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  - (g) MCRP 3-0B
  - (h) MCO 1553.2B

Encl: (1) 2800 T&R Manual

1. <u>Purpose</u>. Per reference (a), this Training and Readiness (T&R) Manual, contained in enclosure (1), establishes training standards, regulations, and policies regarding the training of Marines in the Ground Electronics Maintenance (2800) occupational field.

- 2. Cancellation. NAVMC 3500.6A
- 3. Scope

a. The Core Capability Mission Essential Task List in this manual is used in Defense Readiness Reporting System (DRRS) for assessment and reporting of unit readiness. Units achieve training readiness for reporting in DRRS by gaining and sustaining proficiency in the training events in this manual at both the collective (unit) and individual levels.

b. Per reference (b), commanders will conduct an internal assessment of the unit's ability to execute its mission and develop long-, mid-, and shortrange training plans to sustain proficiency and correct deficiencies. Training plans will incorporate these events to standardize training and provide objective assessment of progress toward attaining combat readiness. Commanders will keep records at the unit and individual levels to record training achievements, identify training gaps and document objective assessments of readiness associated with training Marines. Commanders will use reference (c) to incorporate Chemical, Biological, Radiological, and Nuclear Defense training into training plans, and references (d) and (e) to integrate Operational Risk Management. References (f) and (g) provide amplifying information for effective planning and management of training within the unit.

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c. Formal school and training detachment commanders will use references (a) and (h) to ensure programs of instruction meet skill training requirements established in this manual and provides career-progression training in the events designated for initial training in the formal school environment.

4. <u>Information</u>. Commanding General (CG), Training and Education Command (TECOM) will update this T&R Manual as necessary to provide current and relevant training standards to commanders. All questions pertaining to the Marine Corps Ground T&R Program and Unit Training Management should be directed to: CG, TECOM, Marine Air Ground Task Force Training and Education Standards Division (C 465), 1019 Elliot Road, Quantico, Virginia 22134.

5. Command. This manual is applicable to the Marine Corps Total Force.

6. Certification. Reviewed and approved this date.

hum T. M. MURRAY

By direction

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# 2800 T&R MANUAL

# CHAPTER 1

## OVERVIEW

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2800 T&R MANUAL

CHAPTER 1

OVERVIEW

# 1000. INTRODUCTION

1. The Ground T&R Program is the Corps' primary tool for planning, conducting and evaluating training and assessing training readiness. Subject matter experts (SMEs) from the operating forces developed core capability mission essential task list(s) (METL) for ground communities derived from the Marine Corps Task List (MCTL). This T&R manual is built around these METLs and other related Marine Corps tasks (MCT). All events contained in the manual relate directly to these METLs and MCTs. This comprehensive T&R program will help to ensure the Marine Corps continues to improve its combat readiness by training more efficiently and effectively. Ultimately, this will enhance the Marine Corps' ability to accomplish real-world missions.

2. The T&R manual contains the individual and collective training requirements to prepare units to accomplish their combat mission. The T&R manual is not intended to be an encyclopedia that contains every minute detail of how to accomplish training. Instead, it identifies the minimum standards that Marines must be able to perform in combat. The T&R manual is a fundamental tool for commanders to build and maintain unit combat readiness. Using this tool, leaders can construct and execute an effective training plan that supports the unit's METL. More detailed information on the Marine Corps Ground T&R Program is found in reference (a).

3. The T&R manual is designed for use by unit commanders to determine predeployment training requirements in preparation for training and for formal learning centers (FLCs) and training detachments to create courses of instruction. This directive focuses on individual and collective tasks performed by operating forces (OPFOR) units and supervised by personnel in the performance of unit mission essential tasks (MET).

## 1001. UNIT TRAINING

1. The training of Marines to perform as an integrated unit in combat lies at the heart of the T&R program. Unit and individual readiness are directly related. Individual training and the mastery of individual core skills serve as the building blocks for unit combat readiness. A Marine's ability to perform critical skills required in combat is essential. However, it is not necessary to have all individuals within a unit fully trained in order for that organization to accomplish its assigned tasks. Manpower shortfalls, temporary assignments, leave, or other factors outside the commander's control, often affect the ability to conduct individual training. During these periods, unit readiness is enhanced if emphasis is placed on the individual training of Marines on-hand. Subsequently, these Marines will be mission ready and capable of executing as part of a team when the full complement of personnel is available.

2. Commanders will ensure that all tactical training is focused on their combat mission. The T&R manual is a tool to help develop the unit's training plan. In most cases, unit training should focus on achieving unit proficiency in the core METL. However, commanders will adjust their training focus to support METLs associated with a major operational plan (OPLAN)/contingency plan (CONPLAN) or named operation as designated by their higher commander and reported accordingly in the DRRS. Tactical training will support the METL in use by the commander and be tailored to meet T&R standards. Commanders at all levels are responsible for effective combat training. The conduct of training in a professional manner consistent with Marine Corps standards cannot be over emphasized.

3. Commanders will provide personnel the opportunity to attend formal and operational level courses of instruction as required by this manual. Attendance at all formal courses must enhance the warfighting capabilities of the unit as determined by the unit commander.

## 1002. UNIT TRAINING MANAGEMENT

1. Unit Training Management (UTM) is the application of the Systems Approach to Training (SAT) and the Marine Corps training principles. This is accomplished in a manner that maximizes training results and focuses the training priorities of the unit in preparation for the conduct of its wartime mission.

2. UTM techniques, described in references (b) and (e), provide commanders with the requisite tools and techniques to analyze, design, develop, implement, and evaluate the training of their unit. The Marine Corps Training Principles, explained in reference (b), provide sound and proven direction and are flexible enough to accommodate the demands of local conditions. These principles are not inclusive, nor do they guarantee success. They are guides that commanders can use to manage unit-training programs. The Marine Corps training principles are:

- Train as you fight
- Make commanders responsible for training
- Use standards-based training
- Use performance-oriented training
- Use mission-oriented training
- Train the MAGTF to fight as a combined arms team
- Train to sustain proficiency
- Train to challenge

3. To maintain an efficient and effective training program, leaders at every level must understand and implement UTM. Guidance for UTM and the process for establishing effective programs are contained in references (b), (e) and (f).

### 1003. SUSTAINMENT AND EVALUATION OF TRAINING

1. The evaluation of training is necessary to properly prepare Marines for combat. Evaluations are either formal or informal, and performed by members

of the unit (internal evaluation) or from an external command (external evaluation).

2. Marines are expected to maintain proficiency in the training events for their MOS at the appropriate grade or billet to which assigned. Leaders are responsible for recording the training achievements of their Marines. Whether it involves individual or collective training events, they must ensure proficiency is sustained by requiring retraining of each event at or before expiration of the designated sustainment interval. Performance of the training event, however, is not sufficient to ensure combat readiness. Leaders at all levels must evaluate the performance of their Marines and the unit as they complete training events, and only record successful accomplishment of training based upon the evaluation. The goal of evaluation is to ensure that correct methods are employed to achieve the desired standard, or the Marines understand how they need to improve in order to attain the standard. Leaders must determine whether credit for completing a training event is recorded if the standard was not achieved. While successful accomplishment is desired, debriefing of errors can result in successful learning that will allow ethical recording of training event completion. Evaluation is a continuous process that is integral to training management and is conducted by leaders at every level and during all phases of planning and the conduct of training. To ensure training is efficient and effective, evaluation is an integral part of the training plan. Ultimately, leaders remain responsible for determining if the training was effective.

3. The purpose of formal and informal evaluation is to provide commanders with a process to determine a unit's/Marine's proficiency in the tasks that must be performed in combat. Informal evaluations are conducted during every training evolution. Formal evaluations are often scenario-based, focused on the unit's METs, based on collective training standards, and usually conducted during higher-level collective events. References (a) and (f) provide further guidance on the conduct of informal and formal evaluations using the Marine Corps Ground T&R Program.

1004. ORGANIZATION. The Ground Electronics Maintenance T&R Manual is comprised of 19 chapters and 4 appendices. Chapter 1 is an overview of the Ground T&R Program. Chapter 2 lists the core METs, which are used as part of the DRRS, that are supported by the Ground Electronics Maintenance occupational field. Chapter 3 contains collective events. Chapter 4 begins the chapters that capture individual events specific to a particular MOS and/or billet, as noted. Chapters 5 - 19 contain additional individual events. Appendix A contains acronyms, Appendix B contains terms and definitions, Appendix C contains references, and Appendix D provides an explanation of the maintenance shop organization around which the T&R events in this manual are based.

1005. T&R EVENT CODING. An event contained within a T&R manual is an individual or collective training standard. This section explains each of the components of a T&R event. These items will be included in all of the events in each T&R manual. Community-based T&R manuals may have several additional components not found in unit-based T&R manuals. The event

condition, event title (behavior) and event standard should be read together as a grammatical sentence.

Event Code. The event code is an up to 4-4-4 alphanumeric character set:

 a. First 4 characters indicate MOS or community (e.g., 0321, 1812 or INTL)

b. Second up to 4 characters indicate functional or duty area (e.g. DEF, FSPT, MVMT, etc.)

Third 4 characters indicate the unit size and supported unit, if с. applicable (1000 through 9000), and sequence. The 2800 T&R Manual is organized around a maintenance shop with the primary mission of providing field level maintenance support for ground electronics equipment, regardless of the size of that shop. Such a shop might be as large as a company, as in the case of the ELMACO, or as small as a small section such as within an infantry battalion. A maintenance shop will have two or more maintenance sections, generally, though not always, organized around types of equipment that the section supports. For example, maintenance sections might be organized around calibrations (supporting TMDE) or circuit cards. Such sections might be as large as a platoon, as found within the ELMACO, or as small as a single Marine, as found in an MWSS. In addition, a maintenance shop will have maintenance management functions that might be organized as separate sections, as in a communications company, or which might be performed as collateral duties by Marines in smaller maintenance shops. Figure 1-1 shows the relationship of unit size to event code. NOTE: The titles for the various echelons are for example only, and are not exclusive. For example: 4000-level events are appropriate for section-level events as noted, but also for squad-level events.

Individual Training	Individual Training	Collective Training
entry-level formal school training (Core Skills)	skills progression (MOJT, advanced formal school) (Core Plus Skills)	CREW/TEAM
1000-level	2000-level	3000-level
Collective Training	Collective Training	Collective Training
SECTION	MAINTENANCE SECTION	MAINTENANCE SHOP
4000-level	5000-level	6000-level
Collective Training	Collective Training	Collective Training
BATTALION (not used in this manual)	REGIMENT (not used in this manual)	MSE/MAGTF (not used in this manual)
7000-level	8000-level	9000-level

Figure. 1-1 T&R Event Levels

(1) <u>Grouping</u>. Categorizing events with the use of a recognizable code makes the type of skill or capability being referenced fairly obvious. Examples include: ADMN for maintenance administration events, MAIN for maintenance events, RPTS for events related to maintenance reports, etc. There is no special significance to the functional areas, but they should be intuitive to make it as easy as possible for the T&R user to find events. When organizing the T&R manual, functional areas are alphabetized then the associated events are numbered. The events will be numbered based upon the introduction of each new functional area, allowing up to "999" events. For example: if there are four entry-level maintenance events (MAIN) for the 2847 occupational field, then the events should start 2847-MAIN-1001 and run through 1004. Next, the operations events (OPS) should start at 2847-OPS-1001.

(2) <u>Sequencing</u>. A numerical code is assigned to each individual (1000-2000-level) or collective (3000-9000-level) training event. The first number identifies the size of the unit performing the event, as depicted in figure 1-1. The second number is available for T&R manuals with collective events that support those in other manuals to identify the echelon of unit being supported by a particular collective event. If a collective event is performed in general support without regard to echelon, then a zero "0" will be utilized as the second number. For example: ELM-MAIN-5601 would refer to an event conducted by a maintenance section supporting a maintenance shop, ELM-MAIN-6001 would represent an event the maintenance shop does in support of any sized unit. The event would not be labeled ELM-MAIN-7001 because that would imply that a battalion was performing some task. This is not possible, since no ground electronics maintenance unit organizes in a unit larger than a company.

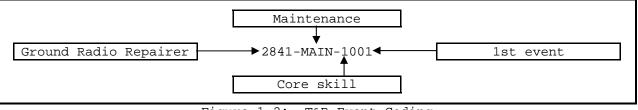


Figure 1-2: T&R Event Coding

## 1006. COMBAT READINESS PERCENTAGE (CRP)

1. The Marine Corps Ground T&R Program includes processes to assess readiness of units and individual Marines. Every unit in the Marine Corps maintains a basic level of readiness based on the training and experience of the Marines in the unit. Even units that never trained together are capable of accomplishing some portion of their missions. Combat readiness assessment does not associate a quantitative value for this baseline of readiness, but uses a "Combat Readiness Percentage", as a method to provide a concise descriptor of the recent training accomplishments of units and Marines.

2. CRP is the percentage of required training events that a unit or Marine accomplishes within specified sustainment intervals.

3. Unit combat readiness is assessed as a percentage of the successfully completed and current (within sustainment interval) key training events called "evaluation-coded" (E-coded) events. E-coded events and unit CRP calculation are described in follow-on paragraphs. CRP achieved through the completion of E-coded events is directly relevant to readiness assessment in DRRS.

4. Individual combat readiness is assessed as the percentage of required individual events in which a Marine is current. This translates as the percentage of training events for his/her MOS and grade that the Marine successfully completes within the directed sustainment interval. Individual skills are developed through a combination of 1000-level training (entry-level formal school courses), individual on-the-job training in 2000-level events, and follow-on formal school training. Skill proficiency is maintained by retraining in each event per the specified sustainment interval.

## 1007. CRP CALCULATION

1. Collective training begins at the 3000-level (team, crew or equivalent). Unit training plans are designed to accomplish the events that support the unit METL while simultaneously sustaining proficiency in individual core skills. E-coded collective events are the only events that contribute to unit CRP. This is done to assist commanders in prioritizing the training toward the METL, taking into account resource, time, and personnel constraints.

2. Unit CRP increases after the completion of E-coded events. The number of E-coded events for the MET determines the value of each E-coded event. For example, if there are 4 E-coded events for a MET, each is worth 25% of MET CRP. MET CRP is calculated by adding the percentage of each completed and current (within sustainment interval) E-coded training event. The percentage for each MET is calculated the same way and all are added together and divided by the number of METS to determine unit CRP. For ease of calculation, we will say that each MET has four E-coded events, each contributing 25% towards the completion of the MET. If the unit has completed and is current on three of the four E-coded events for a given MET, then they have completed 75% of the MET. The CRP for each MET is added together and divided by the number of METS to get unit CRP; unit CRP is the average of MET CRP.

For example:

MET 1: 75% complete (3 of 4 E-Coded events trained)
MET 2: 100% complete (6 of 6 E-Coded events trained)
MET 3: 25% complete (1 of 4 E-Coded events trained)
MET 4: 50% complete (2 of 4 E-Coded events trained)
MET 5: 75% complete (3 of 4 E-Coded events trained)

To get unit CRP, simply add the CRP for each MET and divide by the number of METS:

MET CRP: 75 + 100 + 25 + 50 + 75 = 325

Unit CRP: 325 (total MET CRP)/5 (total number of METS) = 65%

## 1008. T&R EVENT COMPOSITION

1. Event Code. The event code is explained in paragraph 1005.

2. <u>Title</u>. The name of the event. The event title contains one action verb and ideally, one object.

3. Evaluation Coded. Collective events categorize the capabilities that a given unit may be expected to perform. There are some collective events that the Marine Corps has determined that a unit MUST be able to perform, if that unit is to be considered fully ready for operations. These E-coded events represent the irreducible minimum or the floor of readiness for a unit. E-coded events are derived from the training measures of effectiveness for the METs for units that must report readiness in the DRRS. It would seem intuitive that most E-coded events would be for battalion sized units and higher since those are the units that report in DRRS. However, if the Marine Corps has determined that the readiness of a subordinate, supporting unit to accomplish a particular collective event is vital to the accomplishment of the supported unit's MET, then that lower echelon collective event is E-coded.

4. <u>Supported MET(s)</u>. List all METs that are supported by the training event in the judgment of the occupation field drafting the T&R manual, even if those events are not listed as measure of effectiveness (MOEs) in a MET.

5. <u>Sustainment Interval</u>. This is the period, expressed in number of months, between evaluation or retraining requirements. Competencies and capabilities acquired through the accomplishment of training events are to be refreshed at pre-determined intervals. It is essential that these intervals be adhered to in order to ensure Marines maintain proficiency.

6. <u>Billet/MOS</u>. Each individual training event will contain a billet code and/or MOS that designates who is responsible for performing that event and any corresponding formal course required for that billet. Each commander has the flexibility to shift responsibilities based on the organization of his command. These codes are based on recommendations from the collective subject matter expertise that developed this manual and are listed for each event.

7. <u>Grade</u>. The Grade field indicates the rank at which Marines are required to complete the event.

8. <u>Description</u>. This field allows T&R developers to include an explanation of event purpose, objectives, goals, and requirements. It is a general description of an action requiring learned skills and knowledge, i.e., engage fixed target with crew-served weapons. This is an optional field for individual events but it use is strongly encouraged for collective events. This field can be of great value guiding a formal learning center or OPFOR unit trying to discern the intent behind an event that might not be readily apparent. 9. <u>Condition</u>. Condition refers to the constraints that may affect event performance in a real-world environment. It indicates what is provided (equipment, tools, materials, manuals, aids, etc.), environmental constraints or conditions under which the task is to be performed, and any specific cues or indicators to which the performer must respond. Commanders can modify the conditions of the event to best prepare their Marines to accomplish the assigned mission (e.g. in a desert environment; in a mountain environment; etc.). When resources or safety requirements limit the conditions, this should be stated. The content of the condition should be included in the event on a "by exception" basis. If there exists an assumption regarding the conditions under which all or most of the events in the manual will be performed, then only those additional or exceptional items required should be listed in the condition. The common conditions under which all the events in a chapter will be executed will be listed as a separate paragraph at the beginning of the chapter.

10. <u>Standard</u>. The performance standard indicates the basis for judging the effectiveness of the performance. It consists of a carefully worded statement that identifies the proficiency level expected when the task is performed. The standard provides the minimum acceptable performance parameters and must be strictly adhered to. The standard for collective events will likely be general, describing the desired end-state or purpose of the event. The standard for individual events will be objective, quantifiable, and readily observable. Standards will more specifically describe to what proficiency level, specified in terms of accuracy, completeness, time required, and sequencing the event is to be accomplished. These guidelines can be summarized in the acronym "ACTS" (Accuracy Completeness Time Sequence.) In no cases will "per the reference" or "per/in accordance with commander's intent" be used as a stand-alone standard.

11. Event Components/Performance Steps. Description of the actions that the event is composed of, or a list of subordinate, included T&R event codes and event descriptions. The event components help the user determine what must be accomplished and to properly plan for the event. Event components are used for collective events; performance steps are used for individual events.

a. The event components and performance steps will be consciously written so that they may be employed as performance evaluation check lists by the operating forces.

b. Event components may be events one individual in the unit performs, events that small groups in the unit perform, or events involving the entire unit. After the publication of this order, all component events will identify the behaviors required in plain English but also by citing the precise event number the component event refers to, unless that component event only occurs as part of the collective event where it is listed. This provision will allow for specific events to be chained together in order to provide greater granularity for units and Marines executing the events, and clarity for those charged with evaluating unit performance.

12. <u>Prerequisite Events</u>. Prerequisites are academic training or other T&R events that must be completed prior to attempting the task. They are lower-level events or tasks that give the individual/unit the skills required to accomplish the event. They can also be planning steps, administrative

requirements, or specific parameters that build toward mission accomplishment.

13. <u>Chained Events</u>. Collective T&R events are supported by lower-level collective and individual T&R events. This enables unit leaders to effectively identify subordinate T&R events that ultimately support specific mission essential tasks. When the accomplishment of any upper-level events, by their nature, result in the performance of certain subordinate and related events, the events are "chained." The completion of chained events will update sustainment interval credit (and CRP for E-coded events) for the related subordinate level events.

14. <u>Related ITEs</u>. A list of all of the individual training events (1000-2000-level events) that support the event.

15. <u>Initial Training Setting</u>. All individual events will designate the setting at which the skill is first taught, either at formal learning center (FLC), in the OPFOR as MOJT, or via a distance learning product (DL). Note that due to resource constraints, the formal learning center will train students to performance mastery of events using a limited number of representative equipment types. This provides a foundation for Marines to support the broad range of equipment covered under the various equipment types through managed on the job training and supervision by experienced maintenance leaders. It is the responsibility of maintenance leaders in the operating forces to ensure that Marines train to performance mastery on the equipment owned/supported by the unit.

16. <u>References</u>. The training references shall be utilized to determine task performance steps. They assist the trainee in satisfying the performance standards, or the trainer in evaluating the effectiveness of task completion. T&R manuals are designed to be a training outline, not to replicate or replace doctrinal publications, reference publications or technical manuals. References are key to developing detailed lesson plans, determining grading criteria, and ensuring standardization of training. The references listing for each event is representative of those that are most commonly used and are not encyclopedic. In addition, due to the variety of equipment types supported by the Ground Electronics Maintenance occupational field and the types of TMDE and tools used in performing maintenance, technical publications are identified under the general term of "applicable technical references." Marines must identify the specific technical references required based on the equipment being used/maintained.

17. Distance Learning Products. Distance learning products include: individual multimedia instruction (IMI), computer-based training (CBT), Marine Corps Institute (MCI), etc. This notation is included when, in the opinion of the TRMG in consultation with the MTSD representative, the event can be taught via one of these media vice attending a formal course of instruction or receiving MOJT.

18. <u>Support Requirements</u>. This is a list of the external and internal support the unit and Marines will need to complete the event. This is a key section in the overall T&R effort, as resources will eventually be tied directly to the training towards METS. Future efforts to attain and allocate

resources will be based on the requirements outlined in the T&R manual. The list includes, but is not limited to:

Range(s)/Training AreaOrdnanceEquipmentMaterialsOther Units/Personnel

The ordnance requirements for one year of training for the events in the T&R will be aggregated into a table contained in an appendix to the T&R. The task analyst and the occupational field representatives will be careful not to "double count" ammunition that might be employed in the performance of individual and collective events that are chained.

19. <u>Suitability of Simulation/Simulators/DL products</u>. If the TRMG determines that an event can be trained to standard by use of simulation, simulator or a DL product, this will be noted in the event title in a parenthetical remark. Figure 1-3 contains all acceptable codes. The specific simulation, simulator or DL product that is acceptable for training will be noted in the description block and in Supporting Requirements block.

Code	Requirement
L	Event able to be performed to standard only live environment
S	Event performed with simulation and/or simulator, particularly when it is unsafe to conduct the training in a live environment and when supporting live training used as a capstone event to a training continuum that includes academics, simulation-based, and live training
S/L	Event performed with simulation and/or simulator preferred/live optional. If the resources available do not allow for live training to occur, simulation-based training can assist in maintaining proficiency and provide a means to temporarily fill those identified training gaps.
DL	Event shall be performed by self-paced, technology-enabled training (i.e. MarineNet)
DL/L	Event may be performed by self-paced, technology enabled training or in a live environment

Figure 1-3

## 20. Miscellaneous

a. This field provides space for any additional information that will assist in the planning and execution of the event. Units and FLCS are cautioned not to disregard this information or to consider the information of lesser importance than what is contained in other parts of the T&R event. Miscellaneous fields provide an opportunity for the drafters of the T&R event to communicate vital information that might not fit neatly into any other available field. The list may include, but is not limited to:

•Admin Instructions

- Special Personnel Certifications
- •Equipment Operating Hours
- •Road Miles

b. An example of a T&R event is provided in figure 1-4.

0321-PAT-4101 Conduct team planning EVALUATION CODED: YES SUPPORTED MET(S): 1, 2, 3, 4, 5, 6, 7, 8, 9 DESCRIPTION: The unit is conducting tactical operations. The unit has been issued a warning order to conduct reconnaissance patrols to collect information and to conduct normal security patrols. The patrol will be conducted on a 24-hour basis. This event may be trained to standard using the XYZ simulation program available at all MISTC locations. CONDITION: When given a warning order, patrol order or frag order. STANDARD: Prior to commencement of exercise or operation, so that subordinates have 2/3 of the total time before step-off for planning, to include all elements of the plan. EVENT COMPONENTS: 1. Receive warning order or patrol order. Analyze for mission using commander's guidance, METT-TSL, KOCOA.
 Analyze the mission and available information to identify specific tasks with respect to commander's guidance, METT-TSL and KOCOA. 4. Create the plan. RELATED EVENTS: 0321-PAT -1102 0321-PAT -1101 0321-COMM-1207 0321-FSPT-2301 0321-FSPT-2302 0321-FSPT-2303 0321-SURV-1403 REFERENCES: 1. FMFM 6-4 Marine Rifle Company 2. MCWP 3-11.3 Scouting and Patrolling 3. MCRP 2-15.1 DRAFT Ground Reconnaissance Handbook

Figure 1-4: Example of a T&R Event

## 1009. CBRN TRAINING

1. All personnel assigned to the operating force must be trained in CBRN defense, in order to survive and continue their mission in this environment. Individual proficiency standards are defined as survival and basic operating standards. Survival standards are those that the individual must master in order to survive CBRN attacks. Basic operating standards are those that the individual, and collectively the unit, must perform to continue operations in a CBRN environment.

2. In order to develop and maintain the ability to operate in a CBRN environment, CBRN training is an integral part of the training plan and events in this T&R manual. Units should train under CBRN conditions whenever possible. Per reference (c), all units must be capable of accomplishing their assigned mission in a contaminated environment.

# 1010. NIGHT TRAINING

1. While it is understood that all personnel and units of the operating force are capable of performing their assigned mission in "every climate and place," current doctrine emphasizes the requirement to perform assigned missions at night and during periods of limited visibility. Basic skills are significantly more difficult when visibility is limited.

2. To ensure units are capable of accomplishing their mission they must train under the conditions of limited visibility. Units should strive to conduct all events in this T&R manual during both day and night/limited visibility conditions. When there is limited training time available, night training should take precedence over daylight training, contingent on the availability of equipment and personnel.

### 1011. OPERATIONAL RISK MANAGEMENT (ORM)

1. ORM is a process that enables commanders to plan for and minimize risk while still accomplishing the mission. It is a decision making tool used by Marines at all levels to increase operational effectiveness by anticipating hazards and reducing the potential for loss, thereby increasing the probability of a successful mission. ORM minimizes risks to acceptable levels, commensurate with mission accomplishment.

2. Commanders, leaders, maintainers, planners, and schedulers will integrate risk assessment in the decision-making process and implement hazard controls to reduce risk to acceptable levels. Applying the ORM process will reduce mishaps, lower costs, and provide for more efficient use of resources. ORM assists the commander in conserving lives and resources and avoiding unnecessary risk, making an informed decision to implement a course of action (COA), identifying feasible and effective control measures where specific measures do not exist, and providing reasonable alternatives for mission accomplishment. Most importantly, ORM assists the commander in determining the balance between training realism and unnecessary risks in training, the impact of training operations on the environment, and the adjustment of training plans to fit the level of proficiency and experience of Sailors/Marines and leaders. Further guidance for ORM is found in references (b), (d), and (h).

#### 1012. MARINE CORPS GROUND T&R PROGRAM

1. The Marine Corps Ground T&R Program continues to evolve. The vision for Ground T&R Program is to publish a T&R manual for every readiness-reporting unit so that core capability METs are clearly defined with supporting collective training standards, and to publish community-based T&R manuals for all occupational fields whose personnel augment other units to increase their combat and/or logistic capabilities. The vision for this program includes plans to provide a Marine Corps training management information system that enables tracking of unit and individual training accomplishments by unit commanders and small unit leaders, automatically computing CRP for both units and individual Marines based upon MOS and rank (or billet). Linkage of T&R events to the MCTL, through the core capability METs, has enabled objective assessment of training readiness in the DRRS.

2. DRRS measures and reports on the readiness of military forces and the supporting infrastructure to meet missions and goals assigned by the Secretary of Defense. With unit CRP based on the unit's training toward its METs, the CRP will provide a more accurate picture of a unit's readiness. This will give fidelity to future funding requests and factor into the allocation of resources. Additionally, the Ground T&R Program will help to ensure training remains focused on mission accomplishment and that training readiness reporting is tied to units' METLs.

# 2800 T&R MANUAL

# CHAPTER 2

## MISSION ESSENTIAL TASKS MATRIX

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GROUND ELECTRONICS MAINTENANCE MET MATRIX	. 2006	2-3

## 2800 T&R MANUAL

## CHAPTER 2

#### MISSION ESSENTIAL TASKS MATRIX

**2000.** COMBAT LOGISTICS REGIMENT (CLR) (FORWARD (FWD)) CORE MET. The CLR (FWD) MET table lists the standardized core METs for the CLR (FWD) that are directly supported by 2800 T&R events. These tasks are used for readiness reporting in the DRRS.

#### CLR (FWD) METL

MCT	CLR (FWD) CORE MET
MCT 5.1.1	Provide and Maintain Communications

**2001. CLR (DIRECT SUPPORT (DS)) CORE MET**. The CLR (DS) MET table lists the standardized core METs for the CLR (DS) that are directly supported by 2800 T&R events. These tasks are used for readiness reporting in the DRRS.

### CLR (DS) METL

MCT	CLR (DS) CORE MET
MCT 4.2.2.4	Conduct Repair
MCT 4.2.2.5	Conduct Modification
MCT 4.2.2.8	Conduct Recovery & Evacuation Operations
MCT 4.4.1	Provide and Maintain Engineering Reconnaissance Operations
MCT 4.4.9	Conduct Tactical Electrical Supply
MCT 6.1.4	Conduct Survivability Operations

**2002.** CLR (GENERAL SUPPORT (GS)) CORE MET. The CLR (GS) MET table lists the standardized core METs for the CLR (GS) that are directly supported by 2800 T&R events. These tasks are used for readiness reporting in the DRRS.

## CLR (GS) MET

MCT	CLR (GS) CORE MET
MCT 4.2.2	Conduct Ground Equipment Maintenance

2003. COMBAT LOGISTICS BATTALION (CLB) (DS)) CORE MET. The CLB (DS) MET table lists the standardized core METs for the CLB (DS) that are directly supported by 2800 T&R events. These tasks are used for readiness reporting in the DRRS.

## CLB (DS) MET

OMCT	CLB (DS) CORE MET
MCT 4.2.2.4	Conduct Repair
MCT 4.2.2.5	Conduct Modification
MCT 4.2.2.8	Conduct Recovery & Evacuation Operations

**2004. CLB (GS) CORE MET**. The CLR (GS) MET table lists the standardized core METs for the CLR (GS) that are directly supported by 2800 T&R events. These tasks are used for readiness reporting in the DRRS.

## CLB (GS) MET

MCT	CLB (GS) CORE MET
MCT 4.2.2.1	Conduct Inspection & Classification
MCT 4.2.2.2	Conduct Service, Adjustment, & Tuning
MCT 4.2.2.3	Conduct Testing & Calibration
MCT 4.2.2.4	Conduct Repair
MCT 4.2.2.5	Conduct Modification
MCT 4.2.2.8	Conduct Recovery & Evacuation Operations

2005. MAINTENANCE (MAINT) BATTALION (BN) CORE MET. The Maint Bn MET table lists the standardized core METs for the Maint Bn that are directly supported by 2800 T&R events. These tasks are used for readiness reporting in the DRRS.

## MAINT BN MET

MCT	MAINT BN CORE MET
MCT 4.2.1.2	Conduct Intermediate Maintenance
MCT 4.2.2.8	Conduct Recovery & Evacuation Operations

**2006. GROUND ELECTRONICS MAINTENANCE MISSION ESSENTIAL TASKS MATRIX**. The Ground Electronics Maintenance MCT Matrix contains the MCTs identified as METs in the CLR (FWD), CLR (DS), CLR (GS), CLB (DS), CLB (GS), and Maint Bn METs. The Ground Electronics Maintenance MET matrix includes the designated MET number and supporting collective events.

### MCT#/MARINE CORPS TASK

MCT 4.2 CONDUCT	MAINTENANCE OPERATIONS
ELM-MAIN-6001	Provide field level maintenance support for ground
	electronics equipment

-

MCT 4.2.1.2 CON	NDUCT INTERMEDIATE MAINTENANCE
ELM-MAIN-6001	Provide field level maintenance support for ground electronics equipment
MCT 4.2.2 CONDU	JCT GROUND EQUIPMENT MAINTENANCE
ELM-MAIN-6001	Provide field level maintenance support for ground electronics equipment
MCT 4.2.2.1 CON	NDUCT INSPECTION & CLASSIFICATION
ELM-MAIN-5601	Provide field level maintenance support for power supply equipment
ELM-MAIN-5602	Provide field level maintenance support for COMSEC equipment
ELM-MAIN-5603	Provide field level maintenance support for cables
ELM-MAIN-5604	Provide field level maintenance support for C2 electronics equipment
ELM-MAIN-5605	Provide field level maintenance support for intelligence- based systems equipment
ELM-MAIN-5606	Provide field level maintenance support for unmanned systems equipment
ELM-MAIN-5607	Provide field level maintenance support for FORCEPRO electronics equipment
ELM-MAIN-5608	Provide field level maintenance support for NS-E electronics items/components
ELM-MAIN-5609	Provide field level maintenance support for TECHCON equipment
ELM-MAIN-5610	Provide field level maintenance support for DWT equipment
ELM-MAIN-5611	Provide field level maintenance support for SATCOM equipment
ELM-MAIN-5612	Provide field level maintenance support for ground radio equipment
ELM-MAIN-5613	Provide field level maintenance support for ground vehicle intercommunication equipment
ELM-MAIN-5614	Provide field level maintenance support for mechanized vehicle electronics equipment
ELM-MAIN-5615	Provide field level maintenance support for telecommunications equipment
ELM-MAIN-5616	Provide field level maintenance support for IT equipment
ELM-MAIN-5617	Provide field level maintenance support for ground sensor system equipment
ELM-MAIN-5618	Provide field level maintenance support for TMDE
ELM-MAIN-5619	Provide field level maintenance support for artillery electronic equipment
ELM-MAIN-5620	Provide field level maintenance support for complex circuit cards
MCT 4.2.2.2 CON	NDUCT SERVICE, ADJUSTMENT, & TUNING
ELM-MAIN-5601	Provide field level maintenance support for power supply equipment
ELM-MAIN-5602	Provide field level maintenance support for COMSEC equipment

ELM-MAIN-5603	Provide field level maintenance support for cables
ELM-MAIN-5604	Provide field level maintenance support for C2 electronics equipment
ELM-MAIN-5605	Provide field level maintenance support for intelligence- based systems equipment
ELM-MAIN-5606	Provide field level maintenance support for unmanned systems equipment
ELM-MAIN-5607	Provide field level maintenance support for FORCEPRO electronics equipment
ELM-MAIN-5608	Provide field level maintenance support for NS-E electronics items/components
ELM-MAIN-5609	Provide field level maintenance support for TECHCON equipment
ELM-MAIN-5610	Provide field level maintenance support for DWT equipment
ELM-MAIN-5611	Provide field level maintenance support for SATCOM equipment
ELM-MAIN-5612	Provide field level maintenance support for ground radio equipment
ELM-MAIN-5613	Provide field level maintenance support for ground vehicle intercommunication equipment
ELM-MAIN-5614	Provide field level maintenance support for mechanized vehicle electronics equipment
ELM-MAIN-5615	Provide field level maintenance support for telecommunications equipment
ELM-MAIN-5616	Provide field level maintenance support for IT equipment
ELM-MAIN-5617	Provide field level maintenance support for ground sensor system equipment
ELM-MAIN-5618	Provide field level maintenance support for TMDE
ELM-MAIN-5619	Provide field level maintenance support for artillery electronic equipment
ELM-MAIN-5620	Provide field level maintenance support for complex circuit cards
MCT 4.2.2.3 CO	
	NDUCT TESTING & CALIBRATION
ELM-MAIN-5618	NDUCT TESTING & CALIBRATION           Provide field level maintenance support for TMDE
	Provide field level maintenance support for TMDE
ELM-MAIN-5618	Provide field level maintenance support for TMDE
ELM-MAIN-5618 MCT 4.2.2.4 CO	Provide field level maintenance support for TMDE         NDUCT REPAIR         Provide field level maintenance support for power supply
ELM-MAIN-5618 MCT 4.2.2.4 CO ELM-MAIN-5601	Provide field level maintenance support for TMDE         NDUCT REPAIR         Provide field level maintenance support for power supply equipment         Provide field level maintenance support for COMSEC
ELM-MAIN-5618 MCT 4.2.2.4 CO ELM-MAIN-5601 ELM-MAIN-5602	Provide field level maintenance support for TMDE         NDUCT REPAIR         Provide field level maintenance support for power supply equipment         Provide field level maintenance support for COMSEC equipment
ELM-MAIN-5618 MCT 4.2.2.4 CO ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603	Provide field level maintenance support for TMDE         NDUCT REPAIR         Provide field level maintenance support for power supply equipment         Provide field level maintenance support for COMSEC equipment         Provide field level maintenance support for cables         Provide field level maintenance support for COMSEC
ELM-MAIN-5618 MCT 4.2.2.4 CO ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5604	Provide field level maintenance support for TMDE         NDUCT REPAIR         Provide field level maintenance support for power supply equipment         Provide field level maintenance support for COMSEC equipment         Provide field level maintenance support for cables         Provide field level maintenance support for cables         Provide field level maintenance support for cables         Provide field level maintenance support for COMSEC equipment         Provide field level maintenance support for cables         Provide field level maintenance support for C2 electronics equipment         Provide field level maintenance support for intelligence-
ELM-MAIN-5618 MCT 4.2.2.4 CO ELM-MAIN-5601 ELM-MAIN-5603 ELM-MAIN-5604 ELM-MAIN-5605	Provide field level maintenance support for TMDE         NDUCT REPAIR         Provide field level maintenance support for power supply equipment         Provide field level maintenance support for COMSEC equipment         Provide field level maintenance support for cables         Provide field level maintenance support for C2 electronics equipment         Provide field level maintenance support for Intelligence-based systems equipment         Provide field level maintenance support for unmanned

ELM-MAIN-5609	Provide field level maintenance support for TECHCON equipment
ELM-MAIN-5610	Provide field level maintenance support for DWT equipment
	Provide field level maintenance support for SATCOM
ELM-MAIN-5611	equipment
	Provide field level maintenance support for ground radio
ELM-MAIN-5612	equipment
	Provide field level maintenance support for ground vehicle
ELM-MAIN-5613	intercommunication equipment
ELM-MAIN-5614	Provide field level maintenance support for mechanized
ELM-MAIN-2014	vehicle electronics equipment
ELM-MAIN-5615	Provide field level maintenance support for
ETW-WUTN-2012	telecommunications equipment
ELM-MAIN-5616	Provide field level maintenance support for IT equipment
ELM-MAIN-5617	Provide field level maintenance support for ground sensor
ETW-WTU-201/	system equipment
ELM-MAIN-5618	Provide field level maintenance support for TMDE
ELM-MAIN-5619	Provide field level maintenance support for artillery
ETM-MATH-2012	electronic equipment
ELM-MAIN-5620	Provide field level maintenance support for complex circuit
ETM-MATN-2020	cards
	NDUCT MODIFICATION
TCI 7.2.2.J CON	
	Drouido field lovel maintenance support for never supply
ELM-MAIN-5601	Provide field level maintenance support for power supply
	equipment
	equipment Provide field level maintenance support for COMSEC
ELM-MAIN-5601 ELM-MAIN-5602	equipment Provide field level maintenance support for COMSEC equipment
ELM-MAIN-5601	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables
ELM-MAIN-5601 ELM-MAIN-5602	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5604	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence-
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5604 ELM-MAIN-5605	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5604	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment Provide field level maintenance support for unmanned
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5605 ELM-MAIN-5606	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment Provide field level maintenance support for unmanned systems equipment
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5604 ELM-MAIN-5605	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment Provide field level maintenance support for unmanned systems equipment Provide field level maintenance support for FORCEPRO
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5605 ELM-MAIN-5606 ELM-MAIN-5607	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment Provide field level maintenance support for unmanned systems equipment Provide field level maintenance support for FORCEPRO electronics equipment
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5605 ELM-MAIN-5606	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment Provide field level maintenance support for unmanned systems equipment Provide field level maintenance support for FORCEPRO
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5605 ELM-MAIN-5606 ELM-MAIN-5607 ELM-MAIN-5608	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment Provide field level maintenance support for unmanned systems equipment Provide field level maintenance support for FORCEPRO electronics equipment Provide field level maintenance support for NS-E electronics items/components
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5605 ELM-MAIN-5606 ELM-MAIN-5607	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment Provide field level maintenance support for unmanned systems equipment Provide field level maintenance support for FORCEPRO electronics equipment Provide field level maintenance support for NS-E
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5605 ELM-MAIN-5606 ELM-MAIN-5607 ELM-MAIN-5608	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment Provide field level maintenance support for unmanned systems equipment Provide field level maintenance support for FORCEPRO electronics equipment Provide field level maintenance support for NS-E electronics items/components Provide field level maintenance support for TECHCON equipment
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5604 ELM-MAIN-5606 ELM-MAIN-5607 ELM-MAIN-5608 ELM-MAIN-5609 ELM-MAIN-5610	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment Provide field level maintenance support for unmanned systems equipment Provide field level maintenance support for FORCEPRO electronics equipment Provide field level maintenance support for NS-E electronics items/components Provide field level maintenance support for TECHCON
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5604 ELM-MAIN-5606 ELM-MAIN-5607 ELM-MAIN-5608 ELM-MAIN-5609	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment Provide field level maintenance support for unmanned systems equipment Provide field level maintenance support for FORCEPRO electronics equipment Provide field level maintenance support for NS-E electronics items/components Provide field level maintenance support for TECHCON equipment Provide field level maintenance support for TECHCON equipment Provide field level maintenance support for DWT equipment
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5604 ELM-MAIN-5606 ELM-MAIN-5607 ELM-MAIN-5608 ELM-MAIN-5609 ELM-MAIN-5610 ELM-MAIN-5611	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment Provide field level maintenance support for unmanned systems equipment Provide field level maintenance support for FORCEPRO electronics equipment Provide field level maintenance support for NS-E electronics items/components Provide field level maintenance support for TECHCON equipment Provide field level maintenance support for DWT equipment Provide field level maintenance support for SATCOM equipment
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5604 ELM-MAIN-5606 ELM-MAIN-5607 ELM-MAIN-5608 ELM-MAIN-5609 ELM-MAIN-5610	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment Provide field level maintenance support for unmanned systems equipment Provide field level maintenance support for FORCEPRO electronics equipment Provide field level maintenance support for NS-E electronics items/components Provide field level maintenance support for TECHCON equipment Provide field level maintenance support for DWT equipment Provide field level maintenance support for SATCOM
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ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5604 ELM-MAIN-5606 ELM-MAIN-5607 ELM-MAIN-5608 ELM-MAIN-5609 ELM-MAIN-5610 ELM-MAIN-5611	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment Provide field level maintenance support for unmanned systems equipment Provide field level maintenance support for FORCEPRO electronics equipment Provide field level maintenance support for NS-E electronics items/components Provide field level maintenance support for TECHCON equipment Provide field level maintenance support for DWT equipment Provide field level maintenance support for SATCOM equipment Provide field level maintenance support for ground radio equipment
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5604 ELM-MAIN-5605 ELM-MAIN-5607 ELM-MAIN-5607 ELM-MAIN-5609 ELM-MAIN-5610 ELM-MAIN-5611 ELM-MAIN-5612 ELM-MAIN-5613	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment Provide field level maintenance support for unmanned systems equipment Provide field level maintenance support for FORCEPRO electronics equipment Provide field level maintenance support for NS-E electronics items/components Provide field level maintenance support for TECHCON equipment Provide field level maintenance support for DWT equipment Provide field level maintenance support for SATCOM equipment Provide field level maintenance support for ground radio equipment Provide field level maintenance support for ground vehicle
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5604 ELM-MAIN-5605 ELM-MAIN-5606 ELM-MAIN-5607 ELM-MAIN-5609 ELM-MAIN-5610 ELM-MAIN-5611 ELM-MAIN-5612	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment Provide field level maintenance support for unmanned systems equipment Provide field level maintenance support for FORCEPRO electronics equipment Provide field level maintenance support for NS-E electronics items/components Provide field level maintenance support for TECHCON equipment Provide field level maintenance support for DWT equipment Provide field level maintenance support for SATCOM equipment Provide field level maintenance support for ground radio equipment Provide field level maintenance support for ground radio equipment Provide field level maintenance support for ground vehicle intercommunication equipment
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5604 ELM-MAIN-5605 ELM-MAIN-5606 ELM-MAIN-5607 ELM-MAIN-5609 ELM-MAIN-5610 ELM-MAIN-5611 ELM-MAIN-5612 ELM-MAIN-5613 ELM-MAIN-5614	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment Provide field level maintenance support for unmanned systems equipment Provide field level maintenance support for FORCEPRO electronics equipment Provide field level maintenance support for NS-E electronics items/components Provide field level maintenance support for TECHCON equipment Provide field level maintenance support for DWT equipment Provide field level maintenance support for SATCOM equipment Provide field level maintenance support for ground radio equipment Provide field level maintenance support for ground radio equipment Provide field level maintenance support for ground vehicle intercommunication equipment Provide field level maintenance support for ground vehicle intercommunication equipment
ELM-MAIN-5601 ELM-MAIN-5602 ELM-MAIN-5603 ELM-MAIN-5604 ELM-MAIN-5605 ELM-MAIN-5606 ELM-MAIN-5607 ELM-MAIN-5609 ELM-MAIN-5610 ELM-MAIN-5611 ELM-MAIN-5612 ELM-MAIN-5613	equipment Provide field level maintenance support for COMSEC equipment Provide field level maintenance support for cables Provide field level maintenance support for C2 electronics equipment Provide field level maintenance support for intelligence- based systems equipment Provide field level maintenance support for unmanned systems equipment Provide field level maintenance support for FORCEPRO electronics equipment Provide field level maintenance support for NS-E electronics items/components Provide field level maintenance support for TECHCON equipment Provide field level maintenance support for DWT equipment Provide field level maintenance support for SATCOM equipment Provide field level maintenance support for ground radio equipment Provide field level maintenance support for ground radio equipment Provide field level maintenance support for ground vehicle intercommunication equipment Provide field level maintenance support for ground vehicle intercommunication equipment Provide field level maintenance support for mechanized vehicle electronics equipment

ELM-MAIN-5617	Provide field level maintenance support for ground sensor
	system equipment
ELM-MAIN-5618	Provide field level maintenance support for TMDE
ELM-MAIN-5619	Provide field level maintenance support for artillery
	electronic equipment
ELM-MAIN-5620	Provide field level maintenance support for complex circuit
	cards
MCT 4.2.2.8 COM	NDUCT RECOVERY & EVACUATION OPERATIONS
	Provide field level maintenance support for power supply
ELM-MAIN-5601	equipment
	Provide field level maintenance support for COMSEC
ELM-MAIN-5602	equipment
ELM-MAIN-5603	Provide field level maintenance support for cables
HIM MAIN 5005	Provide field level maintenance support for C2 electronics
ELM-MAIN-5604	equipment
	Provide field level maintenance support for intelligence-
ELM-MAIN-5605	based systems equipment
	Provide field level maintenance support for unmanned
ELM-MAIN-5606	
	systems equipment Provide field level maintenance support for FORCEPRO
ELM-MAIN-5607	
	electronics equipment
ELM-MAIN-5608	Provide field level maintenance support for NS-E
	electronics items/components
ELM-MAIN-5609	Provide field level maintenance support for TECHCON
	equipment
ELM-MAIN-5610	Provide field level maintenance support for DWT equipment
ELM-MAIN-5611	Provide field level maintenance support for SATCOM
	equipment
ELM-MAIN-5612	Provide field level maintenance support for ground radio
	equipment
ELM-MAIN-5613	Provide field level maintenance support for ground vehicle
	intercommunication equipment
ELM-MAIN-5614	Provide field level maintenance support for mechanized
	vehicle electronics equipment
ELM-MAIN-5615	Provide field level maintenance support for
	telecommunications equipment
ELM-MAIN-5616	Provide field level maintenance support for IT equipment
ELM-MAIN-5617	Provide field level maintenance support for ground sensor
	system equipment
ELM-MAIN-5618	Provide field level maintenance support for TMDE
ELM-MAIN-5619	Provide field level maintenance support for artillery
	electronic equipment
ELM-MAIN-5620	Provide field level maintenance support for complex circuit
020C-NITHM-MUTH	cards
MCT 5.1.1 PROVI	IDE AND MAINTAIN COMMUNICATIONS
OPSM-OPS-4001	Provide technical data for a communications plan

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# CHAPTER 3

## COLLECTIVE EVENTS

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## CHAPTER 3

#### COLLECTIVE EVENTS

**3000. PURPOSE**. Chapter 3 contains collective training events for the Ground Electronics Maintenance (2800) occupational field.

**3001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX. This chapter utilizes the following methodology:

a. Field one. This field represents the community. This chapter contains the following community codes:

Code	Description
CAL	Calibrations
ELM	Ground Electronics Maintenance
OPSM	Communications Network Operations Maintenance

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

Code	Description	
ADMN	Maintenance	Administration
C2	Command and	Control
MAIN	Maintenance	
MGMT	Maintenance	Management
OPS	Operations	
SVC	Maintenance	Services

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

Code	Description
6000	Maintenance Shop Level
5000	Maintenance Section Level
4000	Technical Control Section Level
3000	Maintenance Management Section Level

### 3002. INDEX OF COLLECTIVE EVENTS

EVENT CODE	E- CODED	EVENT	PAGE
6000-LEVEL			
ELM-MAIN-6001	Y	Provide field level maintenance support for	3-4
		ground electronics equipment	

ELM-OPS-6601	Deploy a ground electronics maintenance	3-5
	activity 5000-LEVEL	
ELM-MAIN-5601		3-6
ELM-MAIN-5601	Provide field level maintenance support for	3-6
ELM-MAIN-5602	power supply equipment Provide field level maintenance support for	3-7
ELM-MAIN-5602	communications security (COMSEC) equipment	3-7
ELM-MAIN-5603	Provide field level maintenance support for	3-8
ETW-WATN-2002	cables	3-0
ELM-MAIN-5604	Provide field level maintenance support for	3-9
	command and control (C2) equipment	
ELM-MAIN-5605	Provide field level maintenance support for	3-9
	intelligence-based systems equipment	
ELM-MAIN-5606	Provide field level maintenance support for	3-10
	unmanned aerial vehicle (unmanned systems)	
	equipment	
ELM-MAIN-5607	Provide field level maintenance support for	3-11
	force protection (FORCEPRO) equipment	
ELM-MAIN-5608	Provide field level maintenance support for	3-12
	non-standard equipment (NS-E) electronics	
	items/components	
ELM-MAIN-5609	Provide field level maintenance support for	3-13
	technical control (TECHCON) equipment	
ELM-MAIN-5610	Provide field level maintenance support for	3-14
	digital wideband transmission (DWT) equipment	
ELM-MAIN-5611	Provide field level maintenance support for	3-15
	satellite communications (SATCOM) equipment	
ELM-MAIN-5612	Provide field level maintenance support for	3-16
	ground radio equipment	
ELM-MAIN-5613	Provide field level maintenance support for	3-17
	ground vehicle intercommunication equipment	
ELM-MAIN-5614	Provide field level maintenance support for	3-18
	mechanized vehicle electronics equipment	
ELM-MAIN-5615	Provide field level maintenance support for	3-19
	telecommunications equipment	
ELM-MAIN-5616	Provide field level maintenance support for	3-20
	information technology (IT) equipment	
ELM-MAIN-5617	Provide field level maintenance support for	3-20
	ground sensor system equipment	
ELM-MAIN-5618	Provide field level maintenance support for	3-21
	test, measurement, and diagnostic equipment	
	(TMDE)	
ELM-MAIN-5619	Provide field level maintenance support for	3-22
	artillery electronics equipment	
ELM-MAIN-5620	Provide field level maintenance support for	3-23
	complex circuit cards	
T	4000-LEVEL	
OPSM-OPS-4001	Provide centralized technical supervision over	3-24
	the installation, operation, and maintenance	
	(IOM) of communications systems	
	3000-LEVEL	
CAL-MGMT-3501	Manage calibrations laboratory programs	3-25

ELM-ADMN-3601	Provide maintenance administration support for field level ground electronics maintenance	3-26
ELM-MAIN-3601	Provide maintenance shop office/operations support for field level ground electronics maintenance	3-27
ELM-SVC-3601	Provide services support for field level ground electronics maintenance	3-27
OPSM-C2-3001	Provide technical data for a communications plan	3-28

## 3003. 6000-LEVEL EVENTS

**ELM-MAIN-6001**: Provide field level maintenance support for ground electronics equipment

### SUPPORTED MET(S):

MCT 4.2 MCT 4.2.1.2 MCT 4.2.2

#### EVALUATION-CODED: YES

SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance shop (of any size) whose primary mission/task is to provide field level maintenance support for multiple equipment types within the ground electronics commodity. Doctrinally, a maintenance shop will consist of a shop office/operations section, a services section, an administrative section, and two or more subordinate maintenance sections whose focus is performing maintenance on one or more of the equipment types. In practice, the actual shop organization, especially with regard to the maintenance management functions (shop office/operations section, services section, and administrative section) will vary.

Units perform the full range of field level maintenance depending on capabilities and mission requirements. Unit leaders will prioritize training based upon assigned missions and tasks as found on the unit's table of organization and equipment and in accordance with commander's intent. Maintenance units must be prepared to perform the full range of maintenance in accordance with doctrine and policy.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Provide maintenance shop office/operations support for field level ground electronics maintenance.
- 2. Provide services support for field level ground electronics maintenance.
- 3. Provide maintenance administrative support for field level ground electronics maintenance.
- 4. Provide field level maintenance support for artillery electronics equipment.

5. Provide field level maintenance support for complex circuit cards. 6. Provide field level maintenance support for IT equipment. 7. Provide field level maintenance support for telecommunications equipment. 8. Provide field level maintenance support for DWT equipment. 9. Provide field level maintenance support for SATCOM equipment. 10. Provide field level maintenance support for intelligence-based systems equipment. 11. Provide field level maintenance support for TECHCON equipment. 12. Provide field level maintenance support for TMDE. 13. Provide field level maintenance support for cables. 14. Provide field level maintenance support for ground vehicle intercommunication equipment. 15. Provide field level maintenance support for unmanned systems equipment. 16. Provide field level maintenance support for FORCEPRO electronics equipment. 17. Provide field level maintenance support for ground sensor system equipment. 18. Provide field level maintenance support for mechanized vehicle electronics equipment. 19. Provide field level maintenance support for ground radio equipment. 20. Provide field level maintenance support for COMSEC equipment. 21. Provide field level maintenance support for non-standard electronics equipment. 22. Provide field level maintenance support for power supply equipment. 23. Provide field level maintenance support for C2 electronics equipment. 24. Deploy a ground electronics maintenance activity. CHAINED EVENTS:

ELM-OPS-6601	ELM-MAIN-5608	ELM-MAIN-5616
ELM-MAIN-5601	ELM-MAIN-5609	ELM-MAIN-5617
ELM-MAIN-5602	ELM-MAIN-5610	ELM-MAIN-5618
ELM-MAIN-5603	ELM-MAIN-5611	ELM-MAIN-5619
ELM-MAIN-5604	ELM-MAIN-5612	ELM-MAIN-5620
ELM-MAIN-5605	ELM-MAIN-5613	ELM-ADMN-3601
ELM-MAIN-5606	ELM-MAIN-5614	ELM-MAIN-3601
ELM-MAIN-5607	ELM-MAIN-5615	ELM-SVC-3601

## REFERENCES:

1. Applicable technical references

- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2 MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

ELM-OPS-6601: Deploy a ground electronics maintenance activity

SUPPORTED MET(S): None

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Ensuring effective ground electronics maintenance support for mission requirements in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

#### EVENT COMPONENTS:

- 1. Plan for the deployment of a ground electronics maintenance activity.
- 2. Prepare organic equipment for embarkation.
- 3. Direct the deployment of a ground electronics maintenance activity.

#### CHAINED EVENTS:

28XX-OPS-2001 28XX-C2-2001

2805-OPS-2001

### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

#### 3004. 5000-LEVEL EVENTS

**ELM-MAIN-5601**: Provide field level maintenance support for power supply equipment

#### SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

#### EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for power supply equipment.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on power supply equipment.
- 2. Perform servicing, adjustment, and tuning on power supply equipment.

- 3. Perform repair on power supply equipment.
- 4. Perform modification on power supply equipment.
- 5. Perform recovery and evacuation on power supply equipment.
- 6. Provide assistance in complex maintenance tasks.
- 7. Administer quality control program.
- 8. Supervise maintenance actions.
- 9. Manage ground electronics maintenance production.
- 10. Train ground electronics maintainers in ground electronics maintenance.
- 11. Manage training for ground electronics maintenance personnel.

#### CHAINED EVENTS:

28XX-ADMN-2001	28XX-MAIN-2002	28XX-MAIN-2037
28XX-ADMN-2003	28XX-MAIN-2003	28XX-PERS-2001
28XX-MAIN-1002	28XX-MAIN-2004	28XX-PERS-2002
28XX-MAIN-2001	28XX-MAIN-2036	
28XX-MAIN-2001	28XX-MAIN-2036	

## **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

ELM-MAIN-5602: Provide field level maintenance support for COMSEC equipment

# SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5

#### EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for COMSEC equipment.

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on COMSEC equipment.
- 2. Perform servicing, adjustment, and tuning on COMSEC equipment.
- 3. Perform repair on COMSEC equipment.
- 4. Perform modification on COMSEC equipment.
- 5. Perform recovery and evacuation on COMSEC equipment.
- 6. Provide technical assistance during the IOM of COMSEC equipment.

- 7. Provide assistance in complex maintenance tasks.
- 8. Administer quality control program.
- 9. Supervise maintenance actions.
- 10. Manage ground electronics maintenance production.
- 11. Train ground electronics maintainers in ground electronics maintenance.
- 12. Manage training for ground electronics maintenance personnel.

#### CHAINED EVENTS:

28XX-ADMN-2001	28XX-PERS-2001	2847-MAIN-2010
28XX-ADMN-2003	28XX-PERS-2002	2847-MAIN-2011
28XX-MAIN-2036	2847-MAIN-1005	2847-MAIN-2012
28XX-MAIN-2037	2847-MAIN-2009	2847-OPS-2003

# REFERENCES:

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

ELM-MAIN-5603: Provide field level maintenance support for cables

## SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

#### EVALUATION-CODED: NO

#### SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for cables.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on cables.
- 2. Perform servicing, adjustment, and tuning on cables.
- 3. Perform repair on cables.
- 4. Perform modification on cables.
- 5. Perform recovery and evacuation on cables.
- 6. Provide assistance in complex maintenance tasks.
- 7. Administer quality control program.
- 8. Supervise maintenance actions.
- 9. Manage ground electronics maintenance production.

10. Train ground electronics maintainers in ground electronics maintenance. 11. Manage training for ground electronics maintenance personnel.

### CHAINED EVENTS:

28XX-ADMN-2001	28XX-MAIN-2008	28XX-PERS-2001
28XX-ADMN-2003	28XX-MAIN-2009	28XX-PERS-2002
28XX-MAIN-2005	28XX-MAIN-2036	2847-MAIN-1004
28XX-MAIN-2006	28XX-MAIN-2037	2847-MAIN-2013
28XX-MAIN-2007		

#### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

**ELM-MAIN-5604**: Provide field level maintenance support for C2 electronics equipment

#### SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

EVALUATION-CODED: NO

#### SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for C2 electronics equipment.

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on C2 electronics equipment.
- 2. Perform servicing, adjustment, and tuning on C2 electronics equipment.
- 3. Perform repair on C2 electronics equipment.
- 4. Perform modification on C2 electronics equipment.
- 5. Perform recovery and evacuation on C2 electronics equipment.
- 6. Provide technical assistance during the IOM of C2 electronics equipment.
- 7. Provide assistance in complex maintenance tasks.
- 8. Administer quality control program.
- 9. Supervise maintenance actions.
- 10. Manage ground electronics maintenance production.

11. Train ground electronics maintainers in ground electronics maintenance. 12. Manage training for ground electronics maintenance personnel.

## CHAINED EVENTS:

28XX-ADMN-2001	28XX-MAIN-2012	28XX-MAIN-2037
28XX-ADMN-2003	28XX-MAIN-2013	28XX-PERS-2001
28XX-MAIN-2010	28XX-MAIN-2014	28XX-PERS-2002
28XX-MAIN-2011	28XX-MAIN-2036	

### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

**ELM-MAIN-5605:** Provide field level maintenance support for intelligence-based systems equipment

### SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

# EVALUATION-CODED: NO

### SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for intelligence-based systems equipment.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on intelligence-based systems equipment.
- 2. Perform servicing, adjustment, and tuning on intelligence-based systems equipment.
- 3. Perform repair on intelligence-based systems equipment.
- 4. Perform modification on intelligence-based systems equipment.
- 5. Perform rebuilding and overhauling on intelligence-based systems equipment.
- 6. Perform recovery and evacuation on intelligence-based systems equipment.
- 7. Provide assistance in complex maintenance tasks.
- 8. Administer quality control program.

- 9. Supervise maintenance actions.
- 10. Manage ground electronics maintenance production.
- 11. Train ground electronics maintainers in ground electronics maintenance.
- 12. Manage training for ground electronics maintenance personnel.

### CHAINED EVENTS:

28XX-ADMN-2001	28XX-MAIN-2017	28XX-MAIN-2036
28XX-ADMN-2003	28XX-MAIN-2018	28XX-MAIN-2037
28XX-MAIN-2015	28XX-MAIN-2019	28XX-PERS-2001
28XX-MAIN-2016	28XX-MAIN-2020	28XX-PERS-2002

### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

**ELM-MAIN-5606**: Provide field level maintenance support for unmanned systems equipment

# SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

### EVALUATION-CODED: NO

#### SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for unmanned systems equipment.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on unmanned systems equipment.
- 2. Perform servicing, adjustment, and tuning on unmanned systems equipment.
- 3. Perform repair on unmanned systems equipment.
- 4. Perform modification on unmanned systems equipment.
- 5. Perform recovery and evacuation on unmanned systems equipment.
- 6. Provide assistance in complex maintenance tasks.
- 7. Administer quality control program.
- 8. Supervise maintenance actions.
- 9. Manage ground electronics maintenance production.

10. Train ground electronics maintainers in ground electronics maintenance. 11. Manage training for ground electronics maintenance personnel.

### CHAINED EVENTS:

28XX-ADMN-2001	28XX-MAIN-2023	28XX-MAIN-2037
28XX-ADMN-2003	28XX-MAIN-2024	28XX-PERS-2001
28XX-MAIN-2021	28XX-MAIN-2025	28XX-PERS-2002
28XX-MAIN-2022	28XX-MAIN-2036	

### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

**ELM-MAIN-5607**: Provide field level maintenance support for FORCEPRO electronics equipment

### SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

# EVALUATION-CODED: NO

# SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for FORCEPRO electronics equipment.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on FORCEPRO electronics equipment.
- 2. Perform servicing, adjustment, and tuning on FORCEPRO electronics equipment.
- 3. Perform repair on FORCEPRO electronics equipment.
- 4. Perform modification on FORCEPRO electronics equipment.
- 5. Perform recovery and evacuation on FORCEPRO electronics equipment.
- 6. Provide assistance in complex maintenance tasks.
- 7. Administer quality control program.
- 8. Supervise maintenance actions.
- 9. Manage ground electronics maintenance production.
- 10. Train ground electronics maintainers in ground electronics maintenance.
- 11. Manage training for ground electronics maintenance personnel.

28XX-MAIN-2028	28XX-MAIN-2037
28XX-MAIN-2029	28XX-PERS-2001
28XX-MAIN-2030	28XX-PERS-2002
28XX-MAIN-2036	
	28XX-MAIN-2029 28XX-MAIN-2030

#### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

**ELM-MAIN-5608:** Provide field level maintenance support for NS-E electronics items/components

#### SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

#### EVALUATION-CODED: NO

#### SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for NS-E electronics items/components.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on NS-E electronics items/components.
- 2. Perform servicing, adjustment, and tuning on NS-E electronics items/components.
- 3. Perform repair on NS-E electronics items/components.
- 4. Perform modification on NS-E electronics items/components.
- 5. Perform recovery and evacuation on NS-E electronics items/components.
- 6. Provide assistance in complex maintenance tasks.
- 7. Administer quality control program.
- 8. Supervise maintenance actions.
- 9. Manage ground electronics maintenance production.
- 10. Train ground electronics maintainers in ground electronics maintenance.
- 11. Manage training for ground electronics maintenance personnel.

28XX-ADMN-2001	28XX-MAIN-2033	28XX-MAIN-2037
28XX-ADMN-2003	28XX-MAIN-2034	28XX-PERS-2001
28XX-MAIN-2031	28XX-MAIN-2035	28XX-PERS-2002
28XX-MAIN-2032	28XX-MAIN-2036	

#### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

ELM-MAIN-5609: Provide field level maintenance support for TECHCON equipment

## SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

#### EVALUATION-CODED: NO

### SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for TECHCON equipment. Note that TECHCON maintenance actions are divided into those for maintenance code "O" items (supported by 2821 and 2823 Marines) and those for maintenance code "F"/"H" items (supported by 2823 Marines).

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on TECHCON equipment.
- 2. Perform servicing, adjustment, and tuning on TECHCON equipment.
- 3. Perform repair on TECHCON equipment.
- 4. Perform modification on TECHCON equipment.
- 5. Perform rebuilding and overhauling on TECHCON equipment.
- 6. Perform recovery and evacuation on TECHCON equipment.
- 7. Provide assistance in complex maintenance tasks.
- 8. Administer quality control program.
- 9. Supervise maintenance actions.
- 10. Manage ground electronics maintenance production.
- 11. Train ground electronics maintainers in ground electronics maintenance.
- 12. Manage training for ground electronics maintenance personnel.

28XX-ADMN-2001	2821-MAIN-1001	2823-MAIN-2002
28XX-ADMN-2003	2821-MAIN-2001	2823-MAIN-2003
28XX-MAIN-2036	2821-MAIN-2002	2823-MAIN-2004
28XX-MAIN-2037	2821-MAIN-2003	2823-MAIN-2005
28XX-PERS-2001	2821-MAIN-2004	2823-MAIN-2006
28XX-PERS-2002	2823-MAIN-2001	

### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

ELM-MAIN-5610: Provide field level maintenance support for DWT equipment

### SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

# EVALUATION-CODED: NO

#### SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for DWT equipment.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on DWT equipment.
- 2. Perform servicing, adjustment, and tuning on DWT equipment.
- 3. Perform repair on DWT equipment.
- 4. Perform modification on DWT equipment.
- 5. Perform rebuilding and overhauling on DWT equipment.
- 6. Perform recovery and evacuation on DWT equipment.
- 7. Provide technical assistance during the IOM of DWT equipment.
- 8. Provide assistance in complex maintenance tasks.
- 9. Administer quality control program.
- 10. Supervise maintenance actions.
- 11. Manage ground electronics maintenance production.
- 12. Train ground electronics maintainers in ground electronics maintenance.

13. Manage training for ground electronics maintenance personnel.

### CHAINED EVENTS:

28XX-ADMN-2001	28XX-PERS-2002	2831-MAIN-2003
28XX-ADMN-2003	2831-MAIN-1001	2831-MAIN-2004
28XX-MAIN-2036	2831-MAIN-2001	2831-MAIN-2005
28XX-MAIN-2037	2831-MAIN-2002	2831-OPS-2001
28XX-PERS-2001		

#### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

ELM-MAIN-5611: Provide field level maintenance support for SATCOM equipment

# SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

# EVALUATION-CODED: NO

#### SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for SATCOM equipment.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on SATCOM equipment.
- 2. Perform servicing, adjustment, and tuning on SATCOM equipment.
- 3. Perform repair on SATCOM equipment.
- 4. Perform modification on SATCOM equipment.
- 5. Perform recovery and evacuation on SATCOM equipment.
- 6. Provide technical assistance during the IOM of SATCOM equipment.
- 7. Provide assistance in complex maintenance tasks.
- 8. Administer quality control program.
- 9. Supervise maintenance actions.
- 10. Manage ground electronics maintenance production.
- 11. Train ground electronics maintainers in ground electronics maintenance.
- 12. Manage training for ground electronics maintenance personnel.

28XX-ADMN-2001	2831-MAIN-1002	2841-MAIN-1003
28XX-ADMN-2003	2831-MAIN-2006	2841-MAIN-2013
28XX-MAIN-2036	2831-MAIN-2007	2841-MAIN-2014
28XX-MAIN-2037	2831-MAIN-2008	2841-MAIN-2015
28XX-PERS-2001	2831-MAIN-2009	2841-MAIN-2016
28XX-PERS-2002	2831-OPS-2002	2841-OPS-2004

### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

**ELM-MAIN-5612:** Provide field level maintenance support for ground radio equipment

### SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

### EVALUATION-CODED: NO

### SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for ground radio equipment.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on ground radio equipment.
- 2. Perform servicing, adjustment, and tuning on ground radio equipment.
- 3. Perform repair on ground radio equipment.
- 4. Perform modification on ground radio equipment.
- 5. Perform recovery and evacuation on ground radio equipment.
- 6. Provide technical assistance during the IOM of ground radio equipment.
- 7. Provide assistance in complex maintenance tasks.
- 8. Administer quality control program.
- 9. Supervise maintenance actions.
- 10. Manage ground electronics maintenance production.
- 11. Train ground electronics maintainers in ground electronics maintenance.

12. Manage training for ground electronics maintenance personnel.

## CHAINED EVENTS:

28XX-ADMN-2001	28XX-PERS-2001	2841-MAIN-2002
28XX-ADMN-2003	28XX-PERS-2002	2841-MAIN-2003
28XX-MAIN-2036	2841-MAIN-1001	2841-MAIN-2004
28XX-MAIN-2037	2841-MAIN-2001	2841-OPS-2001

### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

**ELM-MAIN-5613:** Provide field level maintenance support for ground vehicle intercommunication equipment

## SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

#### EVALUATION-CODED: NO

#### SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for ground vehicle intercommunication equipment.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on ground vehicle intercommunication equipment.
- 2. Perform servicing, adjustment, and tuning on ground vehicle intercommunication equipment.
- 3. Perform repair on ground vehicle intercommunication equipment.
- 4. Perform modification on ground vehicle intercommunication equipment.
- 5. Perform recovery and evacuation on ground vehicle intercommunication equipment.
- 6. Provide technical assistance during the IOM of ground vehicle intercommunication equipment.
- 7. Provide assistance in complex maintenance tasks.
- 8. Administer quality control program.

- 9. Supervise maintenance actions.
- 10. Manage ground electronics maintenance production.
- 11. Train ground electronics maintainers in ground electronics maintenance.
- 12. Manage training for ground electronics maintenance personnel.

#### CHAINED EVENTS:

28XX-ADMN-2001	28XX-PERS-2001	2841-MAIN-2006
28XX-ADMN-2003	28XX-PERS-2002	2841-MAIN-2007
28XX-MAIN-2036	2841-MAIN-1002	2841-MAIN-2008
28XX-MAIN-2037	2841-MAIN-2005	2841-OPS-2002

#### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

**ELM-MAIN-5614:** Provide field level maintenance support for mechanized vehicle electronics equipment

# SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

### EVALUATION-CODED: NO

#### SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for mechanized vehicle electronics of equipment.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on mechanized vehicle electronics equipment.
- 2. Perform servicing, adjustment, and tuning on mechanized vehicle electronics equipment.
- 3. Perform repair on mechanized vehicle electronics equipment.
- 4. Perform modification on mechanized vehicle electronics equipment.
- 5. Perform recovery and evacuation on mechanized vehicle electronics equipment.
- 6. Provide technical assistance during the IOM of mechanized vehicle

electronics equipment.

- 7. Provide assistance in complex maintenance tasks.
- 8. Administer quality control program.
- 9. Supervise maintenance actions.
- 10. Manage ground electronics maintenance production.
- 11. Train ground electronics maintainers in ground electronics maintenance.
- 12. Manage training for ground electronics maintenance personnel.

### CHAINED EVENTS:

28XX-ADMN-2001	28XX-PERS-2001	2841-MAIN-2010
28XX-ADMN-2003	28XX-PERS-2002	2841-MAIN-2011
28XX-MAIN-2036	2841-MAIN-2017	2841-MAIN-2012
28XX-MAIN-2037	2841-MAIN-2009	2841-OPS-2003

### **REFERENCES**:

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

**ELM-MAIN-5615**: Provide field level maintenance support for telecommunications equipment

### SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

### EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for telecommunications equipment.

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on telecommunication equipment.
- 2. Perform servicing, adjustment, and tuning on telecommunication equipment.
- 3. Perform repair on telecommunication equipment.
- 4. Perform modification on telecommunication equipment.
- 5. Perform recovery and evacuation on telecommunication equipment.
- 6. Provide technical assistance during the IOM of telecommunication

equipment.

- 7. Provide assistance in complex maintenance tasks.
- 8. Administer quality control program.
- 9. Supervise maintenance actions.
- 10. Manage ground electronics maintenance production.
- 11. Train ground electronics maintainers in ground electronics maintenance.
- 12. Manage training for ground electronics maintenance personnel.

# CHAINED EVENTS:

28XX-ADMN-2001	28XX-PERS-2001	2847-MAIN-2002
28XX-ADMN-2003	28XX-PERS-2002	2847-MAIN-2003
28XX-MAIN-2036	2847-MAIN-1001	2847-MAIN-2004
28XX-MAIN-2037	2847-MAIN-2001	2847-OPS-2001

### **REFERENCES**:

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

ELM-MAIN-5616: Provide field level maintenance support for IT equipment

### SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

### EVALUATION-CODED: NO

# SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for IT equipment.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on IT equipment.
- 2. Perform servicing, adjustment, and tuning on IT equipment.
- 3. Perform repair on IT equipment.
- 4. Perform modification on IT equipment.
- 5. Perform recovery and evacuation on IT equipment.
- 6. Provide technical assistance during the IOM of IT equipment.
- 7. Provide assistance in complex maintenance tasks.

- 8. Administer quality control program.
- 9. Supervise maintenance actions.
- 10. Manage ground electronics maintenance production.
- 11. Train ground electronics maintainers in ground electronics maintenance.
- 12. Manage training for ground electronics maintenance personnel.

### CHAINED EVENTS:

28XX-ADMN-2001	28XX-PERS-2001	2847-MAIN-2006
28XX-ADMN-2003	28XX-PERS-2002	2847-MAIN-2007
28XX-MAIN-2036	2847-MAIN-1002	2847-MAIN-2008
28XX-MAIN-2037	2847-MAIN-2005	2847-OPS-2002

#### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

**ELM-MAIN-5617:** Provide field level maintenance support for ground sensor system equipment

### SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

### EVALUATION-CODED: NO

# SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for ground sensor system equipment.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on ground sensor system equipment.
- 2. Perform servicing, adjustment, and tuning on ground sensor system equipment.
- 3. Perform repair on ground sensor system equipment.
- 4. Perform modification on ground sensor system equipment.
- 5. Perform recovery and evacuation on ground sensor system equipment.
- 6. Provide technical assistance during the IOM of ground sensor system equipment.

- 7. Provide assistance in complex maintenance tasks.
- 8. Administer quality control program.
- 9. Supervise maintenance actions.
- 10. Manage ground electronics maintenance production.
- 11. Train ground electronics maintainers in ground electronics maintenance.
- 12. Manage training for ground electronics maintenance personnel.

#### CHAINED EVENTS:

28XX-ADMN-2001	28XX-PERS-2001	2848-MAIN-2003
28XX-ADMN-2003	28XX-PERS-2002	2848-MAIN-2004
28XX-MAIN-2036	2848-MAIN-2001	2848-MAIN-2005
28XX-MAIN-2037	2848-MAIN-2002	2848-OPS-2001

#### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

**ELM-MAIN-5618:** Provide field level maintenance support for TMDE

# SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.3 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

### EVALUATION-CODED: NO

# SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for TMDE. Note that TMDE maintenance actions are divided into three groups. The first is high density low complexity equipment (supported by 2871 and 2874 Marines). The second is low density/high complexity equipment (supported by 2874 Marines). The last is laboratory standards (supported by 2874 Marines).

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

- 1. Perform inspection and classification on TMDE.
- 2. Perform servicing, adjustment, and tuning on TMDE.
- 3. Perform testing and calibration on TMDE.
- 4. Perform repair on TMDE.

- 5. Perform modification on TMDE.
- 6. Perform recovery and evacuation on TMDE.
- 7. Provide assistance in complex maintenance tasks.
- 8. Administer quality control program.
- 9. Supervise maintenance actions.
- 10. Manage ground electronics maintenance production.
- 11. Train ground electronics maintainers in ground electronics maintenance.
- 12. Manage training for ground electronics maintenance personnel.

### CHAINED EVENTS:

28XX-ADMN-2001	2871-MAIN-2001	2874-MAIN-2005
28XX-ADMN-2003	2871-MAIN-2002	2874-MAIN-2006
28XX-MAIN-2036	2871-MAIN-2003	2874-MAIN-2007
28XX-MAIN-2037	2871-MAIN-2004	2874-MAIN-2008
28XX-PERS-2001	2874-MAIN-2001	2874-MAIN-2009
28XX-PERS-2002	2874-MAIN-2002	2874-MAIN-2010
2871-MAIN-1001	2874-MAIN-2003	2874-MAIN-2011
2871-MAIN-1002	2874-MAIN-2004	

### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

**ELM-MAIN-5619:** Provide field level maintenance support for artillery electronics equipment

# SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

### EVALUATION-CODED: NO

### SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for artillery electronics equipment.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

### EVENT COMPONENTS:

1. Perform inspection and classification on artillery electronics equipment.

- 2. Perform servicing, adjustment, and tuning on artillery electronics equipment.
- 3. Perform repair on artillery electronics equipment.
- 4. Perform modification on artillery electronics equipment.
- 5. Perform rebuilding and overhauling on artillery electronics equipment.
- 6. Perform recovery and evacuation on artillery electronics equipment.
- 7. Provide technical assistance during the IOM of artillery electronics equipment.
- 8. Provide assistance in complex maintenance tasks.
- 9. Administer quality control program.
- 10. Supervise maintenance actions.
- 11. Manage ground electronics maintenance production.
- 12. Train ground electronics maintainers in ground electronics maintenance.
- 13. Manage training for ground electronics maintenance personnel.

# CHAINED EVENTS:

28XX-ADMN-2001	28XX-PERS-2002	2887-MAIN-2003
28XX-ADMN-2003	2887-MAIN-1001	2887-MAIN-2004
28XX-MAIN-2036	2887-MAIN-2001	2887-MAIN-2005
28XX-MAIN-2037	2887-MAIN-2002	2887-OPS-2001
28XX-PERS-2001		

### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2 MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

**ELM-MAIN-5620:** Provide field level maintenance support for complex circuit cards

# SUPPORTED MET(S):

MCT 4.2.2.1 MCT 4.2.2.2 MCT 4.2.2.4 MCT 4.2.2.5 MCT 4.2.2.8

#### EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** This event is for a maintenance section whose primary focus or additional support requirement is to provide field level maintenance support for complex circuit cards and microminiature repair.

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Retaining materiel in or restoring it to a specified condition in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

### EVENT COMPONENTS:

- 1. Perform inspection and classification on complex circuit cards.
- 2. Perform repair on complex circuit cards.
- 3. Perform modification on complex circuit cards.
- 4. Perform rebuilding and overhauling on complex circuit cards.
- 5. Perform recovery and evacuation on complex circuit cards.
- 6. Provide technical assistance during the IOM of complex circuit cards.
- 7. Provide assistance in complex maintenance tasks.
- 8. Administer quality control program.
- 9. Supervise maintenance actions.
- 10. Manage ground electronics maintenance production.
- 11. Train ground electronics maintainers in ground electronics maintenance.
- 12. Manage training for ground electronics maintenance personnel.

### CHAINED EVENTS:

28XX-ADMN-2001	28XX-PERS-2001	8641-MAIN-2003
28XX-ADMN-2003	28XX-PERS-2002	8641-MAIN-2004
28XX-MAIN-2036	8641-MAIN-2001	8641-MAIN-2005
28XX-MAIN-2037	8641-MAIN-2002	

### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

#### 3005. 4000-LEVEL EVENTS

**OPSM-OPS-4001**: Provide centralized technical supervision over the installation, operation, and maintenance (IOM) of communications systems

### SUPPORTED MET(S):

MCT 5.1.1

# EVALUATION-CODED: NO

### SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Technical controllers (MOS 2821 and 2823) provide this function in support of communications. TECHCON ensures the integrity of signal paths and reroutes or reconfigures portions of the communications network to rapidly respond to operational requirements.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Ensuring adequate support and circuit priority in accordance with MCWP 3-40.3 MAGTF Communications System.

- 1. Plan technical control in support of operations.
- 2. Operate a TECHCON facility.
- 3. Conduct circuit/link restoration.
- 4. Provide technical assistance in the restoration of complex circuits/links.
- 5. Maintain the quality of service of a network.
- 6. Coordinate activation/deactivation of communications circuits/links connecting to the Defense Information Services Agency.

2821-OPS-1001	2823-OPS-2002	2823-C2-2001
2823-OPS-2001	2823-OPS-2003	

#### **REFERENCES:**

- 1. Applicable technical references
- 2. MCWP 3-40.3 MAGTF Communications System
- 3. Operations Order Annex K
- 4. SL 1-2/3 Index of Authorized Publications in Stock

3006. 3000-LEVEL EVENTS

CAL-MGMT-3501: Manage calibrations laboratory programs

SUPPORTED MET(S): None

### EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Ensuring calibration laboratory compliance with TI 4733-OD/1 Calibration Requirements Marine Corps Test, Measurement and Diagnostic Equipment Calibration and Maintenance Program.

### EVENT COMPONENTS:

- 1. Perform inspection and classification on laboratory standards.
- 2. Perform servicing, adjustment, and tuning on laboratory standards.
- 3. Perform testing and calibration on laboratory standards.
- 4. Perform repair on laboratory standards.
- 5. Perform modification on laboratory standards.
- 6. Manage laboratory quality program.
- 7. Manage laboratory standards traceability.

#### CHAINED EVENTS:

2874-MAIN-2007	2874-MAIN-2010	2874-MGMT-2001
2874-MAIN-2008	2874-MAIN-2011	2874-MGMT-2002
2874-MAIN-2009		

# REFERENCES:

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual

- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock
- 8. TI 4733-OD/1\_ Calibration Requirements Marine Corps Test, Measurement and Diagnostic Equipment Calibration and Maintenance Program

**ELM-ADMN-3601:** Provide maintenance administration support for field level ground electronics maintenance

SUPPORTED MET(S): None

## EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** A maintenance administration (or administrative) section performs functions associated with equipment receipt and transfer, technical data research, tool issue, shop property control, and the recording and reporting of completed maintenance actions within the shop. The name of the section may vary depending upon the shop, and the maintenance administration functions may be dispersed throughout the other elements of the shop. In large maintenance shops there may be several personnel in each element of the section. In small shops one individual may perform some or all of these functions.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Ensuring availability of maintenance resources in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

# EVENT COMPONENTS:

- 1. Receipt for equipment.
- 2. Conduct equipment acceptance inspection.
- 3. Request required repair parts identified during the acceptance inspection.
- 4. Manage class IX consumable inventory.
- 5. Manage locally held secondary reparables.
- 6. Store equipment.
- 7. Issue equipment.
- 8. Release equipment.
- 9. Administer publication control program.
- 10. Manage maintenance shop programs.
- 11. Administer calibration control program.
- 12. Administer modification control program.
- 13. Administer tool control program.
- 14. Supervise maintenance administration support.

## CHAINED EVENTS:

28XX-ADMN-2002	28XX-PUBS-2001	28XX-RPTS-2002
28XX-PROG-2001	28XX-RPTS-2001	28XX-RPTS-2003
28XX-PROG-2002		

# **REFERENCES:**

1. Applicable technical references

- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

**ELM-MAIN-3601:** Provide maintenance shop office/operations support for field level ground electronics maintenance

#### SUPPORTED MET(S): None

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** A shop office/operations section manages the overall conduct of maintenance within the shop. The name of the section may vary depending upon the shop, and the shop office/operations functions may be dispersed throughout the other elements of the shop. In small shops, one individual may perform some or all of these functions.

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Managing the overall conduct of maintenance within the shop in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

#### EVENT COMPONENTS:

- 1. Develop unit level ground electronics maintenance policy/procedures.
- 2. Supervise maintenance actions.
- 3. Manage ground electronics maintenance production.
- 4. Manage training for ground electronics maintenance personnel.
- 5. Direct ground electronics maintenance.

### CHAINED EVENTS:

28XX-ADMN-2001	28XX-ADMN-2004	28XX-PERS-2001
28XX-ADMN-2003	28XX-MAIN-2036	28XX-PERS-2002
2891-MGMT-2001		

#### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. MCWP 4-1 Logistics Operations
- 5. MCWP 4-11 Tactical-Level Logistics
- 6. MCWP 4-11.4 Maintenance Operations
- 7. SL 1-2/3 Index of Authorized Publications in Stock

**ELM-SVC-3601:** Provide services support for field level ground electronics maintenance

#### SUPPORTED MET(S): None

# EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** A services section performs functions in support of equipment maintenance; for example, welding, battery shop, inspection, and quality control. The name of the section may vary depending upon the shop, and the services support functions may be dispersed throughout the other elements of the shop. In large maintenance shops there may be several personnel in each element of the section. In small shops one individual may perform some or all of these functions.

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Ensuring availability of functions in support of equipment maintenance in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

### EVENT COMPONENTS:

- 1. Administer quality control program.
- 2. Perform equipment inspection, as required.
- 3. Manage batteries, as required.

CHAINED EVENTS: 28XX-ADMN-2001

### **REFERENCES:**

- 1. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 2. MCO P4790.2\_ MIMMS Field Procedures Manual
- 3. MCWP 4-1 Logistics Operations
- 4. MCWP 4-11 Tactical-Level Logistics
- 5. MCWP 4-11.4 Maintenance Operations

**OPSM-C2-3001**: Provide technical data for a communications plan

SUPPORTED MET(S): None

# EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Technical controllers provide and review technical data in the development of a communications plan, identifying signal conditioning requirements and circuit routing requirements in order to establish a high level of initial circuit quality and mitigate risk of circuit degradation. Technical controllers also identify MAGTF communications system and equipment considerations for network security, timeliness, flexibility, interoperability, and survivability in communications planning.

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Identifying information exchange requirements and supportability, and prioritizing communications support in accordance with MCWP 3-40.3 MAGTF Communications System.

# EVENT COMPONENTS:

- 1. Provide technical data for a regimental level communications plan.
- 2. Develop detailed system level data for a MAGTF or Joint level communications plan.
- CHAINED EVENTS:

2821-C2-2001 2823-C2-2002

# REFERENCES:

- 1. Applicable technical references
- 2. MCWP 3-40.3 MAGTF Communications System
- 3. Operations Order Annex K
- 4. SL 1-2/3 Index of Authorized Publications in Stock

# 2800 T&R MANUAL

# CHAPTER 4

# MOS 28XX INDIVIDUAL EVENTS

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# 2800 T&R MANUAL

## CHAPTER 4

### MOS 28XX INDIVIDUAL EVENTS

**4000. PURPOSE.** This chapter details the individual events that pertain to multiple MOSs in the Ground Electronics Maintenance occupational field. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**4001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX. This chapter utilizes the following methodology.

a. Field one. This field represents the community. This chapter contains the following community codes:

Code	Descrip	ption			
28XX	Ground	Electronics	Maintenance	occupational	field

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

Description
Maintenance Administration Support
Command and Control
Maintenance
Operations
Personnel
Maintenance Programs
Publications Control
Maintenance Reports

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

Code	Description	
1000	Core Skills	
2000	Core Plus Skills	

## 4002. INDEX OF INDIVIDUAL EVENTS

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28XX-ADMN-2004	maintenance policy/procedures	4-10
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	maintenance issues	4-12
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28XX-C2-2001	maintenance activity	4-13
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28XX-MAIN-2005	Perform inspection and classification on cables	4-22
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28XX-MAIN-2010	electronics equipment	4-27
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28XX-MAIN-2011	electronics equipment	4-28
28XX-MAIN-2012	Perform repair on C2 electronics equipment	4-29
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28XX-MAIN-2014	electronics equipment Perform inspection and classification on	4-32
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28XX-MAIN-2017	equipment	4-35
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28XX-MAIN-2018	systems equipment	4-36
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28XX-MAIN-2019	intelligence-based systems equipment	4-38
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28XX-MAIN-2020	based systems equipment	4-38
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28XX-MAIN-2021	unmanned systems equipment	4-39
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28XX-MAIN-2022	unmanned systems equipment	4-41

	Perform modification on unmanned systems	
28XX-MAIN-2024	equipment	4-43
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28XX-MAIN-2025	systems equipment	4 - 44
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28XX-MAIN-2026	FORCEPRO electronics equipment	4-45
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28XX-MAIN-2027	FORCEPRO electronics equipment	4-46
28XX-MAIN-2028	Perform repair on FORCEPRO electronics equipment	4-47
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28XX-MAIN-2029	equipment	4-49
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28XX-MAIN-2030	electronics equipment	4-50
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28XX-MAIN-2031	electronics items/components	4-51
	Perform servicing, adjustment, and tuning on	
28XX-MAIN-2032	NS-E electronics items/components	4-52
	Perform repair on NS-E electronics	
28XX-MAIN-2033	items/components	4-53
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28XX-MAIN-2034	items/components	4-54
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28XX-MAIN-2035	electronics items/components	4-55
28XX-MAIN-2036	Supervise maintenance actions	4-56
28XX-MAIN-2037	Provide assistance in complex maintenance tasks	4-57
28XX-OPS-2001	Prepare organic equipment for embarkation	4-58
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28XX-OPS-2002	maintenance activity	4-59
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28XX-PERS-2001	electronics maintenance	4-61
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28XX-PERS-2002	maintenance personnel	4-62
28XX-PROG-2001	Manage Class IX consumable inventory	4-63
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28XX-PROG-2003	external maintenance support programs	4-65
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# 4003. 1000-LEVEL EVENTS

**28XX-MAIN-1001:** Maintain an electrostatic sensitive device (ESD) safe work area

 EVALUATION-CODED:
 NO
 SUSTAINMENT INTERVAL:
 12 months

 MOS PERFORMING:
 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

 GRADES:
 PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** With the aid of references, ESD sensitive devices and ESD workstation materials.

**STANDARD:** Preventing ESD damage to equipment in accordance with TM 9999-15/2, Chapter 5.

#### PERFORMANCE STEPS:

- 1. Adhere to safety requirements.
- 2. Verify earth ground to ESD desktop workstation/ESD field mat.
- 3. Verify ESD wrist strap connection to ESD desktop workstation/ESD field mat.
- 4. Ensure all personnel in the work area adhere to ESD safety precautions.

#### **REFERENCES:**

- 1. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 2. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 3. TI 5820-25/22\_ Electromagnetic Environmental Effects (E3) Procedures for Installation of Communication Equipment on Marine Corps Platforms
- 4. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 5. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 6. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 7. TM 9999-15/2\_ Electro-static Discharge (ESD) Management

#### SUPPORT REQUIREMENTS:

EQUIPMENT: Support Equipment: ESD workstation/field mat

28XX-MAIN-1002: Perform repair on power supply equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

#### **INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**<u>STANDARD</u>**: Returning equipment to serviceable condition in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.

- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 24. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 25. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 26. UM 4400-124 SASSY Using Unit Procedures
- 27. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

4004. 2000-LEVEL EVENTS

28XX-ADMN-2001: Administer quality control program

### EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2823, 2834, 2862, 2874, 2887

**GRADES:** SGT, SSGT, GYSGT

#### **INITIAL TRAINING SETTING:** MOJT

CONDITION: With the aid of references and equipment.

**STANDARD:** Ensuring that equipment records have been completed and that proper maintenance actions have been completed in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

### PERFORMANCE STEPS:

- 1. Determine performance standards.
- 2. Determine equipment requirements.
- 3. Determine qualified personnel.
- 4. Supervise equipment inspection and classification.
- 5. Supervise follow-on actions.

### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.2\_ MIMMS Field Procedures Manual
- 3. SL 1-2/3 Index of Authorized Publications in Stock
- 4. TM 4700-15/1\_ Ground Equipment Record Procedures
- 5. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28xx-ADMN-2002: Supervise maintenance administration support

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2823, 2834, 2862, 2874, 2887, 2891

GRADES: SGT, SSGT, GYSGT, MSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** With the aid of references, equipment, personnel and tools.

**STANDARD:** Ensuring effectiveness and efficiency of maintenance operations in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual, Chapters 1, 2, and 3, and Appendix E.

### PERFORMANCE STEPS:

- 1. Determine resource requirements.
- 2. Analyze capabilities.
- 3. Enforce maintenance management programs.
- 4. Report maintenance program performance, as required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. CMR Consolidated Memorandum Receipt
- 3. CNSS 4000 Communication Security (COMSEC) Maintenance and Maintenance Training
- Contracted Logistics Support (CLS) Statement of Requirements/Objectives/ Work (SOR/SOO/SOW)
- 5. Contracting Officer's Representative (COR) Duties & Responsibilities Guidebook(s)
- 6. DLA Customer Assistance Handbook
- 7. DoDD 8570.01M Information Assurance Workforce Improvement Program Incorporating Change 2
- 8. DoDI 8523.01 Communication Security
- 9. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 10. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 11. FEDLOG Federal Logistic Data
- 12. Maintenance Float Catalog
- 13. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 14. MCO 1553.3\_ Marine Corps Unit Training Management System
- 15. MCO 2281.1\_ Electronic Key Management System (EKMS) Policy
- 16. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 17. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 18. MCO 3500.27\_ Operational Risk Management (ORM)
- 19. MCO 4081.2\_ Marine Corps Performance Based Logistics (PBL)
- 20. MCO 4105.2 Marine Corps Warranty Program
- 21. MCO 4200.33\_ Contractor Logistics Support (CLS) for Ground Equipment, Weapon Systems, Munitions, and Information Systems
- 22. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 23. MCO 4733.1\_ Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
- 24. MCO 4790.18\_ Corrosion Prevention and Control (CPAC) Program
- 25. MCO 4855.10 Product Quality Deficiency Report (PQDR)
- 26. MCO 5040.6\_ Marine Corps Readiness Inspections and Assessments
- 27. MCO P4400.150\_ Consumer Level Supply Policy Manual
- 28. MCO P4400.151\_ Intermediate-Level Supply Management Policy Manual
- 29. MCO P4400.160\_ Field Supply and Maintenance Analysis Office Program (FSMAO)
- 30. MCO P4400.82\_ Regulated/Controlled Item Management Manual
- 31. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 32. MCO P4790.2\_ MIMMS Field Procedures Manual
- 33. MCO P5215.17\_ The Marine Corps Technical Publications System
- 34. MCRP 4-11.3G Unit Embarkation Handbook
- 35. MCWP 3-40.3 MAGTF Communications System
- 36. NSTISSI 4000 COMSEC Maintenance and Maintenance Training Policy (NSA)
- 37. PLMS V3 UG Publication Library Management System Version 3 Users Guide
- 38. SL 1-2/3 Index of Authorized Publications in Stock
- 39. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 40. TI 4733 Series Calibration and TMDE Requirements and Programs
- 41. TI 5820-25/22\_ Electromagnetic Environmental Effects (E3) Procedures for Installation of Communication Equipment on Marine Corps Platforms

42. TM 10209-10/1\_ Use and Care of Hand Tools and Measuring Tools 43. TM 10510-OD/1\_ General Purpose Test Measurement and Diagnostic Equipment (TMDE) Listing (Including Ancillary Support Items & Tool Kits) 44. TM 2000-15/1\_ Brief Description of U.S. Marine Corps Communication-Electronic Equipment 45. TM 2000-OD/2\_ Principal Technical Characteristics of U.S. Marine Corps Communication-Electronics Equipment 46. TM 4700-15/1 Ground Equipment Record Procedures 47. TM 4795-OR/1 Organizational Corrosion Prevention and Control Procedures for USMC Ground Combat Equipment 48. TM 5411-14&P/2 Marine Corps Expeditionary Shelter System (MCESS)(Small Shelter Family) 10-Foot Rigid General Purpose Shelter Operation and Maintenance Instructions with Repair Parts List 49. TM 5411-14/1\_ Marine Corps Expeditionary Shelter System (MCESS)(Small Shelter Family) Operation and Maintenance Instructions 50. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level 51. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety 52. TM 9999-15/1 Electro-Static Discharge (ESD) Awareness 53. TM 9999-15/2\_ Electro-static Discharge (ESD) Management 54. UM 4400-124 SASSY Using Unit Procedures 55. UM 4400-60 Materiel Returns Program 56. UM 4790-5 MIMMS AIS, Field Maintenance Procedures 57. UM PLMS User's Manual, Publication Library Management System

28XX-ADMN-2003: Manage ground electronics maintenance production

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Maintenance leaders manage maintenance production at varying levels, ranging from section heads that manage maintenance production for specific equipment types up to shop officers and shop chiefs that manage maintenance production for all equipment types. Regardless of the scope and scale of maintenance production being managed, the same basic process is utilized.

MOS PERFORMING: 2802, 2805, 2823, 2834, 2862, 2874, 2887, 2891

GRADES: SGT, SSGT, GYSGT, MSGT, MGYSGT, WO, CWO2, CWO3, CWO4, CAPT

#### **INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>:** With the aid of references, a mission and Commander's guidance, a ground electronic maintenance unit, and an assigned maintenance area.

**STANDARD:** Ensuring the efficient and effective performance of maintenance functions in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

### PERFORMANCE STEPS:

1. Analyze maintenance phase productivity.

2. Analyze workload.

- 3. Determine maintenance capacity.
- 4. Determine maintenance resource requirements.
- 5. Establish maintenance priorities.
- 6. Allocate maintenance resources.
- 7. Monitor maintenance cycle times and workflow.
- 8. Manage maintenance reporting.

### **REFERENCES:**

- 1. Applicable technical references
- Contracted Logistics Support (CLS) Statement of Requirements/Objectives/ Work (SOR/SOO/SOW)
- 3. Contracting Officer's Representative (COR) Duties & Responsibilities Guidebook(s)
- 4. DLA Customer Assistance Handbook
- 5. DoDI 4151.18 Maintenance of Military Material
- 6. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 7. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 1200.17\_ Military Occupational Specialty Manual (MOS Manual)
- 10. MCO 2281.1\_ Electronic Key Management System (EKMS) Policy
- 11. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 12. MCO 4105.2\_ Marine Corps Warranty Program
- 13. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 14. MCO 4733.1\_ Marine Corps Test, Measurement, and Diagnostic Equipment
- (TMDE) Calibration and Maintenance Program (CAMP)
- 15. MCO 4855.10\_ Product Quality Deficiency Report (PQDR)
- 16. MCO 5040.6\_ Marine Corps Readiness Inspections and Assessments
- 17. MCO P4400.150\_ Consumer Level Supply Policy Manual
- 18. MCO P4400.151\_ Intermediate-Level Supply Management Policy Manual
- 19. MCO P4400.82\_ Regulated/Controlled Item Management Manual
- 20. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 21. MCO P4790.2\_ MIMMS Field Procedures Manual
- 22. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 23. MCWP 4-11.4 Maintenance Operations
- 24. MMSOP Maintenance Management Standing Operating Procedures
- 25. NSTISSI 4000 COMSEC Maintenance and Maintenance Training Policy (NSA)
- 26. OpOrd Operational Order
- 27. SL 1-2/3 Index of Authorized Publications in Stock
- 28. T/O&E Table of Organization and Equipment
- 29. TM 10209-10/1\_ Use and Care of Hand Tools and Measuring Tools
- 30. TM 4700-15/1\_ Ground Equipment Record Procedures
- 31. UM 4400-124 SASSY Using Unit Procedures
- 32. UM 4400-125 FMF SASSY Accounting Manual (VOL IV) Maintenance Float Procedures
- 33. UM 4400-60 Materiel Returns Program
- 34. UM 4790-5 MIMMS AIS, Field Maintenance Procedures
- 35. Unit SOP Unit's Standing Operating Procedures

28XX-ADMN-2004: Develop unit level ground electronics maintenance

policy/procedures

#### EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2802, 2805, 2823, 2874, 2891

GRADES: MSGT, MGYSGT, WO, CWO2, CWO3, CWO4, CWO5, CAPT, MAJ, LTCOL

#### **INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** With the aid of references, commander's guidance, directives from higher headquarters, a mission and a table of organization/equipment.

**STANDARD:** Ensuring sufficient detail so that each subordinate unit can perform its maintenance mission in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual, Chapter 1, and paragraph 1004.4.

# PERFORMANCE STEPS:

- 1. Analyze mission, directives, policy guidance and references.
- 2. Determine Commander's additional policy guidance.
- 3. Determine procedures requiring deviation from existing policy.
- 4. Determine policies requiring amplification.
- 5. Indicate rationale why current directives are inadequate or inappropriate.
- 6. Staff procedures/policy letters for review.

### **REFERENCES:**

- 1. Applicable technical references
- 2. CNSS 4000 Communication Security (COMSEC) Maintenance and Maintenance Training
- Contracted Logistics Support (CLS) Statement of Requirements/Objectives/ Work (SOR/SO0/SOW)
- 4. DoDI 8523.01 Communication Security
- 5. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 6. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 7. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 8. MCO 1200.17\_ Military Occupational Specialty Manual (MOS Manual)
- 9. MCO 2281.1\_ Electronic Key Management System (EKMS) Policy
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4105.2 Marine Corps Warranty Program
- 12. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 13. MCO 4733.1\_ Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
- 14. MCO 4855.10 Product Quality Deficiency Report (PQDR)
- 15. MCO 5040.6\_ Marine Corps Readiness Inspections and Assessments
- 16. MCO 5311.1 Total Force Structure Process (TFSP)
- 17. MCO P4400.150 Consumer Level Supply Policy Manual
- 18. MCO P4400.151\_ Intermediate-Level Supply Management Policy Manual
- 19. MCO P4400.160\_ Field Supply and Maintenance Analysis Office Program (FSMAO)
- 20. MCO P4400.82\_ Regulated/Controlled Item Management Manual
- 21. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual

22. MCO P4790.2\_ MIMMS Field Procedures Manual

- 23. MCO P5215.17\_ The Marine Corps Technical Publications System
- 24. MCO P7100.8\_ Field Budget Guidance Manual
- 25. MCRP 4-11.3G Unit Embarkation Handbook
- 26. MCWP 3-40.3 MAGTF Communications System
- 27. MCWP 4-11.4 Maintenance Operations
- 28. MMSOP Maintenance Management Standing Operating Procedures
- 29. NSTISSI 4000 COMSEC Maintenance and Maintenance Training Policy (NSA)
- 30. SL 1-2/3 Index of Authorized Publications in Stock
- 31. TI 4733-15/7\_ Procedural Publication Index for Marine Corps Test, Measurement, and Diagnostic Equipment Calibration and Maintenance Program
- 32. TI 4733-15/9\_ Radiac Instrument Calibration Requirements
- 33. TI 4733-35/5\_ Calibration Equipment Recommendations for the Marine Corps Calibration Program
- 34. TI 4733-ID/8\_ Marine Corps Transfer Standards Program
- 35. TI 4733-OD/1\_ Calibration Requirements Marine Corps Test, Measurement and Diagnostic Equipment Calibration and Maintenance Program
- 36. TI 4733-OD/10\_ Special Calibration of Torque Tools
- 37. TI 4733-OD/11\_ Infantry Weapons Gage Calibration Program (IWGCP)
- 38. TI 4733-OD/21\_ Survey Instrument Calibration Program (SICP)
- 39. TI 5820-25/22\_ Electromagnetic Environmental Effects (E3) Procedures for Installation of Communication Equipment on Marine Corps Platforms
- 40. TI-4733-35/23\_ Navy and Marine Corps Calibration Laboratory Audit/ Certification Manual
- 41. TM 10209-10/1\_ Use and Care of Hand Tools and Measuring Tools
- 42. TM 10510-OD/1\_ General Purpose Test Measurement and Diagnostic Equipment (TMDE) Listing (Including Ancillary Support Items & Tool Kits)
- 43. TM 4700-15/1\_ Ground Equipment Record Procedures
- 44. TM 4795-OR/1\_ Organizational Corrosion Prevention and Control Procedures for USMC Ground Combat Equipment
- 45. TM 5411-14&P/2 Marine Corps Expeditionary Shelter System (MCESS) (Small Shelter Family) 10-Foot Rigid General Purpose Shelter Operation and Maintenance Instructions with Repair Parts List
- 46. TM 5411-14/1\_ Marine Corps Expeditionary Shelter System (MCESS) (Small Shelter Family) Operation and Maintenance Instructions
- 47. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 48. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 49. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness

50. TM 9999-15/2\_ Electro-static Discharge (ESD) Management

- 51. UM 4400-123 FMF SASSY Management Unit Procedures
- 52. UM 4400-124 SASSY Using Unit Procedures
- 53. UM 4400-60 Materiel Returns Program
- 54. UM 4790-5 MIMMS AIS, Field Maintenance Procedures
- 55. UM PLMS User's Manual, Publication Library Management System

**28XX-ADMN-2005**: Advise the commander on ground electronics maintenance issues

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2802, 2805, 2823, 2874, 2891

GRADES: MSGT, MGYSGT, WO, CWO2, CWO3, CWO4, CWO5, CAPT, MAJ, LTCOL

### **INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: With the aid of references, commander's guidance and maintenance reports.

**STANDARD:** Providing an accurate assessment of the unit's ability to perform its assigned mission in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual Chapter 1.

### PERFORMANCE STEPS:

- 1. Review Commander's guidance.
- 2. Review MARES management reports.
- 3. Identify equipment excesses and deficiencies.
- 4. Analyze maintenance trends.
- 5. Analyze supply support.
- 6. Evaluate overall equipment readiness posture.
- 7. Provide maintenance/supply ratings.
- 8. Provide recommendations.

### **REFERENCES:**

- 1. DLA Customer Assistance Handbook
- 2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 3. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 4. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 5. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 6. MCO P4790.2\_ MIMMS Field Procedures Manual
- 7. MCWP 3-40.3 MAGTF Communications System
- 8. MCWP 4-11.4 Maintenance Operations
- 9. T/O&E Table of Organization and Equipment
- 10. TM 4700-15/1\_ Ground Equipment Record Procedures
- 11. UM 4400-124 SASSY Using Unit Procedures
- 12. UM 4790-5 MIMMS AIS, Field Maintenance Procedures
- 13. Unit SOP Unit's Standing Operating Procedures
- 14. Web Tools Web Based Maintenance Management Applications

**<u>28xx-C2-2001</u>**: Plan for the deployment of a ground electronics maintenance activity

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2802, 2805, 2823, 2874, 2891

GRADES: MSGT, MGYSGT, WO, CWO2, CWO3, CWO4, CWO5, CAPT, MAJ, LTCOL

### **INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Providing task-organized maintenance and meeting the mission requirement in support of operations In accordance with MCO P4790.2\_ MIMMS Field Procedures Manual, Appendix E.

# PERFORMANCE STEPS:

- 1. Review mission requirements.
- 2. Identify supported unit requirements.
- 3. Identify supporting unit requirements.
- 4. Determine personnel requirements.
- 5. Determine equipment requirements.
- 6. Identify supply support requirements.
- 7. Identify shortfalls.
- 8. Submit embarkation requirements.
- 9. Identify power requirements.
- 10. Provide input for transportation load plans.
- 11. Arrange for special material handling and transportation of equipment, as required.
- 12. Determine site layout.
- 13. Submit plan.

# **REFERENCES**:

- 1. Applicable technical references
- 2. CAL and LUBF Consolidated Account Listing and Loaded Unit Balance File
- 3. CMR Consolidated Memorandum Receipt
- 4. Contracted Logistics Support (CLS) Statement of Requirements/Objectives/ Work (SOR/SO0/SOW)
- 5. Contracting Officer's Representative (COR) Duties & Responsibilities Guidebook(s)
- 6. DoDD 8500.1 Information Assurance (IA)
- 7. DoDD 8570.01M Information Assurance Workforce Improvement Program Incorporating Change 2
- 8. DoDI 4151.18 Maintenance of Military Material
- 9. DoDI 8523.01 Communication Security
- 10. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 11. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 12. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 13. MCCLL Marine Corps Center for Lessons Learned web site http://www.mccll.usmc.mil
- 14. MCO 1200.17\_ Military Occupational Specialty Manual (MOS Manual)
- 15. MCO 2281.1\_ Electronic Key Management System (EKMS) Policy
- 16. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 17. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 18. MCO 3000.18\_ Marine Corps Force Deployment Planning and Execution (FDP&E) Manual
- 19. MCO 3500.27\_ Operational Risk Management (ORM)
- 20. MCO 3504.1\_ Marine Corps Lessons Learned Program (MCCLP) and the Marine Corps Center for Lessons Learned (MCCLL)
- 21. MCO 4081.2\_ Marine Corps Performance Based Logistics (PBL)
- 22. MCO 4105.2\_ Marine Corps Warranty Program
- 23. MCO 4200.33\_ Contractor Logistics Support (CLS) for Ground Equipment, Weapon Systems, Munitions, and Information Systems
- 24. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)

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- 25. MCO 4733.1\_ Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
- 26. MCO 4790.8 Repair of Micro-Miniature Electronic Circuits (obsolete MCO or incorrect Pub ID)
- 27. MCO 4855.10\_ Product Quality Deficiency Report (PQDR)
- 28. MCO 5311.1\_ Total Force Structure Process (TFSP)
- 29. MCO P4400.150\_ Consumer Level Supply Policy Manual
- 30. MCO P4400.151\_ Intermediate-Level Supply Management Policy Manual
- 31. MCO P4400.82\_ Regulated/Controlled Item Management Manual
- 32. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 33. MCO P4790.2\_ MIMMS Field Procedures Manual
- 34. MCO P5215.17\_ The Marine Corps Technical Publications System
- 35. MCO P7100.8\_ Field Budget Guidance Manual
- 36. MCRP 4-11.3G Unit Embarkation Handbook
- 37. MCWP 3-40.3 MAGTF Communications System
- 38. MCWP 4-11 Tactical-Level Logistics
- 39. MCWP 4-11.4 Maintenance Operations
- 40. MCWP 5-1 Marine Corps Planning Process (MCPP)
- 41. MMSOP Maintenance Management Standing Operating Procedures
- 42. MPS Load Plan
- 43. NSTISSI 4000 COMSEC Maintenance and Maintenance Training Policy (NSA)
- 44. OPNAVINST 2221.3\_ Communications Security (COMSEC) Maintenance and Maintenance Training
- 45. OpOrd Operational Order
- 46. SECNAVINST 5510.36\_ Dept of the Navy Information and Personnel Security Program Regulations
- 47. SL 1-2/3 Index of Authorized Publications in Stock
- 48. T/O&E Table of Organization and Equipment
- 49. TEEP Training, Exercise and Evaluation Plan
- 50. TI 4733 Series Calibration and TMDE Requirements and Programs
- 51. TI 5820-25/22\_ Electromagnetic Environmental Effects (E3) Procedures for Installation of Communication Equipment on Marine Corps Platforms
- 52. TM 10510-OD/1\_ General Purpose Test Measurement and Diagnostic Equipment (TMDE) Listing (Including Ancillary Support Items & Tool Kits)
- 53. TM 2000-15/1\_ Brief Description of U.S. Marine Corps Communication-Electronic Equipment
- 54. TM 2000-OD/2\_ Principal Technical Characteristics of U.S. Marine Corps Communication-Electronics Equipment
- 55. TM 4700-15/1\_ Ground Equipment Record Procedures
- 56. TM 5410-14/1\_ Intermediate Maintenance Instructions, Electronics Maintenance Complex
- 57. TM 5411-14&P/2 Marine Corps Expeditionary Shelter System (MCESS)(Small Shelter Family) 10-Foot Rigid General Purpose Shelter Operation and Maintenance Instructions with Repair Parts List
- 58. TM 5411-14/1\_ Marine Corps Expeditionary Shelter System (MCESS)(Small Shelter Family) Operation and Maintenance Instructions
- 59. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 60. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 61. UM 4400-124 SASSY Using Unit Procedures
- 62. UM 4400-60 Materiel Returns Program
- 63. Unit SOP Unit's Standing Operating Procedures

**28XX-C2-2002:** Conduct ground electronics maintenance continuous process improvement (CPI)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2802, 2805, 2823, 2874, 2891

GRADES: MSGT, MGYSGT, WO, CWO2, CWO3, CWO4, CWO5, CAPT, MAJ, LTCOL

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Ensuring maintenance and maintenance management processes are in compliance with MCO P4790.1\_ MIMMS Introduction Manual.

### PERFORMANCE STEPS:

- 1. Evaluate ground electronics maintenance processes
- 2. Identify process deficiencies/inefficiencies
- 3. Develop process improvements
- 4. Implement process improvements

#### **REFERENCES:**

- 1. Applicable technical references
- 2. CMR Consolidated Memorandum Receipt
- 3. MCO 5311.1\_ Total Force Structure Process (TFSP)
- 4. MCO P4400.150\_ Consumer Level Supply Policy Manual
- 5. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 6. MCO P4790.2\_ MIMMS Field Procedures Manual
- 7. MCWP 4-1 Logistics Operations
- 8. MCWP 4-11 Tactical-Level Logistics
- 9. MCWP 4-11.4 Maintenance Operations
- 10. MCWP 5-1 Marine Corps Planning Process (MCPP)
- 11. SL 1-2/3 Index of Authorized Publications in Stock
- 12. T/O&E Table of Organization and Equipment

**28xx-C2-2003:** Assist in the development of technical input on ground electronics maintenance solutions

#### EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Senior ground electronics maintenance Marines are called upon to provide subject matter expertise in identifying, validating, and evaluating requirements for manning, training, and equipping the force; providing estimates of supportability and life cycle management courses of action for equipment under development/fielding; and assessing enterprise-level training and education requirements in support of ground electronics maintenance operations.

MOS PERFORMING: 2802, 2805, 2823, 2874, 2891

GRADES: MSGT, MGYSGT, WO, CWO2, CWO3, CWO4, CWO5, CAPT, MAJ, LTCOL

# **INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a requirement.

**STANDARD:** Providing analysis of capability gaps and excesses, and identifying possible solutions and solution strategies, in accordance with MCO 3900.15\_Marine Corps Expeditionary Force Development System (EFDS).

# PERFORMANCE STEPS:

- 1. Assess doctrinal/policy impacts/supportability
- 2. Assess organizational impacts/supportability
- 3. Assess training/education impacts/supportability
- 4. Assess materiel impacts/supportability
- 5. Assess leadership impacts/supportability
- 6. Assess personnel impacts/supportability
- 7. Assess facilities impacts/supportability
- 8. Assess cost impacts/supportability
- 9. Develop course of action recommendation
- 10. Submit course of action recommendation

#### **REFERENCES:**

- 1. Applicable technical references
- 2. CJCSI 3170.01\_ Joint Capabilities Integration and Development System (JCIDS)
- 3. CMR Consolidated Memorandum Receipt
- 4. JCIDS Manual for the Operation of the Joint Capabilities Integration and Development System
- 5. MCO 1200.17\_ Military Occupational Specialty Manual (MOS Manual)
- 6. MCO 1553.1\_ The Marine Corps Training and Education System
- 7. MCO 3900.15\_ Marine Corps Expeditionary Force Development System (EFDS)
- 8. MCO 5311.1\_ Total Force Structure Process (TFSP)
- 9. MCO P3500.72\_ Marine Corps Ground Training and Readiness (T&R) Program
- 10. MCO P4400.150\_ Consumer Level Supply Policy Manual
- 11. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 12. MCO P4790.2\_ MIMMS Field Procedures Manual
- 13. MCWP 4-1 Logistics Operations
- 14. MCWP 4-11 Tactical-Level Logistics
- 15. MCWP 4-11.4 Maintenance Operations
- 16. NAVMC 3500.6\_ Ground Electronics Maintenance Training and Readiness Manual
- 17. SL 1-2/3 Index of Authorized Publications in Stock
- 18. T/O&E Table of Organization and Equipment

**28XX-MAIN-2001:** Perform inspection and classification on power supply equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

### **PERFORMANCE STEPS:**

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>28XX-MAIN-2002</u>**: Perform servicing, adjustment, and tuning on power supply equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-MAIN-2003: Perform modification on power supply equipment

# EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 12. MCO P4790.2\_ MIMMS Field Procedures Manual
- 13. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 14. MCO P5215.17\_ The Marine Corps Technical Publications System
- 15. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 16. MIL-STD-188-124A Military Standard for Grounding
- 17. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 18. SDS Safety Data Sheets
- 19. SL 1-2/3 Index of Authorized Publications in Stock
- 20. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 21. TM 4700-15/1\_ Ground Equipment Record Procedures

 22. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
 23. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
 24. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
 25. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
 26. UM 4400-124 SASSY Using Unit Procedures
 27. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**28XX-MAIN-2004:** Perform recovery and evacuation on power supply equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

CONDITION: Given a mission, personnel, and equipment.

**STANDARD**: Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS) 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock

14. TM 4700-15/1\_ Ground Equipment Record Procedures
15. UM 4400-124 SASSY Using Unit Procedures
16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-MAIN-2005: Perform inspection and classification on cables

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

#### **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS) 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock

 TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
 TM 4700-15/1\_ Ground Equipment Record Procedures
 TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
 TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
 TM 9999-15/2\_ Electro-static Discharge (ESD) Management
 UM 4400-124 SASSY Using Unit Procedures
 UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>28XX-MAIN-2006</u>**: Perform servicing, adjustment, and tuning on cables

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets

- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-MAIN-2007: Perform repair on cables

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

### **PERFORMANCE STEPS:**

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data

- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MCWP 4-1 Logistics Operations
- 17. MCWP 4-11 Tactical-Level Logistics
- 18. MCWP 4-11.4 Maintenance Operations
- 19. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 20. MIL-STD-188-124A Military Standard for Grounding
- 21. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 22. SDS Safety Data Sheets
- 23. SL 1-2/3 Index of Authorized Publications in Stock
- 24. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 25. TM 4700-15/1\_ Ground Equipment Record Procedures
- 26. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 27. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 28. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 29. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 30. UM 4400-124 SASSY Using Unit Procedures
- 31. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-MAIN-2008: Perform modification on cables

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

### PERFORMANCE STEPS:

1. Induct equipment into maintenance, if required.

- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-MAIN-2009: Perform recovery and evacuation on cables

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887 GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

# **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2 MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**28XX-MAIN-2010**: Perform inspection and classification on C2 electronics equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834, 2841, 2847, 2862, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

# REFERENCES:

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**28XX-MAIN-2011:** Perform servicing, adjustment, and tuning on C2 electronics equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834, 2841, 2847, 2862, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

### **PERFORMANCE STEPS:**

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-MAIN-2012: Perform repair on C2 electronics equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834, 2841, 2847, 2862, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

#### **PERFORMANCE STEPS:**

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5215.17\_ The Marine Corps Technical Publications System
- 15. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 16. MIL-STD-188-124A Military Standard for Grounding
- 17. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 18. SDS Safety Data Sheets

- 19. SL 1-2/3 Index of Authorized Publications in Stock
- 20. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 21. TM 4700-15/1\_ Ground Equipment Record Procedures
- 22. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 23. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 24. TM 9999-15/1 Electro-Static Discharge (ESD) Awareness
- 25. TM 9999-15/2 Electro-static Discharge (ESD) Management
- 26. UM 4400-124 SASSY Using Unit Procedures
- 27. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-MAIN-2013: Perform modification on C2 electronics equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834, 2841, 2847, 2862, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness

Reporting (MRR) Policy 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS) 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual 13. MCO P4790.2\_ MIMMS Field Procedures Manual 14. MCO P5090.2\_ Environmental Compliance and Protection Manual 15. MCO P5215.17\_ The Marine Corps Technical Publications System 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts 17. MIL-STD-188-124A Military Standard for Grounding 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS) 19. SDS Safety Data Sheets 20. SL 1-2/3 Index of Authorized Publications in Stock 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items 22. TM 4700-15/1\_ Ground Equipment Record Procedures 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management 27. UM 4400-124 SASSY Using Unit Procedures 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>28xx-MAIN-2014</u>**: Perform recovery and evacuation on C2 electronics equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834, 2841, 2847, 2862, 2887

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS) 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 15. UM 4400-124 SASSI USING UNIC Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**28XX-MAIN-2015:** Perform inspection and classification on intelligence-based systems equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2841, 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

- 1. Applicable technical references 2. DLA Customer Assistance Handbook 3. FEDLOG Federal Logistic Data 4. Maintenance Float Catalog 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy 8. MCO 4400.16 Uniform Material Movement and Issue Priority System (UMMIPS) 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual 10. MCO P4790.2\_ MIMMS Field Procedures Manual 11. MCO P5215.17\_ The Marine Corps Technical Publications System 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS) 13. SDS Safety Data Sheets 14. SL 1-2/3 Index of Authorized Publications in Stock 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items 16. TM 4700-15/1 Ground Equipment Record Procedures 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**28XX-MAIN-2016:** Perform servicing, adjustment, and tuning on intelligence-based systems equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2841, 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-MAIN-2017: Perform repair on intelligence-based systems equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2841, 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.

- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**28XX-MAIN-2018:** Perform modification on intelligence-based systems equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

# MOS PERFORMING: 2841, 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

### **PERFORMANCE STEPS:**

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control

and Safety 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management 27. UM 4400-124 SASSY Using Unit Procedures 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>28XX-MAIN-2019</u>**: Perform rebuilding and overhauling on intelligence-based systems equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2841, 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

CONDITION: A mission requirement, equipment, and with the aid of references.

**STANDARD:** Restoring equipment to a serviceable condition under maintenance serviceability standards and in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Conduct initial inspection.
- 2. Diagnose fault.
- 3. Troubleshoot.
- 4. Isolate fault.
- 5. Remove defective components.
- 6. Requisition parts.
- 7. Replace parts.
- 8. Align, as required.
- 9. Apply MIs/TIs, as required.
- 10. Apply firmware/software upgrades, as required.
- 11. Re-surface/re-coat, as required.
- 12. Replace identification markings, as required.
- 13. Document maintenance actions.
- 14. Conduct final inspection.

#### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 5. SDS Safety Data Sheets
- 6. SL 1-2/3 Index of Authorized Publications in Stock
- 7. TM 4700-15/1\_ Ground Equipment Record Procedures

28XX-MAIN-2020: Perform recovery and evacuation on intelligence-based systems

equipment

# EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2841, 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

# **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**28XX-MAIN-2021:** Perform inspection and classification on unmanned systems equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834, 2841, 2847, 2862, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**28XX-MAIN-2022:** Perform servicing, adjustment, and tuning on unmanned systems equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834, 2841, 2847, 2862, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-MAIN-2023: Perform repair on unmanned systems equipment

### EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834, 2841, 2847, 2862, 2887

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**<u>STANDARD</u>**: Returning equipment to serviceable condition in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System

- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-MAIN-2024: Perform modification on unmanned systems equipment

EVALUATION-CODED: NO

NO **SUSTAINMENT INTERVAL:** 12 months

MOS PERFORMING: 2831, 2834, 2841, 2847, 2862, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators

7.	Maintenance Float Catalog
8.	MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES)
	Equipment
9.	MCO 2410.2_ Electromagnetic Environmental Effects (E3) Control Program
10.	MCO 3000.11_ Ground Equipment Condition and Supply Materiel Readiness
	Reporting (MRR) Policy
11.	MCO 4400.16_ Uniform Material Movement and Issue Priority System (UMMIPS)
12.	MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS)
	Introduction Manual
13.	MCO P4790.2_ MIMMS Field Procedures Manual
14.	MCO P5090.2_ Environmental Compliance and Protection Manual
15.	MCO P5215.17_ The Marine Corps Technical Publications System
16.	MIL-STD-1686B Electro-Static Discharge Control Program for Protection of
	Electrical and Electronic Parts
	MIL-STD-188-124A Military Standard for Grounding
18.	N6283300014 Navy Electricity and Electronics Training Series (NEETS)
19.	SDS Safety Data Sheets
20.	SL 1-2/3 Index of Authorized Publications in Stock
21.	TI 4400-15/1_ Packaging, Handling, Storage, and Transportation of
	Electrostatic Discharge Sensitive Items
22.	TM 4700-15/1_ Ground Equipment Record Procedures
23.	TM 5895-45/1_ Standard Maintenance Practices Miniature/Microminiature (2M)
	Electronic Assembly Repair Organizational/Intermediate/Depot Level
24.	TM 9406-15_ Grounding Procedures for Electromagnetic Interference Control
	and Safety
25.	TM 9999-15/1_ Electro-Static Discharge (ESD) Awareness
26.	TM 9999-15/2_ Electro-static Discharge (ESD) Management
	UM 4400-124 SASSY Using Unit Procedures
28.	UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-MAIN-2025: Perform recovery and evacuation on unmanned systems equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834, 2841, 2847, 2862, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

STANDARD: Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.

- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**28XX-MAIN-2026:** Perform inspection and classification on FORCEPRO electronics equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834, 2841, 2847, 2862, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.

- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**28XX-MAIN-2027**: Perform servicing, adjustment, and tuning on FORCEPRO electronics equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834, 2841, 2847, 2862, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.

- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-MAIN-2028: Perform repair on FORCEPRO electronics equipment

# EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834, 2841, 2847, 2862, 2887

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.

- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-MAIN-2029: Perform modification on FORCEPRO electronics equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834, 2841, 2847, 2862, 2887

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 19. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 20. MIL-STD-188-124A Military Standard for Grounding
- 21. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 22. SDS Safety Data Sheets
- 23. SL 1-2/3 Index of Authorized Publications in Stock
- 24. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items

 TM 4700-15/1\_ Ground Equipment Record Procedures
 TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
 TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
 TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
 TM 9999-15/2\_ Electro-static Discharge (ESD) Management
 UM 4400-124 SASSY Using Unit Procedures
 UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**28XX-MAIN-2030:** Perform recovery and evacuation on FORCEPRO electronics equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834, 2841, 2847, 2862, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)

12. SDS Safety Data Sheets
13. SL 1-2/3 Index of Authorized Publications in Stock
14. TM 4700-15/1\_ Ground Equipment Record Procedures
15. UM 4400-124 SASSY Using Unit Procedures
16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>28XX-MAIN-2031</u>**: Perform inspection and classification on NS-E electronics items/components

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. N6283300014 Navy Electricity and Electronics Training Series (NEETS)

 SDS Safety Data Sheets
 SL 1-2/3 Index of Authorized Publications in Stock
 TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
 TM 4700-15/1\_ Ground Equipment Record Procedures
 TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
 TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
 TM 9999-15/2\_ Electro-static Discharge (ESD) Management
 UM 4400-124 SASSY Using Unit Procedures
 UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**28XX-MAIN-2032:** Perform servicing, adjustment, and tuning on NS-E electronics items/components

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual

 MCO P5215.17\_ The Marine Corps Technical Publications System
 MSGID 141844Z Aug 12 (NS-E)
 N6283300014 Navy Electricity and Electronics Training Series (NEETS)
 SDS Safety Data Sheets
 SL 1-2/3 Index of Authorized Publications in Stock
 TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
 TM 4700-15/1\_ Ground Equipment Record Procedures
 TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
 TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
 TM 9999-15/2\_ Electro-static Discharge (ESD) Management
 UM 4400-124 SASSY Using Unit Procedures
 UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-MAIN-2033: Perform repair on NS-E electronics items/components

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook

- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. MSGID 141844Z Aug 12 (NS-E)
- 19. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 20. SDS Safety Data Sheets
- 21. SL 1-2/3 Index of Authorized Publications in Stock
- 22. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 23. TM 4700-15/1\_ Ground Equipment Record Procedures
- 24. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 25. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 26. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 27. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 28. UM 4400-124 SASSY Using Unit Procedures
- 29. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-MAIN-2034: Perform modification on NS-E electronics items/components

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

#### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

#### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. MSGID 141844Z Aug 12 (NS-E)
- 19. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 20. SDS Safety Data Sheets
- 21. SL 1-2/3 Index of Authorized Publications in Stock
- 22. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 23. TM 4700-15/1\_ Ground Equipment Record Procedures
- 24. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 25. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 26. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 27. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 28. UM 4400-124 SASSY Using Unit Procedures
- 29. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**28XX-MAIN-2035:** Perform recovery and evacuation on NS-E electronics items/components

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

#### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. MSGID 141844Z Aug 12 (NS-E)
- 12. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TM 4700-15/1\_ Ground Equipment Record Procedures
- 16. UM 4400-124 SASSY Using Unit Procedures
- 17. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-MAIN-2036: Supervise maintenance actions

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2823, 2834, 2862, 2874, 2887

**GRADES:** SGT, SSGT, GYSGT

# INITIAL TRAINING SETTING: MOJT

**CONDITION:** With the aid of references, equipment and maintenance personnel.

**STANDARD:** Ensuring that proper maintenance actions are performed in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Determine applicable technical references, as required.
- 2. Supervise ground electronics maintenance personnel.
- 3. Evaluate ground electronics maintenance personnel.
- 4. Identify ground electronics maintenance personnel training deficiencies, as required.
- 5. Manage maintenance resources.
- 6. Analyze maintenance reporting data.
- 7. Maintain reports and records.
- 8. Document maintenance actions, as required.
- 9. Requisition parts, as required.

#### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DoDI 4151.18 Maintenance of Military Material
- 4. FEDLOG Federal Logistic Data
- 5. Maintenance Float Catalog
- 6. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 7. MCO 1200.17\_ Military Occupational Specialty Manual (MOS Manual)
- 8. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 9. MCO 4105.2 Marine Corps Warranty Program
- 10. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 11. MCO P4400.150\_ Consumer Level Supply Policy Manual
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5215.17\_ The Marine Corps Technical Publications System
- 15. MMSOP Maintenance Management Standing Operating Procedures
- 16. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 17. SDS Safety Data Sheets
- 18. SL 1-2/3 Index of Authorized Publications in Stock
- 19. TM 4700-15/1\_ Ground Equipment Record Procedures
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures
- 22. Unit SOP Unit's Standing Operating Procedures

28XX-MAIN-2037: Provide assistance in complex maintenance tasks

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Mid-level and senior level maintenance leaders combine experience and advanced training in resolving complex maintenance tasks that are beyond the abilities of entry-level ground electronics maintainers. Complex maintenance tasks include multiple and/or intermittent faults requiring advanced troubleshooting knowledge and skills, the ability to analyze and perform maintenance on unfamiliar equipment, and the ability to analyze equipment in order to identify potential engineering defects and solutions.

MOS PERFORMING: 2823, 2834, 2862, 2874, 2887, 2891

GRADES: SGT, SSGT, GYSGT, MSGT, MGYSGT

**INITIAL TRAINING SETTING:** FORMAL

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Performing required maintenance actions in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Determine applicable technical references.
- 2. Diagnose faults.
- 3. Troubleshoot, as required.
- 4. Isolate faults, as required.
- 5. Adjust maintenance procedures, as required.
- 6. Advise ground electronics maintainers, as required.
- 7. Perform maintenance actions, as required.
- 8. Determine electronics engineering solutions, as required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 3. SL 1-2/3 Index of Authorized Publications in Stock

28XX-OPS-2001: Prepare organic equipment for embarkation

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

CONDITION: With the aid of references, equipment, a mission and personnel.

**STANDARD:** Maintaining the units' ability to rapidly deploy in accordance with MCRP 4-11.3G.

#### PERFORMANCE STEPS:

1. Ensure SL-3 completeness of maintenance/maintenance support equipment.

- 2. Determine requirements for embarkation materials.
- 3. Ensure completion of tactical marking of maintenance/maintenance support equipment.
- 4. Prepare embarkation documents (packing and embark lists, EDL, etc.).
- 5. Ensure completion of weather/waterproofing of maintenance/maintenance support equipment.
- Determine special lifting/handling requirements for maintenance/maintenance support equipment.
- 7. Determine special security requirements for maintenance/maintenance support equipment and COMSEC materials.
- 8. Determine hazardous material movement requirements.

#### **REFERENCES:**

- 1. Applicable technical references
- 2. CMR Consolidated Memorandum Receipt
- 3. MCO 4000.51\_ Automatic Identification Technology (AIT)
- 4. MCO 4631.10\_ Operational Support Airlift Management
- 5. MCO P4030.19\_ Preparing Hazardous Materials for Military Air Shipments
- 6. MCRP 4-11.3G Unit Embarkation Handbook
- 7. MMSOP Maintenance Management Standing Operating Procedures
- 8. MPS Load Plan
- 9. SL 1-2/3 Index of Authorized Publications in Stock
- 10. T/O&E Table of Organization and Equipment
- 11. Unit SOP Unit's Standing Operating Procedures

# SUPPORT REQUIREMENTS:

MATERIAL: Distance Learning Products Available:

- 1. MCI 045C, The Logistics/Embarkation Specialist
- 2. MCI 047D, Introduction to Amphibious Embarkation

**28XX-OPS-2002:** Supervise the deployment of a ground electronics maintenance activity

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2802, 2805 2862, 2874, 2891

GRADES: SGT, SSGT, GYSGT, MSGT, MGYSGT, WO, CWO2, CWO3, CWO4, CAPT, MAJ

**INITIAL TRAINING SETTING:** MOJT

CONDITION: With the aid of references, equipment, a mission and personnel.

**STANDARD:** Fulfilling mission requirements, ensuring safety of personnel, and in accordance with MCO P4790.1\_ MIMMS Introduction Manual.

# PERFORMANCE STEPS:

- 1. Conduct pre-deployment inspection of personnel and equipment.
- 2. Verify execution of load plans.
- 3. Verify special material handling and transportation.
- 4. Verify availability of logistics support items.

- 5. Verify repair parts and equipment requirements are met.
- 6. Provide recommendations on site selection.
- 7. Provide recommendations on organization of maintenance area.
- 8. Provide recommendations on organization for maintenance.
- 9. Provide recommendations on shop layout.
- 10. Adjust plan, as required.

- 1. Applicable technical references
- 2. CNSS 4000 Communication Security (COMSEC) Maintenance and Maintenance Training
- Contracted Logistics Support (CLS) Statement of Requirements/Objectives/ Work (SOR/SOO/SOW)
- 4. Contracting Officer's Representative (COR) Duties & Responsibilities Guidebook(s)
- 5. DLA Customer Assistance Handbook
- 6. DoDD 8570.01M Information Assurance Workforce Improvement Program Incorporating Change 2
- 7. DoDI 4151.18 Maintenance of Military Material
- 8. DoDI 8523.01 Communication Security
- 9. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 10. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 11. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 12. MCO 1200.17\_ Military Occupational Specialty Manual (MOS Manual)
- 13. MCO 2281.1\_ Electronic Key Management System (EKMS) Policy
- 14. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 15. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 16. MCO 3504.1\_ Marine Corps Lessons Learned Program (MCCLP) and the Marine Corps Center for Lessons Learned (MCCLL)
- 17. MCO 4081.2\_ Marine Corps Performance Based Logistics (PBL)
- 18. MCO 4105.2 Marine Corps Warranty Program
- 19. MCO 4200.33\_ Contractor Logistics Support (CLS) for Ground Equipment, Weapon Systems, Munitions, and Information Systems
- 20. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 21. MCO 4733.1\_ Marine Corps Test, Measurement, and Diagnostic Equipment
- (TMDE) Calibration and Maintenance Program (CAMP)
- 22. MCO P4400.150\_ Consumer Level Supply Policy Manual
- 23. MCO P4400.82\_ Regulated/Controlled Item Management Manual
- 24. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 25. MCO P4790.2\_ MIMMS Field Procedures Manual
- 26. MCO P5215.17\_ The Marine Corps Technical Publications System
- 27. MCRP 4-11.3G Unit Embarkation Handbook
- 28. MCWP 3-40.3 MAGTF Communications System
- 29. MCWP 4-11.4 Maintenance Operations
- 30. MCWP 5-1 Marine Corps Planning Process (MCPP)
- 31. MMSOP Maintenance Management Standing Operating Procedures
- 32. MPS Load Plan
- 33. NSTISSI 4000 COMSEC Maintenance and Maintenance Training Policy (NSA)
- 34. OpOrd Operational Order
- 35. SECNAVINST 5510.30\_ Information and Personnel Security Program
- 36. SECNAVINST 5510.36\_ Dept of the Navy Information and Personnel Security

Program Regulations

- 37. SL 1-2/3 Index of Authorized Publications in Stock
- 38. T/O&E Table of Organization and Equipment
- 39. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 40. TI 4733 Series Calibration and TMDE Requirements and Programs
- 41. TI 5820-25/22\_ Electromagnetic Environmental Effects (E3) Procedures for Installation of Communication Equipment on Marine Corps Platforms
- 42. TM 10209-10/1\_ Use and Care of Hand Tools and Measuring Tools
- 43. TM 10510-OD/1\_ General Purpose Test Measurement and Diagnostic Equipment (TMDE) Listing (Including Ancillary Support Items & Tool Kits)
- 44. TM 2000-15/1\_ Brief Description of U.S. Marine Corps Communication-Electronic Equipment
- 45. TM 2000-OD/2\_ Principal Technical Characteristics of U.S. Marine Corps Communication-Electronics Equipment
- 46. TM 4700-15/1\_ Ground Equipment Record Procedures
- 47. TM 4795-OR/1\_ Organizational Corrosion Prevention and Control Procedures for USMC Ground Combat Equipment
- 48. TM 4795-34/2\_ Corrosion Prevention and Control, Rustproofing and Underbody Coating Procedures for Tactical Vehicles, Trailers, and Engineering Equipment
- 49. TM 5410-14/1\_ Intermediate Maintenance Instructions, Electronics Maintenance Complex
- 50. TM 5411-14&P/2 Marine Corps Expeditionary Shelter System (MCESS)(Small Shelter Family) 10-Foot Rigid General Purpose Shelter Operation and Maintenance Instructions with Repair Parts List
- 51. TM 5411-14/1\_ Marine Corps Expeditionary Shelter System (MCESS)(Small Shelter Family) Operation and Maintenance Instructions
- 52. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 53. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 54. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 55. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 56. UM 4400-124 SASSY Using Unit Procedures
- 57. UM 4400-60 Materiel Returns Program
- 58. UM 4790-5 MIMMS AIS, Field Maintenance Procedures
- 59. UM PLMS User's Manual, Publication Library Management System

**<u>28xx-PERS-2001</u>**: Train ground electronics maintainers in ground electronics maintenance

### EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Ground electronics maintenance leaders in the operating forces are required to provide sustainment and core plus skills progression training to ground electronics maintainers in the performance of field level maintenance on ground electronics equipment. Performance of this task requires advanced understanding of electronics theory beyond that mastered in the entry level training as well as that expected to be gained through MOJT and informal learning. This event does not cover formal school instruction missions.

Enclosure (1)

MOS PERFORMING: 2823, 2834, 2862, 2874, 2887

GRADES: SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Providing skills progression and sustaining individual and collective proficiency in accordance with MCRP 3-0B How to Conduct Training.

#### **PERFORMANCE STEPS:**

- 1. Analyze ground electronics maintenance performance requirements.
- 2. Evaluate ground electronics maintenance performance mastery.
- 3. Assess ground electronics maintenance performance deficiencies.
- 4. Design instructional framework.
- 5. Develop instructional material.
- 6. Implement training.
- 7. Evaluate efficiency/effectiveness of training.
- 8. Implement training improvements.

# REFERENCES:

- 1. Applicable technical references
- 2. MCO 1200.17\_ Military Occupational Specialty Manual (MOS Manual)
- 3. MCRP 3-0B How to Conduct Training
- 4. NAVMC 1553.1\_ Systems Approach to Training (SAT) Users Guide
- 5. NAVMC 3500.6\_ Ground Electronics Maintenance Training and Readiness Manual
- 6. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 7. SAT Manual Systems Approach to Training Manual
- 8. SL 1-2/3 Index of Authorized Publications in Stock

28XX-PERS-2002: Manage training for ground electronics maintenance personnel

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2802, 2805, 2823, 2834, 2862, 2874, 2887, 2891

**GRADES:** SSGT, GYSGT, MSGT, MGYSGT, WO, CWO2, CWO3, CWO4, CWO5, CAPT, MAJ, LTCOL

# **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: With the aid of references, equipment, personnel, training records, commander's guidance and the unit's training plan.

**STANDARD:** Sustaining individual and unit proficiency and ability to perform wartime missions in accordance with MCO 1553.3\_ Unit Training Management (UTM) Program.

#### PERFORMANCE STEPS:

- 1. Determine training requirements.
- 2. Establish training priorities.

- 3. Develop training plan.
- 4. Supervise required training.
- 5. Evaluate effectiveness of training.
- 6. Document training.

#### **REFERENCES:**

MCO 1200.17\_ Military Occupational Specialty Manual (MOS Manual)
 MCO 1553.3\_ Unit Training Management (UTM) Program
 MCO 1560.25\_ Marine Corps Lifelong Learning Program
 MCO P3500.72\_ Marine Corps Ground Training and Readiness (T&R) Program
 MCO P4790.2\_ MIMMS Field Procedures Manual
 MCRP 3-0A Unit Training Management Guide
 MCRP 3-0B How to Conduct Training
 MCWP 3-40.3 MAGTF Communications System
 MMSOP Maintenance Management Standing Operating Procedures
 MOS Roadmap Military Occupational Specialty (MOS) Roadmaps
 NAVMC 3500.6\_ Ground Electronics Maintenance Training and Readiness Manual
 TEEP Training, Exercise and Evaluation Plan

14. Unit Training Plan Unit Training Plan

28XX-PROG-2001: Manage Class IX consumable inventory

#### EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Ground electronics maintenance shops manage a variety of class IX consumable inventory within the shop, including PEB, layettes, broken unit of issue (BUI), etc.

MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

GRADES: CPL, SGT, SSGT

#### **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** With the aid of references, equipment, the commander's authorization and the unit's SOP.

**STANDARD:** Ensuring continuous availability and 100% accounting of high usage, fast-moving items in accordance with MCO P4400.150, paragraph 5018.

### PERFORMANCE STEPS:

- 1. Determine Class IX consumable requirements.
- 2. Maintain accountability of inventory.
- 3. Issue parts.
- 4. Conduct periodic inventories.
- 5. Establish re-order points, as required.
- 6. Requisition replacement parts, as required.
- 7. Conduct reconciliation, as required.

# **REFERENCES:**

1. Applicable technical references

- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 7. MCO P4400.150 Consumer Level Supply Policy Manual
- 8. MCO P4790.2 MIMMS Field Procedures Manual
- 9. MCO P5215.17\_ The Marine Corps Technical Publications System
- 10. MMSOP Maintenance Management Standing Operating Procedures
- 11. TM 4700-15/1\_ Ground Equipment Record Procedures
- 12. UM 4400-124 SASSY Using Unit Procedures
- 13. UM 4790-5 MIMMS AIS, Field Maintenance Procedures
- 14. Unit SOP Unit's Standing Operating Procedures

**28XX-PROG-2002:** Manage locally held secondary reparables

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Ground electronics maintenance shops often manage locally held secondary reparables as part of a "float block."

MOS PERFORMING: 2821, 2823, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

**GRADES:** CPL, SGT, SSGT

# **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: With the aid of references, the commander's authorization and the unit's SOP.

**STANDARD:** Ensuring availability and 100% accurate accounting of reparables in accordance with MCO P4400.150, paragraph 5018.

#### PERFORMANCE STEPS:

- 1. Determine Class IX secondary reparable requirements.
- 2. Maintain accountability of inventory.
- 3. Issue parts.
- 4. Conduct periodic inventories.
- 5. Establish re-order points, as required.
- 6. Requisition replacement parts, as required.
- 7. Conduct reconciliation, as required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 7. MCO P4400.150\_ Consumer Level Supply Policy Manual

MCO P4790.2\_ MIMMS Field Procedures Manual
 MCO P5215.17\_ The Marine Corps Technical Publications System
 MMSOP Maintenance Management Standing Operating Procedures
 TM 4700-15/1\_ Ground Equipment Record Procedures
 UM 4400-123 FMF SASSY Management Unit Procedures
 UM 4400-124 SASSY Using Unit Procedures
 UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**28XX-PROG-2003:** Supervise utilization of external maintenance support programs

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2802, 2805, 2823, 2834, 2862, 2874, 2887, 2891

**GRADES:** SSGT, GYSGT, MSGT, MGYSGT, WO, CWO2, CWO3, CWO4, CWO5, CAPT, MAJ, LTCOL

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: With the aid of references, Commander's guidance, a mission statement and program reports.

**STANDARD:** Ensuring that maintenance programs are initiated and managed per MCO P4790.2\_ MIMMS Field Procedures Manual.

#### PERFORMANCE STEPS:

- 1. Identify requirement for utilization of external maintenance support programs.
- 2. Determine equipment eligibility.
- 3. Supervise preparation of equipment.
- 4. Coordinate utilization of external maintenance support programs.
- 5. Monitor equipment in external maintenance support programs, as required.
- 6. Coordinate return of equipment from external maintenance support programs, as required.
- 7. Supervise disposition of external maintenance support program usage, as required.

- Contracted Logistics Support (CLS) Statement of Requirements/Objectives/ Work (SOR/SOO/SOW)
- Contracting Officer's Representative (COR) Duties & Responsibilities Guidebook(s)
- 3. DLA Customer Assistance Handbook
- 4. DoDD 8570.01M Information Assurance Workforce Improvement Program Incorporating Change 2
- 5. DoDI 8523.01 Communication Security
- 6. Maintenance Float Catalog
- 7. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 8. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 9. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness

Reporting (MRR) Policy

- 10. MCO 4000.51\_ Automatic Identification Technology (AIT)
- 11. MCO 4000.57\_ Marine Corps Total Life Cycle Management (TLCM) of Ground Weapons Equipment and Material
- 12. MCO 4000.58 Marine Corps Logistics Command
- 13. MCO 4081.2\_ Marine Corps Performance Based Logistics (PBL)
- 14. MCO 4105.2 Marine Corps Warranty Program
- 15. MCO 4200.33\_ Contractor Logistics Support (CLS) for Ground Equipment, Weapon Systems, Munitions, and Information Systems
- 16. MCO 4400.113\_ Defense Logistics Agency Maintenance Instructions or Technical Maintenance Standards
- 17. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 18. MCO 4733.1\_ Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
- 19. MCO P4400.150\_ Consumer Level Supply Policy Manual
- 20. MCO P4400.151\_ Intermediate-Level Supply Management Policy Manual
- 21. MCO P4400.160\_ Field Supply and Maintenance Analysis Office Program (FSMAO)
- 22. MCO P4400.82\_ Regulated/Controlled Item Management Manual
- 23. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 24. MCO P4790.2\_ MIMMS Field Procedures Manual
- 25. MCWP 4-11.4 Maintenance Operations
- 26. MMSOP Maintenance Management Standing Operating Procedures
- 27. NSTISSI 4000 COMSEC Maintenance and Maintenance Training Policy (NSA)
- 28. TI-4733-35/23\_ Navy and Marine Corps Calibration Laboratory Audit/Certification Manual
- 29. TM 10793A-OD/1\_ Module Test & Repair Tracking System (Marines)User's Guide
- 30. TM 4700-15/1\_ Ground Equipment Record Procedures
- 31. TM 4795-OR/1\_ Organizational Corrosion Prevention and Control Procedures for USMC Ground Combat Equipment
- 32. TM 4795-34/2\_ Corrosion Prevention and Control, Rustproofing and Underbody Coating Procedures for Tactical Vehicles, Trailers, and Engineering Equipment
- 33. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 34. UM 4400-124 SASSY Using Unit Procedures
- 35. UM 4400-60 Materiel Returns Program

28XX-PUBS-2001: Administer publication control program

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

GRADES: LCPL, CPL, SGT

#### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>:** With the aid of references, a consolidated memorandum receipt (CMR), PLMS, publications, SL 1-2/3, a Table of Equipment (T/E) and the unit's SOP.

**STANDARD:** Establishing and maintaining a publications library in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

# PERFORMANCE STEPS:

- 1. Determine required publications.
- 2. Record publications on hand.
- 3. Requisition required publications, as required.
- 4. Inventory publications.
- 5. Incorporate changes, as required.
- 6. Dispose of publications, as required.
- 7. Update records.

#### **REFERENCES:**

- 1. Applicable technical references
- 2. MCBUL 5600 Marine Corps Doctrinal Publication Status
- 3. MCO 5215.1\_ Marine Corps Directives Management Program
- 4. MCO 5215.16\_ Interservicing of Technical Manuals and Related Technology
- 5. MCO P4790.2\_ MIMMS Field Procedures Manual
- 6. MCO P5215.17\_ The Marine Corps Technical Publications System
- 7. MMSOP Maintenance Management Standing Operating Procedures
- 8. NAVMC 2761 Catalog of Publications
- 9. PLMS V3 UG Publication Library Management System Version 3 Users Guide
- 10. SL 1-2/3 Index of Authorized Publications in Stock
- 11. T/O&E Table of Organization and Equipment
- 12. TM 4700-15/1\_ Ground Equipment Record Procedures
- 13. UM PLMS User's Manual, Publication Library Management System
- 14. Unit SOP Unit's Standing Operating Procedures

# SUPPORT REQUIREMENTS:

**MATERIAL:** Distance Learning Product Available: MCI 0416A, The Marine Corps Publications and Directives System

28XX-RPTS-2001: Administer tool control program

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

**GRADES:** LCPL, CPL, SGT

#### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>:** With the aid of references, designated tool kits, tool sets, chests, and equipment.

**STANDARD:** Maintaining accountability and control of all tool kits, chests, sets and organic equipment in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual, Appendix D.

#### PERFORMANCE STEPS:

1. Identify all assigned tool sets, kits, chests and equipment.

- 2. Maintain special tools, as required.
- 3. Issue tool sets, chests, kits and equipment.
- 4. Enforce inventory interval.
- 5. Maintain records.
- 6. Verify inventories.
- 7. Requisition replacements, as required.
- 8. Ensure security of all tool sets, chests, kits and organic equipment.

# **REFERENCES:**

- 1. Applicable technical references
- 2. CMR Consolidated Memorandum Receipt
- 3. DLA Customer Assistance Handbook
- 4. FEDLOG Federal Logistic Data
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 7. MCO 4733.1\_ Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
- 8. MCO P4400.150\_ Consumer Level Supply Policy Manual
- 9. MCO P4790.2 MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. MMSOP Maintenance Management Standing Operating Procedures
- 12. SL 1-2/3 Index of Authorized Publications in Stock
- 13. T/O&E Table of Organization and Equipment
- 14. TM 10209-10/1\_ Use and Care of Hand Tools and Measuring Tools
- 15. TM 10510-OD/1\_ General Purpose Test Measurement and Diagnostic Equipment
- (TMDE) Listing (Including Ancillary Support Items & Tool Kits)
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. UM 4400-124 SASSY Using Unit Procedures
- 18. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-RPTS-2002: Administer calibration control program

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: LCPL, CPL, SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: With the aid of references and equipment.

**STANDARD:** Ensuring effective use of calibration laboratory resources and availability of calibrated TMDE in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

# PERFORMANCE STEPS:

- 1. Identify equipment requiring calibration.
- 2. Prepare calibration control records, as required.
- 3. Determine calibration control category.
- 4. Schedule items for calibration.

MOS PERFORMING: 2821, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

- 5. Submit equipment for calibration, as required.
- 6. Reconcile equipment in calibration, as required.
- 7. Receive equipment from calibration, as required.
- 8. Update calibration control records, as required.

# **REFERENCES:**

- 1. Applicable technical references
- 2. CMR Consolidated Memorandum Receipt
- 3. FEDLOG Federal Logistic Data
- 4. MCO 4733.1\_ Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
- 5. MCO P4790.2 MIMMS Field Procedures Manual
- 6. MMSOP Maintenance Management Standing Operating Procedures
- 7. SL 1-2/3 Index of Authorized Publications in Stock
- 8. T/O&E Table of Organization and Equipment
- 9. TI 4733-15/13 Metrology Requirements List (METRL)
- 10. TI 4733-15/6\_ Test Measurement and Diagnostic Equipment (TMDE) Calibration and Maintenance Support
- 11. TM 10209-10/1\_ Use and Care of Hand Tools and Measuring Tools
- 12. TM 10510-OD/1 General Purpose Test Measurement and Diagnostic Equipment
- (TMDE) Listing (Including Ancillary Support Items & Tool Kits)
- 13. TM 4700-15/1\_ Ground Equipment Record Procedures
- 14. UM 4790-5 MIMMS AIS, Field Maintenance Procedures
- 15. Unit SOP Unit's Standing Operating Procedures

28XX-RPTS-2003: Administer modification control program

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2831, 2834, 2841, 2847, 2862, 2871, 2874, 2887

GRADES: LCPL, CPL, SGT

#### **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** With the aid of references, equipment, modification control forms and modification instructions.

**STANDARD:** Ensuring the application and recording of all modifications for the unit's equipment, in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual, paragraph 3004.

#### PERFORMANCE STEPS:

- 1. Review modification instructions.
- 2. Identify equipment requiring modification.
- 3. Induct equipment into the maintenance cycle, as required.
- 4. Requisition modification materials, as required.
- 5. Ensure application of modifications, as required.
- 6. Update modification control records, as required.

# **REFERENCES:**

1. Applicable technical references

- 2. CMR Consolidated Memorandum Receipt
- 3. DLA Customer Assistance Handbook
- 4. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 5. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 6. FEDLOG Federal Logistic Data
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. SL 1-2/3 Index of Authorized Publications in Stock
- 13. T/O&E Table of Organization and Equipment
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

28XX-SVC-2001: Supervise maintenance services support

# EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** A services section performs functions in support of equipment maintenance; for example, welding, battery shop, inspection, and quality control. In small shops or shops not requiring all of these services, the functions of the services section may be performed by one individual or assigned to other sections. The inspection and quality control functions are required in all shops. This function may be performed by one individual, several individuals, or a team. Refer to MCO P4790.2\_ MIMMS Field Procedures Manual.

MOS PERFORMING: 2823, 2834, 2862, 2874, 2887, 2891

GRADES: SGT, SSGT, GYSGT, MSGT, MGYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** With the aid of references, equipment, personnel and tools.

**STANDARD:** Ensuring effective performance of functions in support of equipment maintenance in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual, Chapters 1, 2, and 3.

#### PERFORMANCE STEPS:

- 1. Determine resource requirements.
- 2. Analyze capabilities.
- 3. Enforce maintenance management programs.
- 4. Report maintenance program performance, as required.

- 1. Applicable technical references
- 2. CMR Consolidated Memorandum Receipt
- 3. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness

Reporting (MRR) Policy

- 4. MCO 3500.27 Operational Risk Management (ORM)
- 5. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 6. MCO 4790.18\_ Corrosion Prevention and Control (CPAC) Program
- 7. MCO 4855.10\_ Product Quality Deficiency Report (PQDR)
- 8. MCO 5040.6\_ Marine Corps Readiness Inspections and Assessments
- 9. MCO P4400.150\_ Consumer Level Supply Policy Manual
- 10. MCO P4400.160\_ Field Supply and Maintenance Analysis Office Program (FSMAO)
- 11. MCO P4400.82\_ Regulated/Controlled Item Management Manual
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5215.17\_ The Marine Corps Technical Publications System
- 15. PLMS V3 UG Publication Library Management System Version 3 Users Guide
- 16. SL 1-2/3 Index of Authorized Publications in Stock
- 17. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 18. TI 5820-25/22\_ Electromagnetic Environmental Effects (E3) Procedures for Installation of Communication Equipment on Marine Corps Platforms
- 19. TM 10209-10/1\_ Use and Care of Hand Tools and Measuring Tools
- 20. TM 10510-OD/1\_ General Purpose Test Measurement and Diagnostic Equipment (TMDE) Listing (Including Ancillary Support Items & Tool Kits)
- 21. TM 2000-15/1\_ Brief Description of U.S. Marine Corps Communication-Electronic Equipment
- 22. TM 2000-OD/2\_ Principal Technical Characteristics of U.S. Marine Corps Communication-Electronics Equipment
- 23. TM 4700-15/1\_ Ground Equipment Record Procedures
- 24. TM 4795-OR/1\_ Organizational Corrosion Prevention and Control Procedures for USMC Ground Combat Equipment
- 25. TM 5411-14&P/2 Marine Corps Expeditionary Shelter System (MCESS)(Small Shelter Family) 10-Foot Rigid General Purpose Shelter Operation and Maintenance Instructions with Repair Parts List
- 26. TM 5411-14/1\_ Marine Corps Expeditionary Shelter System (MCESS)(Small Shelter Family) Operation and Maintenance Instructions
- 27. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 28. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 29. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 30. UM 4400-124 SASSY Using Unit Procedures
- 31. UM 4400-60 Materiel Returns Program
- 32. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

#### 2800 T&R MANUAL

# CHAPTER 5

# MOS 2802 INDIVIDUAL EVENTS

This chapter remains as a placeholder for future use. The 2802, Ground Electronics Maintenance Officer, military occupational specialty (MOS) is a career progression MOS for a 2805, Data/Communications Maintenance Officer. Career progression and experience of the Marine that holds this MOS will execute the individual task of a 2805 (Chapter 6) with an increased level of responsibility that is expected of the rank; advising, managing, planning, directing, and supervising the employment of all ground electronic maintenance resources. The Marine will manage all maintenance requirements associated to his/her rank and shop/unit in accordance with the 2800 individual training events (Chapter 4.) The experience of the 2802, like the 2805 and 2891, is leveraged to evaluate and make recommendations to higher headquarters or supporting agencies on changes needed for future maintenance resources, processes, and capabilities. Additionally, the 2802 also provides advice, coordination, and recommendations to adjacent non-ground electronics programs (i.e., Motor Transportation, Ground Ordnance Maintenance, Engineer, etc.) with regard to associated ground electronic maintenance planning and support. The responsibility of the grade to which this officer is appointed is governed by the guidelines per Title 10 of the United States Code.

# 2800 T&R MANUAL

# CHAPTER 6

# MOS 2805 INDIVIDUAL EVENTS

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# 2800 T&R MANUAL

# CHAPTER 6

#### MOS 2805 INDIVIDUAL EVENTS

**6000. PURPOSE.** This chapter details the individual events that pertain to Data/Communications Maintenance Officers and Electronics Maintenance Officers (Ground). Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**6001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

Code	Description		
2805	Data/Communications	Maintenance	Officer

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

Code	Description
ADMN	Maintenance Administration Support
OPS	Operations
SUPP	Supply Support

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

CodeDescription2000Core Plus Skills

# 6002. INDEX OF INDIVIDUAL EVENTS

EVENT CODE	EVENT	PAGE
	2000-LEVEL	
2805-ADMN-2001	Direct ground electronics maintenance	6-3
2805-OPS-2001	Direct the deployment of a ground electronics maintenance activity	6-4
2805-SUPP-2001	Prepare a budget	6-6

Also refer to Chapter 4 for 28XX individual training events for which 2805 Data/Communications Maintenance Officers are responsible.

# 6003. 2000-LEVEL EVENTS

2805-ADMN-2001: Direct ground electronics maintenance

#### EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2802, 2805

GRADES: WO, CWO2, CWO3, CWO4, CWO5, CAPT, MAJ, LTCOL

#### **INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: With the aid of references, a maintenance unit, maintenance resources and a mission.

**STANDARD:** Ensuring the effective use of maintenance resources in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

#### PERFORMANCE STEPS:

- 1. Provide technical advice to the Commander on commodity maintenance functions.
- 2. Direct maintenance/commodity operations.
- 3. Establish shop procedures.
- 4. Establish shop programs.
- 5. Conduct periodic equipment inspections.
- 6. Coordinate multi-commodity maintenance efforts.
- 7. Coordinate the use of maintenance resources.
- 8. Coordinate supply support.
- 9. Analyze maintenance information.
- 10. Establish quality control program.
- 11. Assign responsibility for maintenance related programs.

#### PREREQUISITE EVENTS:

28XX-ADMN-2003 28XX-PROG-2001

- 1. Applicable technical references
- 2. CMR Consolidated Memorandum Receipt
- Contracted Logistics Support (CLS) Statement of Requirements/Objectives/Work (SOR/SOO/SOW)
- 4. DLA Customer Assistance Handbook
- 5. DoDD 8570.01M Information Assurance Workforce Improvement Program Incorporating Change 2
- 6. DoDI 4151.18 Maintenance of Military Material
- 7. DoDI 8523.01 Communication Security
- 8. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 9. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 10. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 11. MCO 1200.17\_ Military Occupational Specialty Manual (MOS Manual)
- 12. MCO 2281.1\_ Electronic Key Management System (EKMS) Policy
- 13. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 14. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness

Reporting (MRR) Policy

- 15. MCO 4105.2\_ Marine Corps Warranty Program
- 16. MCO 4200.33\_ Contractor Logistics Support (CLS) for Ground Equipment, Weapon Systems, Munitions, and Information Systems
- 17. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 18. MCO 4733.1\_ Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
- 19. MCO 5311.1 Total Force Structure Process (TFSP)
- 20. MCO P4400.150\_ Consumer Level Supply Policy Manual
- 21. MCO P4400.151\_ Intermediate-Level Supply Management Policy Manual
- 22. MCO P4400.160\_ Field Supply and Maintenance Analysis Office Program (FSMAO)
- 23. MCO P4400.82\_ Regulated/Controlled Item Management Manual
- 24. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 25. MCO P4790.2\_ MIMMS Field Procedures Manual
- 26. MCWP 3-40.3 MAGTF Communications System
- 27. MCWP 4-11.4 Maintenance Operations
- 28. MCWP 5-1 Marine Corps Planning Process (MCPP)
- 29. MMSOP Maintenance Management Standing Operating Procedures
- 30. NSTISSI 4000 COMSEC Maintenance and Maintenance Training Policy (NSA)
- 31. OpOrd Operational Order
- 32. T/O&E Table of Organization and Equipment
- 33. TI 4733 Series Calibration and TMDE Requirements and Programs
- 34. TM 10510-OD/1\_ General Purpose Test Measurement and Diagnostic Equipment (TMDE) Listing (Including Ancillary Support Items & Tool Kits)
- 35. TM 2000-15/1\_ Brief Description of U.S. Marine Corps Communication-Electronic Equipment
- 36. TM 2000-OD/2\_ Principal Technical Characteristics of U.S. Marine Corps Communication-Electronics Equipment
- 37. UM 4400-124 SASSY Using Unit Procedures
- 38. UM 4400-125 FMF SASSY Accounting Manual (VOL IV) Maintenance Float Procedures
- 39. UM 4400-60 Materiel Returns Program
- 40. UM 4790-5 MIMMS AIS, Field Maintenance Procedures
- 41. Unit SOP Unit's Standing Operating Procedures

2805-C2-2001: Plan ground electronics maintenance operations

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2802, 2805

GRADES: WO, CWO2, CWO3, CWO4, CAPT, MAJ

#### **INITIAL TRAINING SETTING:** FORMAL

CONDITION: With the aid of references, equipment, a mission and personnel.

**STANDARD:** Integrating with general maintenance/logistics operations and supported unit operations, and fulfilling requirements in accordance with MCO P4790.2\_ MIMMS Field Procedures Manual.

# PERFORMANCE STEPS:

- 1. Determine requirements.
- 2. Provide estimates of supportability.
- 3. Develop courses of action.
- 4. Develop orders.
- 5. Conduct transition.

- 1. CNSS 4000 Communication Security (COMSEC) Maintenance and Maintenance Training
- Contracted Logistics Support (CLS) Statement of Requirements/Objectives/ Work (SOR/SOO/SOW)
- Contracting Officer's Representative (COR) Duties & Responsibilities Guidebook(s)
- 4. DLA Customer Assistance Handbook
- 5. DoDI 4151.18 Maintenance of Military Material
- 6. DoDI 8523.01 Communication Security
- 7. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 8. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 9. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 10. MCO 1200.17\_ Military Occupational Specialty Manual (MOS Manual)
- 11. MCO 2281.1\_ Electronic Key Management System (EKMS) Policy
- 12. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 13. MCO 3504.1\_ Marine Corps Lessons Learned Program (MCCLP) and the Marine Corps Center for Lessons Learned (MCCLL)
- 14. MCO 4081.2\_ Marine Corps Performance Based Logistics (PBL)
- 15. MCO 4105.2\_ Marine Corps Warranty Program
- 16. MCO 4200.33\_ Contractor Logistics Support (CLS) for Ground Equipment, Weapon Systems, Munitions, and Information Systems
- 17. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 18. MCO 4733.1\_ Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
- 19. MCO P4400.150\_ Consumer Level Supply Policy Manual
- 20. MCO P4400.151\_ Intermediate-Level Supply Management Policy Manual
- 21. MCO P4400.82\_ Regulated/Controlled Item Management Manual
- 22. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 23. MCO P4790.2\_ MIMMS Field Procedures Manual
- 24. MCWP 4-11.4 Maintenance Operations
- 25. MCWP 5-1 Marine Corps Planning Process (MCPP)
- 26. MMSOP Maintenance Management Standing Operating Procedures
- 27. MPS Load Plan
- 28. NSTISSI 4000 COMSEC Maintenance and Maintenance Training Policy (NSA)
- 29. T/O&E Table of Organization and Equipment
- 30. TI 4733 Series Calibration and TMDE Requirements and Programs
- 31. TM 2000-15/1\_ Brief Description of U.S. Marine Corps Communication-Electronic Equipment
- 32. TM 2000-OD/2\_ Principal Technical Characteristics of U.S. Marine Corps Communication-Electronics Equipment
- 33. UM 4400-124 SASSY Using Unit Procedures
- 34. UM 4400-60 Materiel Returns Program
- 35. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2805-SUPP-2001: Prepare a budget

#### EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2802, 2805

GRADES: WO, CWO2, CWO3, CWO4, CWO5, CAPT, MAJ, LTCOL

### **INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** With the aid of references, commander's guidance, maintenance contracts and personnel training requirements.

**STANDARD:** Supporting forecast requirements and in accordance with MCO P7100.8\_ Field Budget Guidance Manual.

# PERFORMANCE STEPS:

- 1. Review mission.
- 2. Determine operational and maintenance requirements.
- 3. Review historical data.
- 4. Identify new project requirements.
- 5. Determine funding category.
- 6. Review maintenance contracts.
- 7. Determine costs for training personnel.
- 8. Review existing funds available.
- 9. Determine installation/construction dates for new projects.
- 10. Develop cost estimates for projects, maintenance and training.
- 11. Develop/plan a budget.
- 12. Submit budget.

- 1. CMR Consolidated Memorandum Receipt
- 2. MAL Unit Mechanized Allowance List (MAL)
- 3. MCO P7100.8\_ Field Budget Guidance Manual
- 4. OpOrd Operational Order
- 5. POM\_ Program Objective Memorandum (POM)
- 6. TEEP Training, Exercise and Evaluation Plan

# 2800 T&R MANUAL

# CHAPTER 7

# MOS 2821 INDIVIDUAL EVENTS

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# 2800 T&R MANUAL

## CHAPTER 7

# MOS 2821 INDIVIDUAL EVENTS

7000. PURPOSE. This chapter details the individual events that pertain to Technical Controllers and Technical Control Chiefs. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**7001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

Code	Descriptio	on
2821	Technical	Controller

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

Code	Description
MAIN	Maintenance
OPS	Operations
PLAN	Planning

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

Code	Description
1000	Core Skills
2000	Core Plus Skills

# 7002. INDEX OF INDIVIDUAL EVENTS

EVENT CODE	EVENT	PAGE
	1000-LEVEL	
	Perform repair on maintenance code "O" TECHCON	
2821-MAIN-1001	equipment	7-3
2821-OPS-1001	Conduct circuit/link restoration	7-4
2000-LEVEL		
	Provide technical data for a regimental level	
2821-C2-2001	communications plan	7-5

	Perform inspection and classification on	
2821-MAIN-2001	maintenance code "O" TECHCON equipment	7-6
	Perform servicing, adjustment, and tuning on	
2821-MAIN-2002	Maintenance code "O" TECHCON equipment	7-7
	Perform modification on maintenance code "O"	
2821-MAIN-2003	TECHCON equipment	7-8
	Perform recovery and evacuation on maintenance	
2821-MAIN-2004	code "O" TECHCON equipment	7-9

Also refer to Chapter 4 for 28XX individual training events for which 2821 Technical Controllers are responsible.

# 7003. 1000-LEVEL EVENTS

2821-MAIN-1001: Perform repair on maintenance code "O" TECHCON equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program

- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2821-OPS-1001: Conduct circuit/link restoration

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823

GRADES: PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>:** With the aid of references, a circuit/link outage, a communications network, TMDE, and tools.

**<u>STANDARD</u>**: Re-establishing a communications capability as outlined in Annex K of the operations order.

# PERFORMANCE STEPS:

- 1. Determine operational status of terminal devices.
- 2. Report circuit/link outage.
- 3. Coordinate restoration priorities.
- 4. Diagnose faults.
- 5. Troubleshoot.
- 6. Isolate faults.
- 7. Determine restoration actions required.
- 8. Perform required restoration actions.
- 9. Condition circuits, as required.
- 10. Document circuit/link actions.
- 11. Report restoration actions.

- 1. Applicable technical references
- 2. CJCSM 6231 (Series) Manual for Employing Joint Tactical Communications

- 3. Cut Sheets Programming Cut Sheets
- 4. FM 24-16 Communication-Electronic Operations Orders, Records and Reports
- 5. MCWP 3-40.3 MAGTF Communications System
- 6. OpOrd Operational Order
- 7. SL 1-2/3 Index of Authorized Publications in Stock
- 8. TM 10664A-CD Operator and Organizational Maintenance of Digital Technical Control Facility
- 9. TM 10812A-10/1 Getting Started Guide for OneTouch Series II Network Assistant
- 10. TM 10812A-10/2 User's Manual for OneTouch Series II Network Assistant
- 11. TM 10986A-15/1 Technical Manual for OptiView Integrated Network Analyzer
- 12. TM 10986B-OI/1 Getting Started Guide for OptiView Series II Integrated Network Analyzer
- 13. TM 10986B-OI/2 Help Guide for OptiView Series II Integrated Network Analyzer
- 14. TM 11366A-OD/1 Getting Started Guide for Network Analyzer (MODEL ES-700)

# SUPPORT REQUIREMENTS:

**EQUIPMENT:** Support Equipment:

- 1. Oscilloscope
- 2. Analog Test Set
- 3. Cable Tester
- 4. Data Communication Analyzer
- 5. Digital Multimeter
- 6. Break-out Box
- 7. Associated Tools
- 8. Associated Communications Equipment
- 9. Loop back plugs

### 7004. 2000-LEVEL EVENTS

**<u>2821-C2-2001</u>**: Provide technical data for a regimental level communications plan

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**GRADES:** CPL, SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: With the aid of references, equipment, and a mission.

**STANDARD:** Identifying information exchange requirements and supportability, and prioritizing communications support in accordance with MCWP 3-40.3 MAGTF Communications System.

# PERFORMANCE STEPS:

- 1. Assess communications systems capability.
- 2. Identify equipment shortfalls.
- 3. Coordinate with elements associated with communications control.

- 4. Verify circuit and link priority.
- 5. Prepare associated TECHCON documents.

#### **REFERENCES:**

- 1. Applicable technical references
- 2. CJCSM 6231 (Series) Manual for Employing Joint Tactical Communications
- 3. FM 11-55 Mobile Subscriber Equipment (MSE) Operations
- 4. MCWP 3-40.3 MAGTF Communications System
- 5. Operations Order Annex K
- 6. SL 1-2/3 Index of Authorized Publications in Stock

**2821-MAIN-2001:** Perform inspection and classification on maintenance code "O" TECHCON equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2821, 2823

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy

8. MCO 4400.16_ Uniform Material Movement and Issue Priority System (UMMIPS)
9. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS)
Introduction Manual
10. MCO P4790.2_ MIMMS Field Procedures Manual
11. MCO P5215.17_ The Marine Corps Technical Publications System
12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
13. SDS Safety Data Sheets
14. SL 1-2/3 Index of Authorized Publications in Stock
15. TI 4400-15/1_ Packaging, Handling, Storage, and Transportation of
Electrostatic Discharge Sensitive Items
16. TM 4700-15/1_ Ground Equipment Record Procedures
17. TM 9406-15_ Grounding Procedures for Electromagnetic Interference Control
and Safety
18. TM 9999-15/1_ Electro-Static Discharge (ESD) Awareness
19. TM 9999-15/2_ Electro-static Discharge (ESD) Management
20. UM 4400-124 SASSY Using Unit Procedures
21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2821-MAIN-2002:** Perform servicing, adjustment, and tuning on Maintenance code "O" TECHCON equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2821, 2823

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program

- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2821-MAIN-2003</u>**: Perform modification on maintenance code "O" TECHCON equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2821, 2823

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment

- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2821-MAIN-2004</u>**: Perform recovery and evacuation on maintenance code "O" TECHCON equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2821, 2823

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

### PERFORMANCE STEPS:

1. Induct equipment into maintenance, if required.

- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

# 2800 T&R MANUAL

# CHAPTER 8

# MOS 2823 INDIVIDUAL EVENTS

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# 2800 T&R MANUAL

## CHAPTER 8

### MOS 2823 INDIVIDUAL EVENTS

**8000. PURPOSE.** This chapter details the individual events that pertain to Technical Control Chiefs. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**8001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

Code	Description	
2823	Technical Control	l Chief

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

Code	Description
C2	Command and Control
MAIN	Maintenance
OPS	Operations

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

Code	Desci	riptic	on
1000	Core	Skill	ls
2000	Core	Plus	Skills

# 8002. INDEX OF INDIVIDUAL EVENTS

EVENT CODE	EVENT	PAGE
2823-C2-2001	Plan technical control in support of operations	8-3
2823-C2-2002	Develop detailed system level data for a MAGTF or	8-4
	Joint level communications plan	
2823-MAIN-2001	Perform inspection and classification on maintenance	8-4
	code "F"/"H" TECHCON equipment	0-4
2823-MAIN-2002	Perform servicing, adjustment, and tuning on	8-5
	maintenance code "F"/"H" TECHCON equipment	0-5
2823-MAIN-2003	Perform repair on maintenance code "F"/"H" TECHCON	8-6
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2823-MAIN-2004	Perform modification on maintenance code "F"/"H"	8-8
	TECHCON equipment	
2823-MAIN-2005	Perform rebuilding and overhauling on maintenance code "F"/"H" TECHCON equipment	8-9
2823-MAIN-2006	Perform recovery and evacuation on maintenance code "F"/"H" TECHCON equipment	8-10
2823-OPS-2001	Coordinate activation/deactivation of communications circuits/links connecting to the Defense Information Services Agency	8-11
2823-OPS-2002	Provide technical assistance in the restoration of complex circuits/links	8-12
2823-OPS-2003	Maintain the quality of service of a network	8-13

Also refer to Chapter 4 for 28XX individual training events and Chapter 7 for 2821 individual training events for which 2823 Technical Control Chiefs are responsible.

### 8003. 2000-LEVEL EVENTS

2823-C2-2001: Plan technical control in support of operations

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**GRADES:** SSGT, GYSGT, MSGT, MGYSGT

#### **INITIAL TRAINING SETTING:** MOJT

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Providing task-organized technical control and meeting the mission requirement in support of operations In accordance with MCWP 3-40.3 MAGTF Communications System.

#### PERFORMANCE STEPS:

- 1. Review mission requirements.
- 2. Identify supported unit requirements.
- 3. Identify supporting unit requirements.
- 4. Determine personnel requirements.
- 5. Determine equipment requirements.
- 6. Identify supply support requirements.
- 7. Identify shortfalls.
- 8. Submit embarkation requirements.
- 9. Identify power requirements.
- 10. Provide input for transportation load plans.
- 11. Arrange for special material handling and transportation of equipment, as required.
- 12. Determine site layout.
- 13. Submit plan.

### **REFERENCES**:

1. MCWP 3-40.3 MAGTF Communications System

2. MCWP 5-1 Marine Corps Planning Process (MCPP)

**<u>2823-C2-2002</u>**: Develop detailed system level data for a MAGTF or Joint level communications plan

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**GRADES:** SSGT, GYSGT, MSGT, MGYSGT

**INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: With the aid of references, Commander's guidance, equipment, a mission, and personnel.

**STANDARD:** Identifying information exchange requirements and supportability, and prioritizing communications support in accordance with CJCSM 6231 series.

#### PERFORMANCE STEPS:

- 1. Assess adjacent unit's communication capabilities and requirements for integration and implementation.
- 2. Assess higher unit's communication capabilities and requirements for integration and implementation.
- 3. Assess supported unit's communication capabilities and requirements for integration and implementation.
- 4. Draft required technical data for the communication plan.
- 5. Coordinate with external agencies and elements associated with Communications Control.
- 6. Coordinate the assignment of designations for transmission links and circuits.
- 7. Identify technical deficiencies in the communications plan, as required.
- 8. Review required messages or requests prior to submission.
- 9. Verify circuit and link priority with external agencies.
- 10. Verify circuit requirements with subscribers.

### **REFERENCES:**

- 1. Applicable technical references
- 2. CJCSM 6231 (Series) Manual for Employing Joint Tactical Communications
- 3. DISA Circulars/Publications DISA Circulars/Publications
- 4. DoDD 8570.01M Information Assurance Workforce Improvement Program Incorporating Change 2
- 5. MCWP 3-40.3 MAGTF Communications System
- 6. OpOrd Operational Order
- 7. SL 1-2/3 Index of Authorized Publications in Stock

**2823-MAIN-2001:** Perform inspection and classification on Maintenance code "F"/"H" TECHCON equipment

### EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**GRADES:** SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

#### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2823-MAIN-2002:** Perform servicing, adjustment, and tuning on Maintenance code "F"/"H" TECHCON equipment

# EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

#### **PERFORMANCE STEPS:**

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2823-MAIN-2003: Perform repair on maintenance code "F"/"H" TECHCON equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**GRADES:** SSGT, GYSGT, MSGT

### **INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**<u>STANDARD</u>**: Returning equipment to serviceable condition in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock

- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2 Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2823-MAIN-2004**: Perform modification on maintenance code "F"/"H" TECHCON equipment

EVALUATION-CODED: NO

# SUSTAINMENT INTERVAL: 12 months

**GRADES:** SSGT, GYSGT, MSGT

INITIAL TRAINING SETTING: MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

#### **PERFORMANCE STEPS:**

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)

12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual 13. MCO P4790.2\_ MIMMS Field Procedures Manual 14. MCO P5090.2\_ Environmental Compliance and Protection Manual 15. MCO P5215.17\_ The Marine Corps Technical Publications System 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts 17. MIL-STD-188-124A Military Standard for Grounding 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS) 19. SDS Safety Data Sheets 20. SL 1-2/3 Index of Authorized Publications in Stock 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items 22. TM 4700-15/1\_ Ground Equipment Record Procedures 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness 26. TM 9999-15/2 Electro-static Discharge (ESD) Management 27. UM 4400-124 SASSY Using Unit Procedures 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2823-MAIN-2005:** Perform rebuilding and overhauling on maintenance code "F"/"H" TECHCON equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Restoring equipment to a serviceable condition under maintenance serviceability standards and in accordance with applicable technical references.

#### **PERFORMANCE STEPS:**

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Diagnose fault.
- 5. Troubleshoot.
- 6. Isolate fault.
- 7. Remove defective components.
- 8. Requisition parts.
- 9. Replace parts.
- 10. Align, as required.
- 11. Apply MIs/TIs, as required.
- 12. Apply firmware/software upgrades, as required.

- 13. Re-surface/re-coat, as required.
- 14. Replace identification markings, as required.
- 15. Document maintenance actions.
- 16. Conduct final inspection.
- 17. Return equipment to owner, if required.

# **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 12. MCO P5215.17\_ The Marine Corps Technical Publications System
- 13. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 14. SDS Safety Data Sheets
- 15. SL 1-2/3 Index of Authorized Publications in Stock
- 16. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 17. TM 4700-15/1\_ Ground Equipment Record Procedures
- 18. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 19. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 20. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 21. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 22. UM 4400-124 SASSY Using Unit Procedures
- 23. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2823-MAIN-2006:** Perform recovery and evacuation on maintenance code "F"/"H" TECHCON equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**GRADES:** SSGT, GYSGT

#### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission, personnel, and equipment.

**STANDARD**: Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. MCWP 4-1 Logistics Operations
- 12. MCWP 4-11 Tactical-Level Logistics
- 13. MCWP 4-11.4 Maintenance Operations
- 14. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 15. SDS Safety Data Sheets
- 16. SL 1-2/3 Index of Authorized Publications in Stock
- 17. TM 4700-15/1\_ Ground Equipment Record Procedures
- 18. UM 4400-124 SASSY Using Unit Procedures
- 19. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2823-OPS-2001:** Coordinate activation/deactivation of communications circuits/links connecting to the Defense Information Services Network Agency

#### EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: SSGT, GYSGT, MSGT, MGYSGT

### **INITIAL TRAINING SETTING:** FORMAL

CONDITION: With the aid of references, equipment and an operational plan.

**STANDARD:** Maintaining system operations in accordance with Annex K of the operations order.

### PERFORMANCE STEPS:

- 1. Coordinate circuit parameters with DISA.
- 2. Report communications system status.
- 3. Verify correct incoming and outgoing signaling for each circuit.

- 4. Coordinate activation of circuits.
- 5. Coordinate deactivation of circuits.
- 6. Document circuit/link activation/deactivation.

## **REFERENCES:**

- 1. Applicable technical references
- 2. CJCSM 6231 (Series) Manual for Employing Joint Tactical Communications
- 3. Cut Sheets Programming Cut Sheets
- 4. DISA Circulars/Publications DISA Circulars/Publications
- 5. DoDD 8570.01M Information Assurance Workforce Improvement Program Incorporating Change 2
- 6. FM 24-16 Communication-Electronic Operations Orders, Records and Reports
- 7. MCWP 3-40.3 MAGTF Communications System
- 8. OpOrd Operational Order
- 9. SL 1-2/3 Index of Authorized Publications in Stock

### SUPPORT REQUIREMENTS:

**EQUIPMENT:** Support Equipment:

1. Associated communication systems

**2823-OPS-2002:** Provide technical assistance in the restoration of complex circuits/links

### EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: SSGT, GYSGT, MSGT, MGYSGT

**INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: With the aid of references, a communication network, designated circuit outage, TMDE, and tools.

**STANDARD:** Re-establishing a communications capability as outlined in Annex K of the operations order.

## PERFORMANCE STEPS:

- 1. Determine operational status of terminal devices.
- 2. Coordinate restoration priorities.
- 3. Diagnose faults.
- 4. Troubleshoot.
- 5. Isolate faults.
- 6. Determine restoration actions required.
- 7. Coordinate restoration efforts with transmission and circuit system operators.
- 8. Condition circuits, as required.
- 9. Document circuit/link actions.
- 10. Report restoration actions.

- 1. Applicable technical references
- 2. Cut Sheets Programming Cut Sheets

- 3. DoDD 8570.01M Information Assurance Workforce Improvement Program Incorporating Change 2
- 4. OpOrd Operational Order
- 5. SL 1-2/3 Index of Authorized Publications in Stock

### SUPPORT REQUIREMENTS:

**EQUIPMENT:** Support Equipment:

- 1. TECHCON facility (DTC, JECCS, DITS)
- 2. Analog test set
- 3. Data communication analyzer
- 4. Digital multimeter
- 5. Break-out box
- 6. Associated tools
- 7. Associated communications equipment
- 8. Loop back plugs
- 9. Oscilloscope

MATERIAL: Distance Learning Products Available:

- 1. MCI 286G, Fundamentals of Digital Logic
- 2. MCI 287A, Introduction to Test Measurement and Diagnostic Equipment

2823-OPS-2003: Maintain the quality of service of a network

#### EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Quality of service is the ability to provide or guarantee a certain level of performance of data flow, flow, and class across a network circuit with the idea that transmission rates, error rates, and other characteristics can be measured, improved, and to some extent, and guaranteed. Includes but is not limited to monitoring, and measuring error rates, packet lose, input/output errors, signal strength, burst rate, and classification thus providing a better or stable service for select network traffic through bandwidth or latency control.

Quality of service can be improved utilizing various methods to include but not limited to transmission and signaling adjustments such as signal strength and polarization, bandwidth management, timing priorities, traffic shaping techniques such as packet prioritization, application classification and queuing at congestion points.

GRADES: SSGT, GYSGT, MSGT, MGYSGT

**INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>:** With the aid of references, an assigned maintenance area, designated circuit requirements and network management tools.

**STANDARD:** Maintaining network operation as outlined in Annex K of the operations order.

### PERFORMANCE STEPS:

- 1. Research applicable technical data pertaining to faulty equipment.
- 2. Read architectural diagrams.
- 3. Measure circuit performance.
- 4. Trace signal paths.
- 5. Evaluate the efficiency of the configured network.
- 6. Utilize network management tools to improve quality of service.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DoDD 8570.01M Information Assurance Workforce Improvement Program Incorporating Change 2
- 3. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 4. Maintenance Float Catalog
- 5. MCO P4790.2\_ MIMMS Field Procedures Manual
- 6. OpOrd Operational Order
- 7. SECNAVINST 5510.30\_ Information and Personnel Security Program
- 8. SECNAVINST 5510.36\_ Dept of the Navy Information and Personnel Security Program Regulations
- 9. SL 1-2/3 Index of Authorized Publications in Stock

## SUPPORT REQUIREMENTS:

**EQUIPMENT:** Support Equipment:

- 1. TECHCON facility (DTC, JECCS, DITS)
- 2. Oscilloscope
- 3. Analog test set
- 4. Data communication analyzer
- 5. Digital multimeter
- 6. Break-out box
- 7. Associated tools
- 8. Associated communications equipment
- 9. Loop back plugs
- 10. Network monitoring tools

MATERIAL: Distance Learning Products Available:

- 1. MCI 2820, Electronics Mathematics for Marines
- 2. MCI 286G, Fundamentals of Digital Logic
- 3. MCI 287A, Introduction to Test Measurement and Diagnostic Equipment

# 2800 T&R MANUAL

# CHAPTER 9

# MOS 2831 INDIVIDUAL EVENTS

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# 2800 T&R MANUAL

## CHAPTER 9

### MOS 2831 INDIVIDUAL EVENTS

**9000. PURPOSE.** This chapter details the individual events that pertain to Digital Wideband Repairers and Digital Wideband Technicians. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**9001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

Code	Descript	tion	
2831	Digital	Wideband	Repairer

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

Code	Description
MAIN	Maintenance
OPS	Operations

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

Code	Desci	riptio	on
1000	Core	Skil	ls
2000	Core	Plus	Skills

# 9002. INDEX OF INDIVIDUAL EVENTS

EVENT CODE	EVENT	PAGE
	1000-LEVEL	
2831-MAIN-1001	Perform repair on DWT equipment	9-3
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2831-OPS-2001	Provide technical assistance during the IOM of DWT	9-15
	systems	
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	density satellite communication systems	

Also refer to Chapter 4 for 28XX individual training events for which 2831 Digital Wideband Repairers are responsible.

# 9003. 1000-LEVEL EVENTS

2831-MAIN-1001: Perform repair on DWT equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.

- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

## **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 23. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 24. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 25. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 26. UM 4400-124 SASSY Using Unit Procedures
- 27. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2831-MAIN-1002: Perform repair on low density SATCOM equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2831, 2834

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

## **INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**<u>STANDARD</u>**: Returning equipment to serviceable condition in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 16. MIL-STD-188-124A Military Standard for Grounding
- 17. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 18. SDS Safety Data Sheets
- 19. SL 1-2/3 Index of Authorized Publications in Stock
- 20. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 21. TM 4700-15/1\_ Ground Equipment Record Procedures
- 22. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 23. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 24. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness

25. TM 9999-15/2\_ Electro-static Discharge (ESD) Management 26. UM 4400-124 SASSY Using Unit Procedures 27. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

9004. 2000-LEVEL EVENTS

2831-MAIN-2001: Perform inspection and classification on DWT equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2831, 2834

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

## PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System

- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2831-MAIN-2002: Perform servicing, adjustment, and tuning on DWT equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual

 MCO P5215.17\_ The Marine Corps Technical Publications System
 N6283300014 Navy Electricity and Electronics Training Series (NEETS)
 SDS Safety Data Sheets
 SL 1-2/3 Index of Authorized Publications in Stock
 TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
 TM 4700-15/1\_ Ground Equipment Record Procedures
 TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
 TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
 TM 9999-15/2\_ Electro-static Discharge (ESD) Management
 UM 4400-124 SASSY Using Unit Procedures
 UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2831-MAIN-2003: Perform modification on DWT equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2831, 2834

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

## PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program

10.	MCO 3000.11_ Ground Equipment Condition and Supply Materiel Readiness
	Reporting (MRR) Policy
11.	MCO 4400.16_ Uniform Material Movement and Issue Priority System (UMMIPS)
12.	MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS)
	Introduction Manual
13.	MCO P4790.2_ MIMMS Field Procedures Manual
14.	MCO P5090.2_ Environmental Compliance and Protection Manual
15.	MCO P5215.17_ The Marine Corps Technical Publications System
16.	MIL-STD-1686B Electro-Static Discharge Control Program for Protection of
	Electrical and Electronic Parts
17.	MIL-STD-188-124A Military Standard for Grounding
18.	N6283300014 Navy Electricity and Electronics Training Series (NEETS)
19.	SDS Safety Data Sheets
20.	SL 1-2/3 Index of Authorized Publications in Stock
21.	TI 4400-15/1_ Packaging, Handling, Storage, and Transportation of
	Electrostatic Discharge Sensitive Items
22.	TM 4700-15/1_ Ground Equipment Record Procedures
23.	TM 5895-45/1_ Standard Maintenance Practices Miniature/Microminiature (2M)
	Electronic Assembly Repair Organizational/Intermediate/Depot Level
24.	TM 9406-15_ Grounding Procedures for Electromagnetic Interference Control
	and Safety
25.	TM 9999-15/1_ Electro-Static Discharge (ESD) Awareness
26.	TM 9999-15/2_ Electro-static Discharge (ESD) Management
27.	UM 4400-124 SASSY Using Unit Procedures
28.	UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2831-MAIN-2004: Perform rebuilding and overhauling on DWT equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2831, 2834

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

## **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Restoring equipment to a serviceable condition under maintenance serviceability standards and in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Diagnose fault.
- 5. Troubleshoot.
- 6. Isolate fault.
- 7. Remove defective components.
- 8. Requisition parts.

- 9. Replace parts.
- 10. Align, as required.
- 11. Apply MIs/TIs, as required.
- 12. Apply firmware/software upgrades, as required.
- 13. Re-surface/re-coat, as required.
- 14. Replace identification markings, as required.
- 15. Document maintenance actions.
- 16. Conduct final inspection.
- 17. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 12. MCO P5215.17\_ The Marine Corps Technical Publications System
- 13. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 14. SDS Safety Data Sheets
- 15. SL 1-2/3 Index of Authorized Publications in Stock
- 16. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 17. TM 4700-15/1\_ Ground Equipment Record Procedures
- 18. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 19. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 20. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 21. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 22. UM 4400-124 SASSY Using Unit Procedures
- 23. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2831-MAIN-2005: Perform recovery and evacuation on DWT equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2831, 2834

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD**: Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

## PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2831-MAIN-2006</u>**: Perform inspection and classification on low density SATCOM equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2831-MAIN-2007:** Perform servicing, adjustment, and tuning on low density SATCOM equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

### 2831-MAIN-2008: Perform modification on low density SATCOM equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2831, 2834

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2831-MAIN-2009</u>**: Perform recovery and evacuation on low density SATCOM equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2831, 2834

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD**: Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

# REFERENCES:

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2831-OPS-2001: Provide technical assistance during the IOM of DWT equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Ground electronics maintenance Marines often assists equipment crew/operators in the installation and operation of equipment. In addition, ground electronics maintenance Marines often assists equipment crew/operators in troubleshooting equipment in operation, restoring equipment to operation. While ground electronics maintenance Marines are not utilized in the role of equipment crew/operators, they must have a thorough understanding in aspects of the proper installation and operation of equipment in order to determine when corrective action can be resolved by the equipment crew/operators and when equipment must be inducted into maintenance for field level maintenance actions.

#### MOS PERFORMING: 2831, 2834

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Ensuring proper equipment installation and operation, and identifying maintenance actions required to restore equipment operation as required in accordance with applicable equipment operation references.

### PERFORMANCE STEPS:

- 1. Determine applicable equipment operation references.
- 2. Verify equipment configuration.
- 3. Verify software/firmware version, as required.
- 4. Verify equipment is properly grounded.
- 5. Verify power source.
- 6. Verify antenna installation, as required.
- 7. Verify remote capabilities, as required.
- 8. Verify COMSEC connection, as required.
- 9. Verify equipment operation.
- 10. Perform electromagnetic interference troubleshooting, as required.
- 11. Determine corrective action required, if applicable.

### **REFERENCES:**

- 1. Applicable technical references
- 2. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 3. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 4. SL 1-2/3 Index of Authorized Publications in Stock
- 5. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety

# SUPPORT REQUIREMENTS:

### EQUIPMENT: Support Equipment:

- 1. Oscilloscope
- 2. Multimeter
- 3. Signal generator
- 4. Power supply
- 5. Data analyzer
- 6. Spectrum analyzer

- 7. Frequency counter
- 8. Ground tester

**2831-OPS-2002:** Provide technical assistance during the IOM of low density SATCOM equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Ground electronics maintenance Marines often assists equipment crew/operators in the installation and operation of equipment. In addition, ground electronics maintenance Marines often assists equipment crew/operators in troubleshooting equipment in operation, restoring equipment to operation. While ground electronics maintenance Marines are not utilized in the role of equipment crew/operators, they must have a thorough understanding in aspects of the proper installation and operation of equipment in order to determine when corrective action can be resolved by the equipment crew/operators and when equipment must be inducted into maintenance for field level maintenance actions.

MOS PERFORMING: 2831, 2834

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Ensuring proper equipment installation and operation, and identifying maintenance actions required to restore equipment operation as required in accordance with applicable equipment operation references.

## PERFORMANCE STEPS:

- 1. Determine applicable equipment operation references.
- 2. Verify equipment configuration.
- 3. Verify software/firmware version, as required.
- 4. Verify equipment is properly grounded.
- 5. Verify power source.
- 6. Verify antenna installation, as required.
- 7. Verify remote capabilities, as required.
- 8. Verify COMSEC connection, as required.
- 9. Verify equipment operation.
- 10. Perform electromagnetic interference troubleshooting, as required.
- 11. Determine corrective action required, if applicable.

- 1. Applicable technical references
- 2. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 3. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 4. Operational Order Operational Order
- 5. SL 1-2/3 Index of Authorized Publications in Stock
- 6. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control

and Safety

# SUPPORT REQUIREMENTS:

# **EQUIPMENT:** Support Equipment:

- 1. Oscilloscope
- 2. Multimeter
- Signal generator
   Power supply
- 5. Data analyzer
- 6. Spectrum analyzer
- 7. Frequency counter
- 8. Ground tester

# 2800 T&R MANUAL

# CHAPTER 10

# MOS 2834 INDIVIDUAL EVENTS

This chapter remains as a placeholder for future use. The 2834, Digital Wideband Technician MOS is a career progression MOS for a 2831, Digital Wideband Repairer. Skills progression training, experience, and rank of the Marine that holds this MOS will execute the individual training events of a 2831 (Chapter 9) at an advanced level; providing complex troubleshooting, supervision, training, and quality control of associated equipment. The Marine will manage all maintenance requirements associated to his/her rank and shop/unit in accordance with the 28XX individual training events (Chapter 4.)

# 2800 T&R MANUAL

# CHAPTER 11

# MOS 2841 INDIVIDUAL EVENTS

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# 2800 T&R MANUAL

## CHAPTER 11

#### MOS 2841 INDIVIDUAL EVENTS

**11000. PURPOSE.** This chapter details the individual events that pertain to Ground Radio Repairers and Electronics Maintenance Technicians. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**11001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

Code	Descrip	otion	
2841	Ground	Radio	Repairer

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

Code	Description
MAIN	Maintenance
OPS	Operations

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

Code	Desci	riptic	on
1000	Core	Skill	s
2000	Core	Plus	Skills

# 11002. INDEX OF INDIVIDUAL EVENTS

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	1000-LEVEL	
2841-MAIN-1001	Perform repair on ground radio equipment	11-3
2841-MAIN-1002	Perform repair on ground vehicle intercommunication equipment	11-5
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2841-MAIN-2001	Perform inspection and classification on ground radio equipment	11-8

2841-MAIN-2002	Perform servicing, adjustment, and tuning on ground radio equipment	11-9
2841-MAIN-2003	Perform modification on ground radio equipment	11-10
2841-MAIN-2004	Perform recovery and evacuation on ground radio equipment	11-11
2841-MAIN-2005	Perform inspection and classification on ground vehicle intercommunication equipment	11-12
2841-MAIN-2006	Perform servicing, adjustment, and tuning on ground vehicle intercommunication equipment	11-13
2841-MAIN-2007	Perform modification on ground vehicle intercommunication equipment	11-14
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2841-MAIN-2009	Perform inspection and classification on mechanized vehicle electronics equipment	11-16
2841-MAIN-2010	Perform servicing, adjustment, and tuning on mechanized vehicle electronics equipment	11-17
2841-MAIN-2011	Perform modification on mechanized vehicle electronics equipment	11-18
2841-MAIN-2012	Perform recovery and evacuation on mechanized vehicle electronics equipment	11-20
2841-MAIN-2013	Perform inspection and classification on ground common SATCOM equipment	11-21
2841-MAIN-2014	Perform servicing, adjustment, and tuning on ground common SATCOM equipment	11-22
2841-MAIN-2015	Perform modification on ground common SATCOM equipment	11-23
2841-MAIN-2016	Perform recovery and evacuation on ground common SATCOM equipment	11-24
2841-MAIN-2017	Perform repair on mechanized vehicle electronics equipment	11-25
2841-OPS-2001	Provide technical assistance during the IOM of ground radio equipment	11-26
2841-OPS-2002	Provide technical assistance during the IOM of ground vehicle intercommunication equipment	11-27
2841-OPS-2003	Provide technical assistance during the IOM of mechanized vehicle electronics equipment	11-29
2841-OPS-2004	Provide technical assistance during the IOM of ground common SATCOM equipment	11-30

Also refer to Chapter 4 for 28XX individual training events for which 2841 Ground Radio Repairers are responsible.

# 11003. 1000-LEVEL EVENTS

2841-MAIN-1001: Perform repair on ground radio equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2841, 2862

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

## **INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock

- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2 Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2841-MAIN-1002: Perform repair on ground vehicle intercommunication equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**<u>STANDARD</u>**: Returning equipment to serviceable condition in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control

- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2841-MAIN-1003: Perform repair on ground common SATCOM equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**<u>STANDARD</u>**: Returning equipment to serviceable condition in accordance with applicable technical references.

## PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.

- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2 Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

# 11004. 2000-LEVEL EVENTS

**<u>2841-MAIN-2001</u>**: Perform inspection and classification on ground radio equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items

 TM 4700-15/1\_ Ground Equipment Record Procedures
 TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
 TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
 TM 9999-15/2\_ Electro-static Discharge (ESD) Management
 UM 4400-124 SASSY Using Unit Procedures
 UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2841-MAIN-2002</u>**: Perform servicing, adjustment, and tuning on ground radio equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

#### **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS) 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock

 TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
 TM 4700-15/1\_ Ground Equipment Record Procedures
 TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
 TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
 TM 9999-15/2\_ Electro-static Discharge (ESD) Management
 UM 4400-124 SASSY Using Unit Procedures
 UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2841-MAIN-2003</u>**: Perform modification on ground radio equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

## PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS)

Introduction Manual

- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2841-MAIN-2004: Perform recovery and evacuation on ground radio equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data

- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2841-MAIN-2005</u>**: Perform inspection and classification on ground vehicle intercommunication equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data

4.	Maintenance Float Catalog
5.	MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES)
	Equipment
б.	MCO 2410.2_ Electromagnetic Environmental Effects (E3) Control Program
7.	MCO 3000.11_ Ground Equipment Condition and Supply Materiel Readiness
	Reporting (MRR) Policy
8.	MCO 4400.16_ Uniform Material Movement and Issue Priority System (UMMIPS)
9.	MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS)
	Introduction Manual
10.	MCO P4790.2_ MIMMS Field Procedures Manual
11.	MCO P5215.17_ The Marine Corps Technical Publications System
12.	N6283300014 Navy Electricity and Electronics Training Series (NEETS)
	SDS Safety Data Sheets
14.	SL 1-2/3 Index of Authorized Publications in Stock
15.	TI 4400-15/1_ Packaging, Handling, Storage, and Transportation of
	Electrostatic Discharge Sensitive Items
16.	TM 4700-15/1_ Ground Equipment Record Procedures
17.	TM 9406-15_ Grounding Procedures for Electromagnetic Interference Control
	and Safety
18.	TM 9999-15/1_ Electro-Static Discharge (ESD) Awareness
19.	TM 9999-15/2_ Electro-static Discharge (ESD) Management
20.	UM 4400-124 SASSY Using Unit Procedures
21.	UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2841-MAIN-2006</u>**: Perform servicing, adjustment, and tuning on ground vehicle intercommunication equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

# **REFERENCES:**

1. Applicable technical references

- 2. DLA Customer Assistance Handbook 3. FEDLOG Federal Logistic Data 4. Maintenance Float Catalog 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy 8. MCO 4400.16 Uniform Material Movement and Issue Priority System (UMMIPS) 9. MCO P4790.1 Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual 10. MCO P4790.2\_ MIMMS Field Procedures Manual 11. MCO P5215.17\_ The Marine Corps Technical Publications System 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS) 13. SDS Safety Data Sheets 14. SL 1-2/3 Index of Authorized Publications in Stock 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items 16. TM 4700-15/1\_ Ground Equipment Record Procedures 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness 19. TM 9999-15/2 Electro-static Discharge (ESD) Management 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2841-MAIN-2007</u>**: Perform modification on ground vehicle intercommunication equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2841, 2862

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

Enclosure (1)

#### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2841-MAIN-2008</u>**: Perform recovery and evacuation on ground vehicle intercommunication equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2841, 2862

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

## **INITIAL TRAINING SETTING:** MOJT

CONDITION: Given a mission, personnel, and equipment.

**STANDARD**: Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

## PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

#### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2841-MAIN-2009:** Perform inspection and classification on mechanized vehicle electronics equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

#### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2841-MAIN-2010</u>**: Perform servicing, adjustment, and tuning on mechanized vehicle electronics equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2841, 2862

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

## PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

## **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2841-MAIN-2011</u>**: Perform modification on mechanized vehicle electronics equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures

28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2841-MAIN-2012</u>**: Perform recovery and evacuation on mechanized vehicle electronics equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2841-MAIN-2013**: Perform inspection and classification on ground common SATCOM equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety

18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management 20. UM 4400-124 SASSY Using Unit Procedures 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2841-MAIN-2014:** Perform servicing, adjustment, and tuning on ground common SATCOM equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

## **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures

 TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
 TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
 TM 9999-15/2\_ Electro-static Discharge (ESD) Management
 UM 4400-124 SASSY Using Unit Procedures
 UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2841-MAIN-2015: Perform modification on ground common SATCOM equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual

15. MCO P5215.17\_ The Marine Corps Technical Publications System 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts 17. MIL-STD-188-124A Military Standard for Grounding 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS) 19. SDS Safety Data Sheets 20. SL 1-2/3 Index of Authorized Publications in Stock 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items 22. TM 4700-15/1\_ Ground Equipment Record Procedures 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management 27. UM 4400-124 SASSY Using Unit Procedures 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2841-MAIN-2016:** Perform recovery and evacuation on ground common SATCOM equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

## PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES)

Equipment

- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2 MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2841-MAIN-2017: Perform repair on mechanized vehicle electronics equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

#### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook

- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2841-OPS-2001</u>**: Provide technical assistance during the IOM of ground radio equipment

# EVALUATION-CODED: NO

# SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Ground electronics maintenance Marines often assist equipment crew/operators in the installation and operation of equipment. In addition, ground electronics maintenance Marines often assist equipment crew/operators in troubleshooting equipment in operation, restoring equipment to operation. While ground electronics maintenance Marines are not utilized in the role of equipment crew/operators, they must have a thorough understanding in aspects of the proper installation and operation of equipment in order to determine when corrective action can be resolved by the equipment crew/operators and when equipment must be inducted into maintenance for field level maintenance actions.

MOS PERFORMING: 2841, 2862

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

## **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Ensuring proper equipment installation and operation, and identifying maintenance actions required to restore equipment operation as required in accordance with applicable equipment operation references.

#### **PERFORMANCE STEPS:**

- 1. Determine applicable equipment operation references.
- 2. Verify equipment configuration.
- 3. Verify software/firmware version, as required.
- 4. Verify equipment is properly grounded.
- 5. Verify power source.
- 6. Verify antenna installation, as required.
- 7. Verify remote capabilities, as required.
- 8. Verify COMSEC connection, as required.
- 9. Verify equipment operation.
- 10. Perform electromagnetic interference troubleshooting, as required.
- 11. Determine corrective action required, if applicable.

# **REFERENCES:**

- 1. Applicable technical references
- 2. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 3. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 4. Operational Order Operational Order
- 5. SL 1-2/3 Index of Authorized Publications in Stock
- 6. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety

### SUPPORT REQUIREMENTS:

EQUIPMENT: Support Equipment:

- 1. Oscilloscope
- 2. Multimeter
- 3. Signal generator
- 4. Power supply
- 5. Data analyzer
- 6. Spectrum analyzer
- 7. Frequency counter
- 8. Ground tester

**<u>2841-OPS-2002</u>**: Provide technical assistance during the IOM of ground vehicle intercommunication equipment

#### EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Ground electronics maintenance Marines often assists equipment crew/operators in the installation and operation of equipment. In addition,

ground electronics maintenance Marines often assists equipment crew/operators in troubleshooting equipment in operation, restoring equipment to operation. While ground electronics maintenance Marines are not utilized in the role of equipment crew/operators, they must have a thorough understanding in aspects of the proper installation and operation of equipment in order to determine when corrective action can be resolved by the equipment crew/operators and when equipment must be inducted into maintenance for field level maintenance actions.

MOS PERFORMING: 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

#### **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Ensuring proper equipment installation and operation, and identifying maintenance actions required to restore equipment operation as required in accordance with applicable equipment operation references.

#### **PERFORMANCE STEPS:**

- 1. Determine applicable equipment operation references.
- 2. Verify equipment configuration.
- 3. Verify software/firmware version, as required.
- 4. Verify equipment is properly grounded.
- 5. Verify power source.
- 6. Verify antenna installation, as required.
- 7. Verify remote capabilities, as required.
- 8. Verify COMSEC connection, as required.
- 9. Verify equipment operation.
- 10. Perform electromagnetic interference troubleshooting, as required.
- 11. Determine corrective action required, if applicable.

#### **REFERENCES:**

- 1. Applicable technical references
- 2. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 3. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 4. Operational Order Operational Order
- 5. SL 1-2/3 Index of Authorized Publications in Stock
- 6. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety

#### SUPPORT REQUIREMENTS:

EQUIPMENT: Support Equipment:

- 1. Oscilloscope
- 2. Multimeter
- 3. Signal generator
- 4. Power supply
- 5. Data analyzer
- 6. Spectrum analyzer
- 7. Frequency counter

# 8. Ground tester

**<u>2841-OPS-2003</u>**: Provide technical assistance during the IOM of mechanized vehicle electronics equipment

# EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Ground electronics maintenance Marines often assist equipment crew/operators in the installation and operation of equipment. In addition, ground electronics maintenance Marines often assist equipment crew/operators in troubleshooting equipment in operation, restoring equipment to operation. While ground electronics maintenance Marines are not utilized in the role of equipment crew/operators, they must have a thorough understanding in aspects of the proper installation and operation of equipment in order to determine when corrective action can be resolved by the equipment crew/operators and when equipment must be inducted into maintenance for field level maintenance actions.

### **MOS PERFORMING:** 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

#### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Ensuring proper equipment installation and operation, and identifying maintenance actions required to restore equipment operation as required in accordance with applicable equipment operation references.

### PERFORMANCE STEPS:

- 1. Determine applicable equipment operation references.
- 2. Verify equipment configuration.
- 3. Verify software/firmware version, as required.
- 4. Verify equipment is properly grounded.
- 5. Verify power source.
- 6. Verify antenna installation, as required.
- 7. Verify remote capabilities, as required.
- 8. Verify COMSEC connection, as required.
- 9. Verify equipment operation.
- 10. Perform electromagnetic interference troubleshooting, as required.
- 11. Determine corrective action required, if applicable.

- 1. Applicable technical references
- 2. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 3. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 4. Operational Order Operational Order
- 5. SL 1-2/3 Index of Authorized Publications in Stock
- 6. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety

# SUPPORT REQUIREMENTS:

**EQUIPMENT:** Support Equipment:

- 1. Oscilloscope
- 2. Multimeter
- 3. Signal generator
- 4. Power supply
- 5. Data analyzer
- 6. Spectrum analyzer
- 7. Frequency counter
- 8. Ground tester

**2841-OPS-2004:** Provide technical assistance during the IOM of ground common SATCOM equipment

# EVALUATION-CODED: NO

# SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Ground electronics maintenance Marines often assist equipment crew/operators in the installation and operation of equipment. In addition, ground electronics maintenance Marines often assist equipment crew/operators in troubleshooting equipment in operation, restoring equipment to operation. While ground electronics maintenance Marines are not utilized in the role of equipment crew/operators, they must have a thorough understanding in aspects of the proper installation and operation of equipment in order to determine when corrective action can be resolved by the equipment crew/operators and when equipment must be inducted into maintenance for field level maintenance actions.

# MOS PERFORMING: 2841, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Ensuring proper equipment installation and operation, and identifying maintenance actions required to restore equipment operation as required in accordance with applicable equipment operation references.

#### PERFORMANCE STEPS:

- 1. Determine applicable equipment operation references.
- 2. Verify equipment configuration.
- 3. Verify software/firmware version, as required.
- 4. Verify equipment is properly grounded.
- 5. Verify power source.
- 6. Verify antenna installation, as required.
- 7. Verify remote capabilities, as required.
- 8. Verify COMSEC connection, as required.
- 9. Verify equipment operation.
- 10. Perform electromagnetic interference troubleshooting, as required.

11. Determine corrective action required, if applicable.

# **REFERENCES:**

- 1. Applicable technical references
- 2. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 3. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 4. Operational Order Operational Order
- 5. SL 1-2/3 Index of Authorized Publications in Stock
- 6. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety

## SUPPORT REQUIREMENTS:

**EQUIPMENT:** Support Equipment:

- 1. Oscilloscope
- 2. Multimeter
- 3. Signal generator
- 4. Power supply
- 5. Data analyzer
- 6. Spectrum analyzer
- 7. Frequency counter
- 8. Ground tester

# 2800 T&R MANUAL

# CHAPTER 12

# MOS 2847 INDIVIDUAL EVENTS

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EVENT CODING	. 12001	12-2
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#### 2800 T&R MANUAL

#### CHAPTER 12

#### MOS 2847 INDIVIDUAL EVENTS

**12000. PURPOSE.** This chapter details the individual events that pertain to Telephone Systems/Personal Computer Repairers and Electronics Maintenance Technicians. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**12001.** EVENT CODING. Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

Code	Descriptio	n		
2847	Telephone	Systems/Personal	Computer	Repairer

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

Code	Description
MAIN	Maintenance
OPS	Operations

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

Code	Description
1000	Core Skills
2000	Core Plus Skills

# 12002. INDEX OF INDIVIDUAL EVENTS

EVENT CODE	EVENT	PAGE
	1000-LEVEL	
2847-MAIN-1001	Perform repair on telecommunications equipment	12-3
2847-MAIN-1002	Perform repair on IT equipment	12-5
2847-MAIN-1003	Perform repair on COMSEC equipment	12-6
2847-MAIN-1004	Perform repair on fiber optic cable/line equipment	12-7
2000-LEVEL		
2847-MAIN-2001	Perform inspection and classification on	12-9
	telecommunications equipment	

2847-MAIN-2002	Perform servicing, adjustment, and tuning on	12-10
	telecommunications equipment	
2847-MAIN-2003	Perform modification on telecommunications equipment	12-11
2847-MAIN-2004	Perform recovery and evacuation on	12-12
	telecommunications equipment	
2847-MAIN-2005	Perform inspection and classification on IT	12-13
	equipment	
2847-MAIN-2006	Perform servicing, adjustment, and tuning on IT	12-14
	equipment	
2847-MAIN-2007	Perform modification on IT equipment	12-15
2847-MAIN-2008	Perform recovery and evacuation on IT equipment	12-16
2847-MAIN-2009	Perform inspection and classification on COMSEC	12-17
	equipment	
2847-MAIN-2010	Perform servicing, adjustment, and tuning on COMSEC	12-18
	equipment	
2847-MAIN-2011	Perform modification on COMSEC equipment	12-19
2847-MAIN-2012	Perform recovery and evacuation on COMSEC equipment	12-21
2847-MAIN-2013	Perform inspection and classification on fiber optic	12-22
	cable/line equipment	
2847-OPS-2001	Provide technical assistance during the IOM of	12-23
	telecommunications equipment	
2847-OPS-2002	Provide technical assistance during the IOM of IT	12-24
	equipment	
2847-OPS-2003	Provide technical assistance during the IOM of	12-25
	COMSEC equipment	

Also refer to Chapter 4 for 28XX individual training events for which 2847 Telephone Systems/Personal Computer Repairers are responsible.

# 12003. 1000-LEVEL EVENTS

2847-MAIN-1001: Perform repair on telecommunications equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

## PERFORMANCE STEPS:

1. Induct equipment into maintenance, if required.

2. Determine applicable technical references.

3. Conduct initial inspection.

- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2 Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2847-MAIN-1002: Perform repair on IT equipment

#### EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

#### **INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**<u>STANDARD</u>**: Returning equipment to serviceable condition in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System

- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2847-MAIN-1003: Perform repair on COMSEC equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**<u>STANDARD</u>**: Returning equipment to serviceable condition in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Apply MIs/TIs, as required.
- 12. Apply firmware/software upgrades, as required.
- 13. Document maintenance actions.
- 14. Conduct final inspection.
- 15. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 6. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 7. FEDLOG Federal Logistic Data
- 8. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 9. Maintenance Float Catalog
- 10. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 11. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 12. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 13. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 14. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 15. MCO P4790.2\_ MIMMS Field Procedures Manual
- 16. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 17. MCO P5215.17\_ The Marine Corps Technical Publications System
- 18. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 19. MIL-STD-188-124A Military Standard for Grounding
- 20. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 21. SDS Safety Data Sheets
- 22. SL 1-2/3 Index of Authorized Publications in Stock
- 23. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 24. TM 4700-15/1\_ Ground Equipment Record Procedures
- 25. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 26. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 27. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 28. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 29. UM 4400-124 SASSY Using Unit Procedures
- 30. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2847-MAIN-1004: Perform repair on fiber optic cable/line equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

## **INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**<u>STANDARD</u>**: Returning equipment to serviceable condition in accordance with applicable technical references.

## PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety

25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management 27. UM 4400-124 SASSY Using Unit Procedures 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

## 12004. 2000-LEVEL EVENTS

**<u>2847-MAIN-2001</u>**: Perform inspection and classification on telecommunications equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual

 MCO P4790.2\_ MIMMS Field Procedures Manual
 MCO P5215.17\_ The Marine Corps Technical Publications System
 N6283300014 Navy Electricity and Electronics Training Series (NEETS)
 SDS Safety Data Sheets
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 TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
 TM 4700-15/1\_ Ground Equipment Record Procedures
 TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
 TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
 TM 9999-15/2\_ Electro-static Discharge (ESD) Management
 UM 4400-124 SASSY Using Unit Procedures
 UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2847-MAIN-2002</u>**: Perform servicing, adjustment, and tuning on telecommunications equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)

MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS)
Introduction Manual
MCO P4790.2_ MIMMS Field Procedures Manual
MCO P5215.17_ The Marine Corps Technical Publications System
N6283300014 Navy Electricity and Electronics Training Series (NEETS)
SDS Safety Data Sheets
SL 1-2/3 Index of Authorized Publications in Stock
TI 4400-15/1_ Packaging, Handling, Storage, and Transportation of
Electrostatic Discharge Sensitive Items
TM 4700-15/1_ Ground Equipment Record Procedures
TM 9406-15_ Grounding Procedures for Electromagnetic Interference Control
and Safety
TM 9999-15/1_ Electro-Static Discharge (ESD) Awareness
TM 9999-15/2_ Electro-static Discharge (ESD) Management
UM 4400-124 SASSY Using Unit Procedures
UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2847-MAIN-2003: Perform modification on telecommunications equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES)

Equipment

- 8. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 9. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 10. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 11. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 12. MCO P4790.2\_ MIMMS Field Procedures Manual
- 13. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 14. MCO P5215.17\_ The Marine Corps Technical Publications System
- 15. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 16. MIL-STD-188-124A Military Standard for Grounding
- 17. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 18. SDS Safety Data Sheets
- 19. SL 1-2/3 Index of Authorized Publications in Stock
- 20. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 21. TM 4700-15/1\_ Ground Equipment Record Procedures
- 22. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 23. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 24. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 25. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 26. UM 4400-124 SASSY Using Unit Procedures
- 27. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2847-MAIN-2004</u>**: Perform recovery and evacuation on telecommunications equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.

- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2847-MAIN-2005</u>**: Perform inspection and classification on IT equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.

11. Return equipment to owner, if required.

## **REFERENCES:**

1. Applicable technical references

- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2847-MAIN-2006: Perform servicing, adjustment, and tuning on IT equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2847, 2862

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.

- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

## **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2847-MAIN-2007: Perform modification on IT equipment

### EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

- 1. Conduct initial inspection.
- 2. Requisition parts, as required.
- 3. Apply modification (MI/TI/software/firmware upgrade).
- 4. Document modification.

5. Conduct final inspection.

## **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2847-MAIN-2008: Perform recovery and evacuation on IT equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

## **INITIAL TRAINING SETTING:** MOJT

CONDITION: Given a mission, personnel, and equipment.

**STANDARD**: Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

## PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2847-MAIN-2009: Perform inspection and classification on COMSEC equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

#### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures

21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2847-MAIN-2010: Perform servicing, adjustment, and tuning on COMSEC equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

## **INITIAL TRAINING SETTING:** MOJT

CONDITION: Given a mission requirement, equipment, and with the aid of

references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 4. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 5. FEDLOG Federal Logistic Data
- 6. Maintenance Float Catalog
- MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 8. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 9. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 10. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 11. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 12. MCO P4790.2\_ MIMMS Field Procedures Manual
- 13. MCO P5215.17\_ The Marine Corps Technical Publications System
- 14. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 15. SDS Safety Data Sheets
- 16. SL 1-2/3 Index of Authorized Publications in Stock
- 17. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 18. TM 4700-15/1\_ Ground Equipment Record Procedures
- 19. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 20. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 21. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 22. UM 4400-124 SASSY Using Unit Procedures
- 23. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2847-MAIN-2011: Perform modification on COMSEC equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# INITIAL TRAINING SETTING: MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 6. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 7. FEDLOG Federal Logistic Data
- 8. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 9. Maintenance Float Catalog
- 10. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 11. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 12. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 13. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 14. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 15. MCO P4790.2\_ MIMMS Field Procedures Manual
- 16. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 17. MCO P5215.17\_ The Marine Corps Technical Publications System
- 18. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 19. MIL-STD-188-124A Military Standard for Grounding
- 20. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 21. SDS Safety Data Sheets
- 22. SL 1-2/3 Index of Authorized Publications in Stock
- 23. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 24. TM 4700-15/1\_ Ground Equipment Record Procedures
- 25. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 26. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 27. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness

28. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
29. UM 4400-124 SASSY Using Unit Procedures
30. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2847-MAIN-2012: Perform recovery and evacuation on COMSEC equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD**: Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

#### **PERFORMANCE STEPS:**

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 4. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 5. FEDLOG Federal Logistic Data
- 6. Maintenance Float Catalog
- 7. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 8. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 9. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 10. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 11. MCO P4790.2\_ MIMMS Field Procedures Manual
- 12. MCO P5215.17\_ The Marine Corps Technical Publications System
- 13. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 14. SDS Safety Data Sheets
- 15. SL 1-2/3 Index of Authorized Publications in Stock
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. UM 4400-124 SASSY Using Unit Procedures
- 18. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2847-MAIN-2013</u>**: Perform inspection and classification on fiber optic cable/line equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety

18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management 20. UM 4400-124 SASSY Using Unit Procedures 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2847-OPS-2001</u>**: Provide technical assistance during the IOM of telecommunications equipment

### EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Ground electronics maintenance Marines often assist equipment crew/operators in the installation and operation of equipment. In addition, ground electronics maintenance Marines often assist equipment crew/operators in troubleshooting equipment in operation, restoring equipment to operation. While ground electronics maintenance Marines are not utilized in the role of equipment crew/operators, they must have a thorough understanding in aspects of the proper installation and operation of equipment in order to determine when corrective action can be resolved by the equipment crew/operators and when equipment must be inducted into maintenance for field level maintenance actions.

### MOS PERFORMING: 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Ensuring proper equipment installation and operation, and identifying maintenance actions required to restore equipment operation as required in accordance with applicable equipment operation references.

### PERFORMANCE STEPS:

- 1. Determine applicable equipment operation references.
- 2. Verify equipment configuration.
- 3. Verify software/firmware version, as required.
- 4. Verify equipment is properly grounded.
- 5. Verify power source.
- 6. Verify antenna installation, as required.
- 7. Verify remote capabilities, as required.
- 8. Verify COMSEC connection, as required.
- 9. Verify equipment operation.
- 10. Perform electromagnetic interference troubleshooting, as required.
- 11. Determine corrective action required, if applicable.

- 1. Applicable technical references
- 2. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 3. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 4. Operational Order Operational Order

- 5. SL 1-2/3 Index of Authorized Publications in Stock
- 6. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety

## SUPPORT REQUIREMENTS:

**EQUIPMENT:** Support Equipment:

- 1. Oscilloscope
- 2. Multimeter
- 3. Signal generator
- 4. Power supply
- 5. Data analyzer
- 6. Spectrum analyzer
- 7. Frequency counter
- 8. Ground tester

2847-OPS-2002: Provide technical assistance during the IOM of IT equipment

### EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Ground electronics maintenance Marines often assist equipment crew/operators in the installation and operation of equipment. In addition, ground electronics maintenance Marines often assist equipment crew/operators in troubleshooting equipment in operation, restoring equipment to operation. While ground electronics maintenance Marines are not utilized in the role of equipment crew/operators, they must have a thorough understanding in aspects of the proper installation and operation of equipment in order to determine when corrective action can be resolved by the equipment crew/operators and when equipment must be inducted into maintenance for field level maintenance actions.

**MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Ensuring proper equipment installation and operation, and identifying maintenance actions required to restore equipment operation as required in accordance with applicable equipment operation references.

- 1. Determine applicable equipment operation references.
- 2. Verify equipment configuration.
- 3. Verify software/firmware version, as required.
- 4. Verify equipment is properly grounded.
- 5. Verify power source.
- 6. Verify antenna installation, as required.
- 7. Verify remote capabilities, as required.

- 8. Verify COMSEC connection, as required.
- 9. Verify equipment operation.
- 10. Perform electromagnetic interference troubleshooting, as required.
- 11. Determine corrective action required, if applicable.

### **REFERENCES:**

- 1. Applicable technical references
- 2. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 3. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 4. Operational Order Operational Order
- 5. SL 1-2/3 Index of Authorized Publications in Stock
- 6. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety

## SUPPORT REQUIREMENTS:

EQUIPMENT: Support Equipment:

- 1. Oscilloscope
- 2. Multimeter
- 3. Signal generator
- 4. Power supply
- 5. Data analyzer
- 6. Spectrum analyzer
- 7. Frequency counter
- 8. Ground tester

**<u>2847-OPS-2003</u>**: Provide technical assistance during the IOM of COMSEC equipment

### EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Ground electronics maintenance Marines often assist equipment crew/operators in the installation and operation of equipment. In addition, ground electronics maintenance Marines often assist equipment crew/operators in troubleshooting equipment in operation, restoring equipment to operation. While ground electronics maintenance Marines are not utilized in the role of equipment crew/operators, they must have a thorough understanding in aspects of the proper installation and operation of equipment in order to determine when corrective action can be resolved by the equipment crew/operators and when equipment must be inducted into maintenance for field level maintenance actions.

### **MOS PERFORMING:** 2847, 2862

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

STANDARD: Ensuring proper equipment installation and operation, and

identifying maintenance actions required to restore equipment operation as required in accordance with applicable equipment operation references.

## PERFORMANCE STEPS:

- 1. Determine applicable equipment operation references.
- 2. Verify equipment configuration.
- 3. Verify software/firmware version, as required.
- 4. Verify equipment is properly grounded.
- 5. Verify power source.
- 6. Verify antenna installation, as required.
- 7. Verify remote capabilities, as required.
- 8. Verify COMSEC connection, as required.
- 9. Verify equipment operation.
- 10. Perform electromagnetic interference troubleshooting, as required.
- 11. Determine corrective action required, if applicable.

## **REFERENCES:**

- 1. Applicable technical references
- 2. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 3. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 4. Operational Order Operational Order
- 5. SL 1-2/3 Index of Authorized Publications in Stock
- 6. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety

# SUPPORT REQUIREMENTS:

EQUIPMENT: Support Equipment:

- 1. Oscilloscope
- 2. Multimeter
- 3. Signal generator
- 4. Power supply
- 5. Data analyzer
- 6. Spectrum analyzer
- 7. Frequency counter
- 8. Ground tester

# 2800 T&R MANUAL

# CHAPTER 13

# MOS 2848 INDIVIDUAL EVENTS

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# 2800 T&R MANUAL

## CHAPTER 13

### MOS 2848 INDIVIDUAL EVENTS

13000. PURPOSE. This chapter details the individual events that pertain to Tactical Remote Sensor System (TRSS) Maintainers. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**13001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

Code	Description
2848	Tactical Remote Sensor System (TRSS) Maintainer

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

Code	Description
MAIN	Maintenance
OPS	Operations

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

Code	Description		
1000	Core Skills		
2000	Core Plus Skills		

# 13002. INDEX OF INDIVIDUAL EVENTS

EVENT CODE	EVENT	PAGE
	2000-LEVEL	
2848-MAIN-2001	Perform inspection and classification on ground	13-3
	sensor system equipment	12-2
2848-MAIN-2002	Perform servicing, adjustment, and tuning on ground	13-4
	sensor system equipment	
2848-MAIN-2003	Perform repair on ground sensor system equipment	13-5
2848-MAIN-2004	Perform modification on ground sensor system	13-6
	equipment	
2848-MAIN-2005	Perform recovery and evacuation on ground sensor	13-7
	system equipment	

2848-OPS-2001	Provide technical assistance during the IOM of	13-8
	ground sensor system equipment	

### 13003. 2000-LEVEL EVENTS

**<u>2848-MAIN-2001</u>**: Perform inspection and classification on ground sensor system equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of

Electrostatic Discharge Sensitive Items
16. TM 4700-15/1\_ Ground Equipment Record Procedures
17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
20. UM 4400-124 SASSY Using Unit Procedures
21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2848-MAIN-2002</u>**: Perform servicing, adjustment, and tuning on ground sensor system equipment

## EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

## PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of

Electrostatic Discharge Sensitive Items
16. TM 4700-15/1\_ Ground Equipment Record Procedures
17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
20. UM 4400-124 SASSY Using Unit Procedures
21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2848-MAIN-2003: Perform repair on ground sensor system equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**<u>STANDARD</u>**: Returning equipment to serviceable condition in accordance with applicable technical references.

## PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment

9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS) 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual 13. MCO P4790.2 MIMMS Field Procedures Manual 14. MCO P5090.2 Environmental Compliance and Protection Manual 15. MCO P5215.17 The Marine Corps Technical Publications System 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts 17. MIL-STD-188-124A Military Standard for Grounding 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS) 19. SDS Safety Data Sheets 20. SL 1-2/3 Index of Authorized Publications in Stock 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items 22. TM 4700-15/1\_ Ground Equipment Record Procedures 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management 27. UM 4400-124 SASSY Using Unit Procedures 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2848-MAIN-2004: Perform modification on ground sensor system equipment

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2848-MAIN-2005</u>**: Perform recovery and evacuation on ground sensor system equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD**: Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

### REFERENCES:

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2848-OPS-2001:** Provide technical assistance during the IOM of ground sensor system equipment

### EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Ground electronics maintenance Marines often assist equipment crew/operators in the installation and operation of equipment. In addition, ground electronics maintenance Marines often assist equipment crew/operators in troubleshooting equipment in operation, restoring equipment to operation. While ground electronics maintenance Marines are not utilized in the role of equipment crew/operators, they must have a thorough understanding in aspects of the proper installation and operation of equipment in order to determine when corrective action can be resolved by the equipment crew/operators and when equipment must be inducted into maintenance for field level maintenance actions.

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

CONDITION: Given a mission requirement, equipment, and with the aid of

references.

**STANDARD:** Ensuring proper equipment installation and operation, and identifying maintenance actions required to restore equipment operation as required in accordance with applicable equipment operation references.

### PERFORMANCE STEPS:

- 1. Determine applicable equipment operation references.
- 2. Verify equipment configuration.
- 3. Verify software/firmware version, as required.
- 4. Verify equipment is properly grounded.
- 5. Verify power source.
- 6. Verify antenna installation, as required.
- 7. Verify remote capabilities, as required.
- 8. Verify COMSEC connection, as required.
- 9. Verify equipment operation.
- 10. Perform electromagnetic interference troubleshooting, as required.
- 11. Determine corrective action required, if applicable.

### **REFERENCES:**

- 1. Applicable technical references
- 2. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 3. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 4. Operational Order Operational Order
- 5. SL 1-2/3 Index of Authorized Publications in Stock
- 6. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety

## SUPPORT REQUIREMENTS:

**EQUIPMENT:** Support Equipment:

- 1. Oscilloscope
- 2. Multimeter
- 3. Signal generator
- 4. Power supply
- 5. Data analyzer
- 6. Spectrum analyzer
- 7. Frequency counter
- 8. Ground tester

# 2800 T&R MANUAL

# CHAPTER 14

## MOS 2862 INDIVIDUAL EVENTS

This chapter remains as a placeholder for future use. The 2862, Electronics Maintenance Technician MOS is a career progression MOS for a 2841, Ground Radio Repairer, and 2847, Telephone Systems/Personal Computer Repairer. Skills progression training, experience, and rank of the Marine that holds this MOS will execute the individual training events of a 2841 (Chapter 11) and a 2847 (Chapter 12) at an advanced level; providing complex troubleshooting, supervision, training, and quality control of associated equipment. The Marine will manage all maintenance requirements associated to his/her rank and shop/unit in accordance with the 28XX individual training events (Chapter 4).

# 2800 T&R MANUAL

# CHAPTER 15

# MOS 2871 INDIVIDUAL EVENTS

	PARAGRAPH	PAGE
PURPOSE	. 15000	15-2
EVENT CODING	. 15001	15-2
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1000-LEVEL EVENTS	. 15003	15-3
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# 2800 T&R MANUAL

## CHAPTER 15

### MOS 2871 INDIVIDUAL EVENTS

**15000. PURPOSE.** This chapter details the individual events that pertain to Calibration Technicians and Metrology Technicians. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**15001.** EVENT CODING. Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

Code	Description	
2871	Calibration	Technician

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

Code Description MAIN Maintenance

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

Code	Description		
1000	Core	Skill	s
2000	Core	Plus	Skills

### 15002. INDEX OF INDIVIDUAL EVENTS

EVENT CODE	EVENT	
	1000-LEVEL	
2871-MAIN-1001	Perform testing and calibration on high density, low	15-3
	complexity TMDE	
2871-MAIN-1002	Perform repair on high density, low complexity TMDE	15-4
2000-LEVEL		
2871-MAIN-2001	Perform inspection and classification on high	15-5
	density, low complexity TMDE	T2-2
2871-MAIN-2002	Perform servicing, adjustment, and tuning on high	15-6
	density, low complexity TMDE	10-0

2871-MAIN-2003	Perform modification on high density, low complexity TMDE	15-7
2871-MAIN-2004	Perform recovery and evacuation on high density, low complexity TMDE	15-9

Also refer to Chapter 4 for 28XX individual training events for which 2871 Calibration Technicians are responsible.

### 15003. 1000-LEVEL EVENTS

**2871-MAIN-1001:** Perform testing and calibration on high density low complexity TMDE

# EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2871, 2874

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Detecting and reporting, or eliminating by adjustment, errors in tested equipment in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable equipment calibration procedures.
- 3. Conduct initial inspection.
- 4. Verify performance within accepted standards.
- 5. Submit to maintenance, if required.
- 6. Document maintenance actions.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)

SDS Safety Data Sheets
 SL 1-2/3 Index of Authorized Publications in Stock
 TM 4700-15/1\_ Ground Equipment Record Procedures
 UM 4400-124 SASSY Using Unit Procedures
 UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2871-MAIN-1002:** Perform repair on high density low complexity TMDE

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2871, 2874

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program

10.	MCO 3000.11_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
11.	MCO 4400.16_ Uniform Material Movement and Issue Priority System (UMMIPS)
12.	MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS)
	Introduction Manual
13.	MCO P4790.2_ MIMMS Field Procedures Manual
14.	MCO P5090.2_ Environmental Compliance and Protection Manual
15.	MCO P5215.17_ The Marine Corps Technical Publications System
16.	MIL-STD-1686B Electro-Static Discharge Control Program for Protection of
	Electrical and Electronic Parts
	MIL-STD-188-124A Military Standard for Grounding
	N6283300014 Navy Electricity and Electronics Training Series (NEETS)
	SDS Safety Data Sheets
	SL 1-2/3 Index of Authorized Publications in Stock
21.	TI 4400-15/1_ Packaging, Handling, Storage, and Transportation of
	Electrostatic Discharge Sensitive Items
22.	TI 4733-OD/1_ Calibration Requirements Marine Corps Test, Measurement and
	Diagnostic Equipment Calibration and Maintenance Program
	TM 4700-15/1_ Ground Equipment Record Procedures
24.	TM 5895-45/1_ Standard Maintenance Practices Miniature/Microminiature (2M)
05	Electronic Assembly Repair Organizational/Intermediate/Depot Level
25.	TM 9406-15_ Grounding Procedures for Electromagnetic Interference Control
0.0	and Safety
	TM 9999-15/1_ Electro-Static Discharge (ESD) Awareness
	TM 9999-15/2_ Electro-static Discharge (ESD) Management
	UM 4400-124 SASSY Using Unit Procedures
29.	UM 4790-5 MIMMS AIS, Field Maintenance Procedures

### 15004. 2000-LEVEL EVENTS

**<u>2871-MAIN-2001</u>**: Perform inspection and classification on high density low complexity TMDE

# EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2871, 2874

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

## PERFORMANCE STEPS:

1. Induct equipment into maintenance, if required.

2. Determine applicable technical references.

- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TI 4733-OD/1\_ Calibration Requirements Marine Corps Test, Measurement and Diagnostic Equipment Calibration and Maintenance Program
- 17. TM 4700-15/1\_ Ground Equipment Record Procedures
- 18. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 19. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 20. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 21. UM 4400-124 SASSY Using Unit Procedures
- 22. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2871-MAIN-2002</u>**: Perform servicing, adjustment, and tuning on high density low complexity TMDE

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2871, 2874

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

CONDITION: Given a mission requirement, equipment, and with the aid of

references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

#### 2871-MAIN-2003: Perform modification on high density low complexity TMDE

EVALUATION-CODED: NO SUSTAI

SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2871, 2874

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2871-MAIN-2004:** Perform recovery and evacuation on high density low complexity TMDE

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**MOS PERFORMING:** 2871, 2874

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

# 2800 T&R MANUAL

# CHAPTER 16

# MOS 2874 INDIVIDUAL EVENTS

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PURPOSE	. 16000	16-2
EVENT CODING	. 16001	16-2
INDEX OF INDIVIDUAL EVENTS	. 16002	16-2
2000-level events	. 16003	16-3

# 2800 T&R MANUAL

### CHAPTER 16

#### MOS 2874 INDIVIDUAL EVENTS

16000. PURPOSE. This chapter details the individual events that pertain to Metrology Technicians. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**16001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

Code	Descriptio	on
2874	Metrology	Technician

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

Code	Description
MAIN	Maintenance
MGMT	Maintenance Management

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

Code	Desci	riptic	on
1000	Core	Skill	s
2000	Core	Plus	Skills

#### 16002. INDEX OF INDIVIDUAL EVENTS

EVENT CODE	EVENT	PAGE
	2000-LEVEL	
2874-MAIN-2001	Perform inspection and classification on low	16-3
	density/high complexity TMDE	10 5
2874-MAIN-2002	Perform servicing, adjustment, and tuning on low	16-4
	density/high complexity TMDE	10-4
2874-MAIN-2003	Perform testing and calibration on low density/high	16-5
	complexity TMDE	T0-2
2874-MAIN-2004	Perform repair on low density/high complexity TMDE	16-6
2874-MAIN-2005	Perform modification on low density/high complexity	16-7
	TMDE	10-7

2874-MAIN-2006	Perform recovery and evacuation on low density/high complexity TMDE	16-8
2874-MAIN-2007	Perform inspection and classification on laboratory standards	16-9
2874-MAIN-2008	Perform servicing, adjustment, and tuning on laboratory standards	16-11
2874-MAIN-2009	Perform testing and calibration on laboratory standards	16-12
2874-MAIN-2010	Perform repair on laboratory standards	16-12
2874-MAIN-2011	Perform modification on laboratory standards	16-14
2874-MGMT-2001	Manage calibration laboratory standards traceability	16-15
2874-MGMT-2002	Manage laboratory quality program	16-15

Also refer to Chapter 4 for 28XX individual training events and Chapter 15 for 2871 individual training events for which 2874 Metrology Technicians are responsible.

#### 16003. 2000-LEVEL EVENTS

**2874-MAIN-2001:** Perform inspection and classification on low density/high complexity TMDE

#### EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**GRADES:** SGT, SSGT, GYSGT

#### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook

- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TI 4733-OD/1\_ Calibration Requirements Marine Corps Test, Measurement and Diagnostic Equipment Calibration and Maintenance Program
- 17. TM 4700-15/1\_ Ground Equipment Record Procedures
- 18. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 19. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 20. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 21. UM 4400-124 SASSY Using Unit Procedures
- 22. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2874-MAIN-2002:** Perform servicing, adjustment, and tuning on low density/high complexity TMDE

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**GRADES:** SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2874-MAIN-2003:** Perform testing and calibration on low density/high complexity TMDE

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**GRADES:** SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Detecting and reporting, or eliminating by adjustment, errors in tested equipment in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable equipment calibration procedures.
- 3. Conduct initial inspection.
- 4. Verify performance within accepted standards.
- 5. Submit to maintenance, if required.
- 6. Document maintenance actions.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

#### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2874-MAIN-2004:** Perform repair on low density/high complexity TMDE

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**GRADES:** SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

#### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TI 4733-OD/1\_ Calibration Requirements Marine Corps Test, Measurement and Diagnostic Equipment Calibration and Maintenance Program
- 23. TM 4700-15/1\_ Ground Equipment Record Procedures
- 24. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 25. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 26. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 27. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 28. UM 4400-124 SASSY Using Unit Procedures
- 29. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2874-MAIN-2005: Perform modification on low density/high complexity TMDE

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**GRADES:** SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

#### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2874-MAIN-2006: Perform recovery and evacuation on low density/high

complexity TMDE

#### EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**GRADES:** SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TI 4733-OD/1\_ Calibration Requirements Marine Corps Test, Measurement and Diagnostic Equipment Calibration and Maintenance Program
- 15. TM 4700-15/1\_ Ground Equipment Record Procedures
- 16. UM 4400-124 SASSY Using Unit Procedures
- 17. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2874-MAIN-2007:** Perform inspection and classification on laboratory standards

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**GRADES:** SGT, SSGT, GYSGT, MSGT

# INITIAL TRAINING SETTING: MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TI 4733-OD/1\_ Calibration Requirements Marine Corps Test, Measurement and Diagnostic Equipment Calibration and Maintenance Program
- 17. TM 4700-15/1\_ Ground Equipment Record Procedures
- 18. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 19. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 20. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 21. UM 4400-124 SASSY Using Unit Procedures
- 22. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2874-MAIN-2008:** Perform servicing, adjustment, and tuning on laboratory standards

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: SGT, SSGT, GYSGT, MSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

2874-MAIN-2009: Perform testing and calibration on laboratory standards

#### EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

#### **INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Detecting and reporting, or eliminating by adjustment, errors in tested equipment in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable equipment calibration procedures.
- 3. Conduct initial inspection.
- 4. Verify performance within accepted standards.
- 5. Submit to maintenance, if required.
- 6. Document maintenance actions.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 3. MCO P4790.2\_ MIMMS Field Procedures Manual
- 4. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 5. SDS Safety Data Sheets
- 6. SL 1-2/3 Index of Authorized Publications in Stock
- 7. TI 4733-OD/1\_ Calibration Requirements Marine Corps Test, Measurement and Diagnostic Equipment Calibration and Maintenance Program
- 8. TM 4700-15/1\_ Ground Equipment Record Procedures

2874-MAIN-2010: Perform repair on laboratory standards

BURDONITON CODED. NO BUDIALIMENT INTERVAL. 12 month	EVALUATION-CODED:	NO	SUSTAINMENT	INTERVAL:	12 months
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GRADES: SGT, SSGT, GYSGT, MSGT

**INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**<u>STANDARD</u>**: Returning equipment to serviceable condition in accordance with applicable technical references.

#### PERFORMANCE STEPS:

1. Induct equipment into maintenance, if required.

- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TI 4733-OD/1\_ Calibration Requirements Marine Corps Test, Measurement and Diagnostic Equipment Calibration and Maintenance Program
- 23. TM 4700-15/1\_ Ground Equipment Record Procedures
- 24. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 25. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 26. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 27. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 28. UM 4400-124 SASSY Using Unit Procedures

29. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2874-MAIN-2011:** Perform modification on laboratory standards

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**GRADES:** SGT, SSGT, GYSGT, MSGT

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock

- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2 Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2874-MGMT-2001</u>**: Manage calibration laboratory standards traceability

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: SGT, SSGT, GYSGT, MSGT

**INITIAL TRAINING SETTING:** FORMAL

CONDITION: With the aid of references, equipment, materials, and tools.

**STANDARD:** Ensuring the recall or removal from service of any standard or equipment in accordance with TI 4733-35/24\_ United States Marine Corps Metrology Calibration Quality Assurance Program.

### PERFORMANCE STEPS:

- 1. Coordinate receipt of standards.
- 2. Schedule laboratory standards for calibration.
- 3. Schedule personnel to perform maintenance action.
- 4. Coordinate shipment of standards.
- 5. Maintain laboratory standards.

### **REFERENCES:**

- 1. MCO 4733.1\_ Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
- 2. MCO P4790.2\_ MIMMS Field Procedures Manual
- 3. SDS Safety Data Sheets
- 4. TI 4733-35/24\_ United States Marine Corps Metrology Calibration Quality Assurance Program
- 5. TI-4733-35/23\_ Navy and Marine Corps Calibration Laboratory Audit/Certification Manual
- 6. TM 10510-OD/1\_ General Purpose Test Measurement and Diagnostic Equipment (TMDE) Listing (Including Ancillary Support Items & Tool Kits)
- 7. TM 4700-15/1\_ Ground Equipment Record Procedures

2874-MGMT-2002: Manage laboratory quality program

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**GRADES:** SGT, SSGT, GYSGT

# **INITIAL TRAINING SETTING:** FORMAL

CONDITION: With the aid of references, equipment, a mission, and personnel.

**STANDARD:** Ensuring calibration laboratory compliance with TI 4733-35/24\_ United States Marine Corps Metrology Calibration Quality Assurance Program.

#### PERFORMANCE STEPS:

- 1. Prepare for evaluations.
- 2. Perform evaluation.
- 3. Correct deficiencies.
- 4. Maintain laboratory documents.
- 5. Maintain laboratory records.

### **REFERENCES:**

- 1. NAVAIR 17-35FR-06 Facility Requirements
- 2. TI 4733-35/24\_ United States Marine Corps Metrology Calibration Quality Assurance Program
- 3. TI-4733-35/23\_ Navy and Marine Corps Calibration Laboratory Audit/Certification Manual

# SUPPORT REQUIREMENTS:

**EQUIPMENT:** Support Equipment: Calibration facility

# 2800 T&R MANUAL

# CHAPTER 17

# MOS 2887 INDIVIDUAL EVENTS

	PARAGRAPH	PAGE
PURPOSE	. 17000	17-2
EVENT CODING	. 17001	17-2
INDEX OF INDIVIDUAL EVENTS	. 17002	17-2
1000-LEVEL EVENTS	. 17003	17-3
2000-level events	. 17004	17-4

# 2800 T&R MANUAL

### CHAPTER 17

#### MOS 2887 INDIVIDUAL EVENTS

**17000. PURPOSE.** This chapter details the individual events that pertain to Artillery Electronics Technicians. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**17001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

Code	Description
2887	Artillery Electronics Technician

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

Code	Description
MAIN	Maintenance
OPS	Operations

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

Code	Description
1000	Core Skills
2000	Core Plus Skills

#### 17002. INDEX OF INDIVIDUAL EVENTS

EVENT CODE	EVENT	PAGE
	1000-LEVEL	
2887-MAIN-1001	Perform repair on artillery electronics equipment	17-3
	2000-LEVEL	
2887-MAIN-2001	Perform inspection and classification on artillery	17-4
	electronics equipment	1/-4
2887-MAIN-2002	Perform servicing, adjustment, and tuning on	17-5
	artillery electronics equipment	17-5
2887-MAIN-2003	Perform modification on artillery electronics	17-6
	equipment	T/-0

2887-MAIN-2004	Perform rebuilding and overhauling on artillery electronics equipment	17-7
2887-MAIN-2005	Perform recovery and evacuation on artillery electronics equipment	17-9
2887-OPS-2001	Provide technical assistance during the IOM of artillery electronics equipment	17-10

Also refer to Chapter 4 for 28XX individual training events for which 2887 Artillery Electronics Technicians are responsible.

### 17003. 1000-LEVEL EVENTS

2887-MAIN-1001: Perform repair on artillery electronics equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**<u>STANDARD</u>**: Returning equipment to serviceable condition in accordance with applicable technical references.

# PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators

- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 21. TM 4700-15/1\_ Ground Equipment Record Procedures
- 22. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 23. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 24. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 25. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 26. UM 4400-124 SASSY Using Unit Procedures
- 27. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

### 17004. 2000-LEVEL EVENTS

**2887-MAIN-2001:** Perform inspection and classification on artillery electronics equipment

# EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.

- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 15. TM 4700-15/1\_ Ground Equipment Record Procedures
- 16. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 17. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 18. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 19. UM 4400-124 SASSY Using Unit Procedures
- 20. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2887-MAIN-2002</u>**: Perform servicing, adjustment, and tuning on artillery electronics equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Adjust equipment performance.
- 5. Verify equipment performance.
- 6. Document maintenance actions.
- 7. Return equipment to owner, if required.

# **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1\_ Ground Equipment Record Procedures
- 17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2887-MAIN-2003</u>**: Perform modification on artillery electronics equipment

EVALUATION-CODED: NO S

#### SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

#### PERFORMANCE STEPS:

1. Induct equipment into maintenance, if required.

- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

# **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2887-MAIN-2004</u>**: Perform rebuilding and overhauling on artillery electronics equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

# INITIAL TRAINING SETTING: MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Restoring equipment to a serviceable condition under maintenance serviceability standards and in accordance with applicable technical references.

### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Diagnose fault.
- 5. Troubleshoot.
- 6. Isolate fault.
- 7. Remove defective components.
- 8. Requisition parts.
- 9. Replace parts.
- 10. Align, as required.
- 11. Apply MIs/TIs, as required.
- 12. Apply firmware/software upgrades, as required.
- 13. Re-surface/re-coat, as required.
- 14. Replace identification markings, as required.
- 15. Document maintenance actions.
- 16. Conduct final inspection.
- 17. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 12. MCO P5215.17\_ The Marine Corps Technical Publications System
- 13. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 14. SDS Safety Data Sheets
- 15. SL 1-2/3 Index of Authorized Publications in Stock
- 16. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 17. TM 4700-15/1\_ Ground Equipment Record Procedures
- 18. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 19. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety

20. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
21. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
22. UM 4400-124 SASSY Using Unit Procedures
23. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**<u>2887-MAIN-2005</u>**: Perform recovery and evacuation on artillery electronics equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

#### **INITIAL TRAINING SETTING:** MOJT

CONDITION: Given a mission, personnel, and equipment.

**STANDARD**: Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 7. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 8. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 9. MCO P4790.2\_ MIMMS Field Procedures Manual
- 10. MCO P5215.17\_ The Marine Corps Technical Publications System
- 11. N6283300014 Navy Electronics and Electricity Training Series (NEETS)
- 12. SDS Safety Data Sheets
- 13. SL 1-2/3 Index of Authorized Publications in Stock
- 14. TM 4700-15/1\_ Ground Equipment Record Procedures
- 15. UM 4400-124 SASSY Using Unit Procedures
- 16. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

**2887-OPS-2001:** Provide technical assistance during the IOM of artillery electronics equipment

# EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Ground electronics maintenance Marines often assist equipment crew/operators in the installation and operation of equipment. In addition, ground electronics maintenance Marines often assist equipment crew/operators in troubleshooting equipment in operation, restoring equipment to operation. While ground electronics maintenance Marines are not utilized in the role of equipment crew/operators, they must have a thorough understanding in aspects of the proper installation and operation of equipment in order to determine when corrective action can be resolved by the equipment crew/operators and when equipment must be inducted into maintenance for field level maintenance actions.

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

#### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Ensuring proper equipment installation and operation, and identifying maintenance actions required to restore equipment operation as required in accordance with applicable equipment operation references.

#### PERFORMANCE STEPS:

- 1. Determine applicable equipment operation references.
- 2. Verify equipment configuration.
- 3. Verify software/firmware version, as required.
- 4. Verify equipment is properly grounded.
- 5. Verify power source.
- 6. Verify antenna installation, as required.
- 7. Verify remote capabilities, as required.
- 8. Verify COMSEC connection, as required.
- 9. Verify equipment operation.
- 10. Perform electromagnetic interference troubleshooting, as required.
- 11. Determine corrective action required, if applicable.

### **REFERENCES:**

- 1. Applicable technical references
- 2. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 3. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 4. Operational Order Operational Order
- 5. SL 1-2/3 Index of Authorized Publications in Stock
- 6. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety

# SUPPORT REQUIREMENTS:

# **EQUIPMENT:** Support Equipment:

- 1. Oscilloscope
- 2. Multimeter

- Signal generator
   Power supply
   Data analyzer

- 6. Spectrum analyzer
- 7. Frequency counter
- 8. Ground tester

# 2800 T&R MANUAL

# CHAPTER 18

# MOS 2891 INDIVIDUAL EVENTS

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# 2800 T&R MANUAL

### CHAPTER 18

#### MOS 2874 INDIVIDUAL EVENTS

**18000. PURPOSE.** This chapter details the individual events that pertain to Metrology Technicians. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**18001.** EVENT CODING. Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

Code	Description		
2891	Electronics	Maintenance	Chief

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

Code	Description	
MGMT	Maintenance	Management

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

CodeDescription2000Core Plus Skills

# 18002. INDEX OF INDIVIDUAL EVENTS

EVENT CODE	EVENT	PAGE
2000-LEVEL		
2891-MGMT-2001	Supervise ground electronics maintenance	18-2

Also refer to Chapter 4 for 28XX individual training events for which 2891 Electronics Maintenance Chiefs are responsible.

# 18003. 2000-LEVEL EVENTS

2891-MGMT-2001: Supervise ground electronics maintenance

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

**GRADES:** MSGT, MGYSGT

### **INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: With the aid of references, a maintenance unit, maintenance resources and a mission.

**STANDARD:** Ensuring effective and efficient application of maintenance resources, maximum maintenance production, and compliance with MCO P4790.2\_MIMMS Field Procedures Manual.

#### **PERFORMANCE STEPS:**

- 1. Provide technical advice to the Commander on commodity maintenance functions.
- 2. Supervise maintenance/commodity operations.
- 3. Supervise shop procedures.
- 4. Supervise shop programs.
- 5. Conduct periodic equipment inspections.
- 6. Coordinate multi-commodity maintenance efforts.
- 7. Supervise the use of maintenance resources.
- 8. Coordinate supply support.
- 9. Analyze maintenance information.
- 10. Supervise maintenance related programs.

### PREREQUISITE EVENTS:

28XX-ADMN-2003 28XX-PROG-2001

- 1. Applicable technical references
- 2. CMR Consolidated Memorandum Receipt
- Contracted Logistics Support (CLS) Statement of Requirements/Objectives/Work (SOR/SOO/SOW)
- 4. DLA Customer Assistance Handbook
- 5. DoDD 8570.01M Information Assurance Workforce Improvement Program Incorporating Change 2
- 6. DoDI 4151.18 Maintenance of Military Material
- 7. DoDI 8523.01 Communication Security
- 8. EKMS-1 (series) EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3
- 9. EKMS-5A Cryptographic Equipment Information/Guidance Manual
- 10. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 11. MCO 1200.17\_ Military Occupational Specialty Manual (MOS Manual)
- 12. MCO 2281.1\_ Electronic Key Management System (EKMS) Policy
- 13. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 14. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 15. MCO 4105.2\_ Marine Corps Warranty Program
- 16. MCO 4200.33\_ Contractor Logistics Support (CLS) for Ground Equipment, Weapon Systems, Munitions, and Information Systems
- 17. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 18. MCO 4733.1\_ Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
- 19. MCO 4855.10 Product Quality Deficiency Report (PQDR)
- 20. MCO 5311.1\_ Total Force Structure Process (TFSP)

- 21. MCO P4400.150\_ Consumer Level Supply Policy Manual
- 22. MCO P4400.151\_ Intermediate-Level Supply Management Policy Manual
- 23. MCO P4400.160\_ Field Supply and Maintenance Analysis Office Program (FSMAO)
- 24. MCO P4400.82\_ Regulated/Controlled Item Management Manual
- 25. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 26. MCO P4790.2\_ MIMMS Field Procedures Manual
- 27. MCO P5215.17\_ The Marine Corps Technical Publications System
- 28. MCRP 4-11.3G Unit Embarkation Handbook
- 29. MCWP 3-40.3 MAGTF Communications System
- 30. MCWP 4-1 Logistics Operations
- 31. MCWP 4-11 Tactical-Level Logistics
- 32. MCWP 4-11.4 Maintenance Operations
- 33. MCWP 5-1 Marine Corps Planning Process (MCPP)
- 34. MMSOP Maintenance Management Standing Operating Procedures
- 35. NSTISSI 4000 COMSEC Maintenance and Maintenance Training Policy (NSA)
- 36. OpOrd Operational Order
- 37. PLMS V3 UG Publication Library Management System Version 3 Users Guide
- 38. SL 1-2/3 Index of Authorized Publications in Stock
- 39. T/O&E Table of Organization and Equipment
- 40. TI 4733 Series Calibration and TMDE Requirements and Programs
- 41. TI 5820-25/22\_ Electromagnetic Environmental Effects (E3) Procedures for Installation of Communication Equipment on Marine Corps Platforms
- 42. TM 10209-10/1\_ Use and Care of Hand Tools and Measuring Tools
- 43. TM 10510-OD/1\_ General Purpose Test Measurement and Diagnostic Equipment (TMDE) Listing (Including Ancillary Support Items & Tool Kits)
- 44. TM 2000-15/1\_ Brief Description of U.S. Marine Corps Communication-Electronic Equipment
- 45. TM 2000-OD/2\_ Principal Technical Characteristics of U.S. Marine Corps Communication-Electronics Equipment
- 46. TM 4700-15/1\_ Ground Equipment Record Procedures
- 47. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 48. UM 4400-123 FMF SASSY Management Unit Procedures
- 49. UM 4400-124 SASSY Using Unit Procedures
- 50. UM 4400-125 FMF SASSY Accounting Manual (VOL IV) Maintenance Float Procedures
- 51. UM 4790-5 MIMMS AIS, Field Maintenance Procedures
- 52. Unit SOP Unit's Standing Operating Procedures

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# CHAPTER 19

# MOS 8641 INDIVIDUAL EVENTS

	PARAGRAPH	PAGE
PURPOSE	. 19000	19-2
EVENT CODING	. 19001	19-2
INDEX OF INDIVIDUAL EVENTS	. 19002	19-2
2000-level events	. 19003	19-3

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### CHAPTER 19

#### MOS 8641 INDIVIDUAL EVENTS

**19000. PURPOSE.** This chapter details the individual events that pertain to Microminiature Repairers. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**19001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

Code	Description	
8641	Microminiature	Repairer

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

Code	Description
MAIN	Maintenance

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

CodeDescription2000Core Plus Skills

# 19002. INDEX OF INDIVIDUAL EVENTS

EVENT CODE	EVENT	PAGE
	2000-LEVEL	
8641-MAIN-2001	Perform inspection and classification on complex circuit cards	19-3
8641-MAIN-2002	Perform repair on complex circuit cards	19-4
8641-MAIN-2003	Perform modification on complex circuit cards	19-5
8641-MAIN-2004	Perform rebuilding and overhauling on complex circuit cards	19-6
8641-MAIN-2005	Perform recovery and evacuation on complex circuit cards	19-7
8641-MAIN-2006	Create a test routine	19-8

## 19003. 2000-LEVEL EVENTS

**8641-MAIN-2001**: Perform inspection and classification on complex circuit cards

#### EVALUATION-CODED: NO

#### SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Test item against established standards.
- 4. Verify application of all required MIs and TIs.
- 5. Verify currency of firmware/software version, if applicable.
- 6. Determine extent of maintenance required.
- 7. Assign item to a maintenance category, if required.
- 8. Confirm satisfactory performance of maintenance, if required.
- 9. Return to maintenance, if required.
- 10. Document maintenance actions.
- 11. Return equipment to owner, if required.
- 12. Submit technical information, as required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M)

Electronic Assembly Repair Organizational/Intermediate/Depot Level
17. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
20. UM 4400-124 SASSY Using Unit Procedures
21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

8641-MAIN-2002: Perform repair on complex circuit cards

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

## PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Research applicable technical information.
- 5. Diagnose fault.
- 6. Troubleshoot.
- 7. Isolate fault.
- 8. Determine maintenance actions required.
- 9. Requisition parts, if required.
- 10. Perform required maintenance actions.
- 11. Align, as required.
- 12. Apply MIs/TIs, as required.
- 13. Apply firmware/software upgrades, as required.
- 14. Document maintenance actions.
- 15. Conduct final inspection.
- 16. Return equipment to owner, if required.

#### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program

- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 23. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 24. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 25. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 26. UM 4400-124 SASSY Using Unit Procedures
- 27. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

8641-MAIN-2003: Perform modification on complex circuit cards

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** MOJT

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

#### **PERFORMANCE STEPS:**

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Requisition parts, as required.
- 5. Apply modification (MI/TI/software/firmware upgrade).
- 6. Document modification.
- 7. Conduct final inspection.
- 8. Return equipment to owner, if required.

### **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook

- 3. DOD-HDBK-263B Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment
- 4. DOD-STD-1686 Electrostatic Discharge Control
- 5. FEDLOG Federal Logistic Data
- 6. FMFRP 4-14 Field Grounding Procedures for Computers and Generators
- 7. Maintenance Float Catalog
- 8. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 9. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 10. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 11. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 12. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 13. MCO P4790.2\_ MIMMS Field Procedures Manual
- 14. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 15. MCO P5215.17\_ The Marine Corps Technical Publications System
- 16. MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts
- 17. MIL-STD-188-124A Military Standard for Grounding
- 18. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 19. SDS Safety Data Sheets
- 20. SL 1-2/3 Index of Authorized Publications in Stock
- 21. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 22. TM 4700-15/1\_ Ground Equipment Record Procedures
- 23. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 24. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 25. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 26. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 27. UM 4400-124 SASSY Using Unit Procedures
- 28. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

8641-MAIN-2004: Perform rebuilding and overhauling on complex circuit cards

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

### **INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Restoring equipment to a serviceable condition under maintenance serviceability standards and in accordance with applicable technical references.

### PERFORMANCE STEPS:

1. Induct equipment into maintenance, if required.

- 2. Determine applicable technical references.
- 3. Conduct initial inspection.
- 4. Diagnose fault.
- 5. Troubleshoot.
- 6. Isolate fault.
- 7. Remove defective components.
- 8. Requisition parts.
- 9. Replace parts.
- 10. Align, as required.
- 11. Apply MIs/TIs, as required.
- 12. Apply firmware/software upgrades, as required.
- 13. Re-surface/re-coat, as required.
- 14. Replace identification markings, as required.
- 15. Document maintenance actions.
- 16. Conduct final inspection.
- 17. Return equipment to owner, if required.

## **REFERENCES**:

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5090.2\_ Environmental Compliance and Protection Manual
- 12. MCO P5215.17\_ The Marine Corps Technical Publications System
- 13. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 14. SDS Safety Data Sheets
- 15. SL 1-2/3 Index of Authorized Publications in Stock
- 16. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 17. TM 4700-15/1\_ Ground Equipment Record Procedures
- 18. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 19. TM 9406-15\_ Grounding Procedures for Electromagnetic Interference Control and Safety
- 20. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 21. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 22. UM 4400-124 SASSY Using Unit Procedures
- 23. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

8641-MAIN-2005: Perform recovery and evacuation on complex circuit cards

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

## INITIAL TRAINING SETTING: MOJT

CONDITION: Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

#### PERFORMANCE STEPS:

- 1. Induct equipment into maintenance, if required.
- 2. Determine applicable technical references.
- 3. Inspect equipment.
- 4. Return to service, if applicable.
- 5. Conduct disposition of unserviceable equipment, if applicable.
- 6. Evacuate materiel to higher maintenance activity, as required.
- 7. Document maintenance actions.
- 8. Return equipment to owner, if required.

## **REFERENCES:**

- 1. Applicable technical references
- 2. DLA Customer Assistance Handbook
- 3. FEDLOG Federal Logistic Data
- 4. Maintenance Float Catalog
- 5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
- 6. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- 7. MCO 3000.11\_ Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy
- 8. MCO 4400.16\_ Uniform Material Movement and Issue Priority System (UMMIPS)
- 9. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
- 10. MCO P4790.2\_ MIMMS Field Procedures Manual
- 11. MCO P5215.17\_ The Marine Corps Technical Publications System
- 12. N6283300014 Navy Electricity and Electronics Training Series (NEETS)
- 13. SDS Safety Data Sheets
- 14. SL 1-2/3 Index of Authorized Publications in Stock
- 15. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 16. TM 4700-15/1 Ground Equipment Record Procedures
- 17. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 18. TM 9999-15/1\_ Electro-Static Discharge (ESD) Awareness
- 19. TM 9999-15/2\_ Electro-static Discharge (ESD) Management
- 20. UM 4400-124 SASSY Using Unit Procedures
- 21. UM 4790-5 MIMMS AIS, Field Maintenance Procedures

8641-MAIN-2006: Create a test routine

EVALUATION-CODED: NO

SUSTAINMENT INTERVAL: 12 months

**DESCRIPTION:** Identify and record individual analog signatures for use in the diagnosis of faulty components to the microscopic level. Developed routines are certified and released at the enterprise level to support subsequent maintenance actions on assemblies for which test routines are created.

GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

#### **INITIAL TRAINING SETTING:** FORMAL

**<u>CONDITION</u>:** With the aid of references, automated test equipment, an application program set, and known good circuit card assemblies.

**STANDARD:** Providing cost effective aid to diagnosis and repair of applicable circuit card assembly in accordance with TM 10793A-10/1, Chapter 5.

## PERFORMANCE STEPS:

- 1. Develop test routine instructions.
- 2. Store component signatures.
- 3. Develop test routine illustrations.
- 4. Develop test routine database.
- 5. Verify test routine.

## **REFERENCES:**

- 1. MCO 2410.2\_ Electromagnetic Environmental Effects (E3) Control Program
- NAVSEA ST900-HN-GPT-020 Technical Reference and Operation Manual for PROTRACK I Model 20A/PROTRACK Scanner I
- 3. ST-90 Shortrak 90 User's Manual
- 4. TI 10793-ID\_ AN/USM-674 Test Station Gold Disk and Silver Disk Miniature/Microminiature (2M)/Module Test and Repair Program
- 5. TI 4400-15/1\_ Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
- 6. TM 09810A-50/5\_ MTR Gold Disk Test Routine Development Requirements Manual
- 7. TM 10793A-OD/1\_ Module Test & Repair Tracking System (Marines) User's Guide
- 8. TM 5895-45/1\_ Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level
- 9. TM 9999-15/1 Electro-Static Discharge (ESD) Awareness
- 10. TM 9999-15/2\_ Electro-static Discharge (ESD) Management

### SUPPORT REQUIREMENTS:

### EQUIPMENT: Support Equipment:

- 1. Applicable APS
- 2. AN/USM-674

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# APPENDIX A

## ACRONYMS AND ABBREVIATIONS

2M	
AAR BUI	
BUI	
C2	ntrol
CAMP	ogram
CBRN	clear
CBT	
CLS	
CMR	
COA	ction
COMSEC	urity
CONPLAN	
COP	
COR	
CPAC	
CPI	
CRP	
CSS	
CSSE	
CTE	
DL	
DOTMLPF doctrine, organization, training, mate	
leadership, personnel, and facil	ities
DPAS Defense Property Accountability S	ystem
DRRS	ystem
DWT	ssion
E3	
EDL	list
EKMS	vstem
ESD	
FLC	
FLIS	
FORCEPRO	
FSMAO	
G-BOSS	
GCSS-MC	ystem Gewog
HUMINT	
IA	rance
IOM	
IP	
IT	01
ITE	
IWGCP Infantry Weapons Gage Calibration Pr	-
LD	nsity
LOI	ction

LTI	
MAGTF	
MARES Marine Corps Automated Readiness Evaluation System	
MCESS Marine Corps Expeditionary Shelter System	
MCI	:
MCPP	;
MCSN	
MCT	
MCTL	
MET	
METL	
MI	
MIMMS Marine Corps Integrated Maintenance Management System	
MOJT	
MOE	
MOS	
MRR	
MSDS	
MSE	
NIIN	
NS-E	
NSN	
OPFAC	
OPFOR	
OPLAN	
ORM	
PBL	
PEB	
PLMS	
PQDR	
QCquality control	
Q/Q	
RCIED remote controlled improvised explosive device	
RIP	
SAT	
SATCOM	
SCS	ι
SICP	L
SIGINT	2
SME	
SOO	
SOP	
SOR	
SOW	
T&R	
5	
T/E	
TECHCON	
TEEP	
TI	
TMDE	
T/O	
T/O&E	
TOCNET	l
TRMG	

TRSS
UJTL
UNTL
UMMIPS
UTM

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### APPENDIX B

### TERMS AND DEFINITIONS

Terms in this glossary are subject to change as applicable orders and directives are revised. Terms established by Marine Corps orders or directives take precedence after definitions found in Joint Publication 1-02, DOD Dictionary of Military and Associated Terms.

Α

After Action Review (AAR). A professional discussion of training events conducted after all training to promote learning among training participants. The formality and scope increase with the command level and size of the training evolution. For longer exercises, they should be planned for at predetermined times during an exercise. The results of the AAR shall be recorded on an after action report and forwarded to higher headquarters. The commander and higher headquarters use the results of an AAR to reallocate resources, reprioritize their training plan, and plan for future training.

Artillery Electronics. Artillery electronics equipment covers a range of equipment peculiar to the artillery regiment, including artillery ground-based sensors, the meteorological measuring station, and artillery fire control electronic systems.

Assessment. An informal judgment of the unit's proficiency and resources made by a commander or trainer to gain insight into the unit's overall condition. It serves as the basis for the midrange plan. Commanders make frequent use of these determinations during the course of the combat readiness cycle in order to adjust, prioritize or modify training events and plans.

С

**Cables.** Cables include any types of wiring/cabling that transfer signals and/or electricity. These include assault cable, fiber optic (qv.) cable, etc. Field maintenance support for cables covers end-to-end, including the tips/connectors and any portion of the transmission line.

**Chaining.** A process that enables unit leaders to effectively identify subordinate collective events and individual events that support a specific collective event. For example, collective training events at the 4000-level are directly supported by collective events at the 3000-level. When a higher level event by its nature requires the completion of lower level events, they are "chained"; sustainment credit is given for all lower level events chained to a higher event.

**Collective (Training) Event.** A clearly defined, discrete, and measurable activity, action, or event (i.e., task) that requires organized team or unit performance and leads to accomplishment of a mission or function. A collective task is derived from unit missions or higher-level collective

tasks. Task accomplishment requires performance of procedures composed of supporting collective or individual tasks. A collective task describes the exact performance a group must perform in the field under actual operational conditions. The term "collective" does not necessarily imply that a unit accomplishes the event. A unit, such as a squad or platoon conducting an attack; may accomplish a collective event or, it may be accomplished by an individual to accomplish a unit mission, such as a battalion supply officer completing a reconciliation of the battalion's CMR. Thus, many collective events will have titles that are the same as individual events; however, the standard and condition will be different because the scope of the collective event is broader.

**Collective Training Standards (CTS).** Criteria that specify mission and functional area unit proficiency standards for combat, combat support, and combat service support units. They include tasks, conditions, standards, evaluator instruction, and key indicators. CTS are found within collective training events in T&R Manuals.

**Combat Readiness Cycle.** The combat readiness cycle depicts the relationships within the building block approach to training. The combat readiness cycle progresses from T&R manual individual core skills training, to the accomplishment of collective training events, and finally, to a unit's participation in a contingency or actual combat. The combat readiness cycle demonstrates the relationship of core capabilities to unit combat readiness. Individual core skills training and the training of collective events lead to unit proficiency and the ability to accomplish the unit's stated mission.

**Combat Readiness Percentage (CRP).** The CRP is a quantitative numerical value used in calculating collective training readiness based on the E-coded events that support the unit METL. CRP is a concise measure of unit training accomplishments. This numerical value is only a snapshot of training readiness at a specific time. As training is conducted, unit CRP will continuously change.

**Command and Control (C2) Electronics.** C2 electronics equipment includes a wide range of equipment types within the ground inventory that support C2. In many cases, such equipment overlaps with other equipment types such as telecommunications, IT, etc. C2 electronics equipment includes but is not limited to global positioning systems, situational awareness systems (e.g., Blue Force Tracker), common operational picture (COP) systems, operational facility (OPFAC) equipment, and other systems used in conducting C2 and not covered under the other equipment types listed in this manual.

**Communication(s) Security (COMSEC).** COMSEC equipment is associated with a variety of systems and maintainers support those COMSEC devices associated with the systems they support.

**Complex Circuit Cards.** Complex circuit cards require miniature/microminiature (2M) repair skills and include surface-mounted components and conductors, the internal conductors of multilayer boards, laminates, flexible flat conductors, and stranded wire.

**Condition.** The condition describes the training situation or environment under which the training event or task will take place. The condition

expands on the information in the title by identifying when, where and why the event or task will occur and what materials, personnel, equipment, environmental provisions, and safety constraints must be present to perform the event or task in a real-world environment. Commanders can modify the conditions of the event to best prepare their Marines to accomplish the assigned mission (e.g., in a desert environment; in a mountain environment; etc.).

**Core Competency.** Core competency is the comprehensive measure of a unit's ability to accomplish its assigned MET. It serves as the foundation of the T&R Program. Core competencies are those unit core capabilities and individual core skills that support the commander's METL and T/O mission statement. Individual competency is exhibited through demonstration of proficiency in specified core tasks and core plus tasks. Unit proficiency is measured through collective tasks.

**Core Capabilities.** Core capabilities are the essential functions a unit must be capable of performing during extended contingency/combat operations. Core unit capabilities are based upon mission essential tasks derived from operational plans; doctrine and established tactics; techniques and procedures.

**Core Plus Capabilities.** Core plus capabilities are advanced capabilities that are environment, mission, or theater specific. Core plus capabilities may entail high-risk, high-cost training for missions that are less likely to be assigned in combat.

**Core Plus Skills.** Core plus skills are those advanced skills that are environment, mission, rank, or billet specific. 2000-level training is designed to make Marines proficient in core skills in a specific billet or at a specified rank at the Combat Ready level. 3000-8000-level training produces combat leaders and fully qualified section members at the Combat Qualified level. Marines trained at the Combat Qualified level are those the commanding officer feels are capable of accomplishing unit-level missions and of directing the actions of subordinates. Many core plus tasks are learned via MOJT, while others form the base for curriculum in career level MOS courses taught by the formal school.

D

**Defense Readiness Reporting System (DRRS).** A comprehensive readiness reporting system that evaluates readiness on the basis of the actual missions and capabilities assigned to the forces. It is a capabilities-based, adaptive, near real-time reporting system for the entire Department of Defense.

**Deferred Event.** A T&R event that a commanding officer may postpone when in his or her judgment, a lack of logistic support, ammunition, ranges, or other training assets requires a temporary exemption. CRP cannot be accrued for deferred "E-Coded" events.

**Delinquent Event.** An event becomes delinquent when a unit exceeds the sustainment interval for that particular event. The individual or unit must

update the delinquent event by first performing all prerequisite events. When the unit commander deems that performing all prerequisite is unattainable, then the delinquent event will be re-demonstrated under the supervision of the appropriate evaluation authority.

Depot (Level) Maintenance. Depot level maintenance capabilities include major repairs, overhaul, or complete rebuild of equipment or materiel, components or sub-components, assemblies or sub-assemblies, software, or parts, to include manufacturing, conversion, reclamation, or fabrication of parts. The intent of this capability is to perform repairs on all supported items, equipment, or materiel of the supply chain through program/product support management efforts.

Depot maintenance actions apply to repairs which require extensive time, specialized tools, equipment, facilities and/or skills competency, and are less expeditionary in nature. These repairs may include conducting required modifications, testing, calibrating, reclamation, and conversion to sustain an item, equipment, or materiel throughout its lifecycle, or to extend service-life through established maintenance-related programs.

Refer to MCO 4790.23\_ Ground Equipment Maintenance Program.

**Digital Wideband Transmission (DWT).** DWT system equipment includes nonsatellite line of sight (LOS) obstacle gain defraction and tropospheric scatter systems and similar equipment.

Е

**E-Coded Event.** An "E-Coded" event is a collective T&R event that is a noted indicator of capability or, a noted Collective skill that contributes to the unit's ability to perform the supported MET. Only "E-Coded" events are assigned a CRP value and used to calculate a unit's CRP.

**Evaluation.** Evaluation is a continuous process that occurs at all echelons during every phase of training and can be both formal and informal. Evaluations ensure that Marines and units are capable of conducting their combat mission. Evaluation results are used to reallocate resources, reprioritize the training plan, and plan for future training.

**Event (Training).** 1) An event is a significant training occurrence that is identified, expanded and used as a building block and potential milestone for a unit's training. An event may include formal evaluations. 2) An event within the T&R Program can be an individual training evolution, a collective training evolution or both. Through T&R events, the unit commander ensures that individual Marines and the unit progress from a combat capable status to a Fully Combat Qualified (FCQ) status.

**Event Component**. The major procedures (i.e., actions) that must occur to perform a collective event to standard.

**Exercise Commander (EC).** The MAGTF commander or his appointee will fill this role, unless authority is delegated to the respective commander of the CE, GCE, ACE, or LCE. Responsibilities and functions of the EC include: 1) designate unit(s) to be evaluated, 2) may designate an exercise director,

3) prescribe exercise objectives and T&R events to be evaluated, 4) coordinate with commands or agencies external to the Marine Corps and adjacent Marine Corps commands, when required.

Exercise Director (ED). Designated by the EC to prepare, conduct, and report all evaluation results. Responsibilities and functions of the ED include: 1) Publish a letter of instruction (LOI) that: delineates the T&R events to be evaluated, establishes timeframe of the exercise, lists responsibilities of various elements participating in the exercise, establishes safety requirements/guidelines, and lists coordinating instructions. 2) Designate the TEC and TECG to operate as the central control agency for the exercise. 3) Assign evaluators, to include the senior evaluator, and ensure that those evaluators are properly trained. 4) Develop the general exercise scenario taking into account any objectives/events prescribed by the EC. 5) Arrange for all resources to include: training areas, airspace, aggressor forces, and other required support.

 $\mathbf{F}$ 

Fiber Optic Cable/Line Equipment. Referred to in industry as "optical fiber," fiber optic cable/line equipment is a flexible, transparent fiber made of glass (silica) or plastic, slightly thicker than a human hair. It functions as a waveguide, or "light pipe", to transmit light between the two ends of the fiber. Fiber optic cable/line equipment is a subset of cables (qv.), called out separately due to a requirement for special knowledge and skills, as well as a requirement for entry level training.

Field (Level) Maintenance. Field [level] maintenance is any maintenance that does not require depot [level] maintenance capability and is performed by crew/operators and mechanics/technicians within Marine Corps organizations and activities, and/or by approved commercial/contract sources.

Maintenance tasks performed within the field LOM are categorized as organizational or intermediate. Alignment of tasks within the field LOM is based on supporting/supported relationships and respective capabilities among units. A unit may perform any field maintenance tasks for which it is manned, trained, and equipped. Units are not authorized to conduct maintenance outside of their assigned capabilities.

Per MCWP 3-40.1 with Change 1, Marine Air-Ground Task Force (MAGTF) Command and Control, supporting/supported relationships may be standing/long-term and defined in unit mission statements and supported with capabilities established in T/OE, or assigned for specific operations and supported with task-organized capabilities. Supporting/supported relationships will be planned and executed to align and manage the respective maintenance capabilities among supporting and supported units as effectively as possible within constraints. Flexibility in alignment of maintenance tasks within the supporting/supported relationship framework is required to enable commanders to best align maintenance requirements to capabilities. Supporting commanders may perform maintenance tasks that are within supported units' capabilities, including, but not limited to, overflow maintenance and organizational tasks that must be completed in order for intermediate tasks to be performed on equipment evacuated to supporting units. Supporting and supported unit commanders will coordinate closely to ensure the most effective use of maintenance resources within their respective capabilities, and will incorporate local standard operating procedures to ensure the same.

Refer to MCO 4790.23\_ Ground Equipment Maintenance Program.

For the purpose of this T&R manual, field level maintenance refers to maintenance in the intermediate category, codes "F" and "H," as covered in MSGID R 262106Z MAR 13.

Force Protection (FORCEPRO) Electronics. Force protection electronics equipment includes the electronic components of modular, scalable force protection and physical security systems including RCIED jamming devices, interior security equipment (e.g., G-BOSS), tactical security systems and interior/exterior robotics, and similar equipment.

G

**Ground Common.** Ground common equipment is found in large quantities and/or in a large number of units within the MAGTF.

**Ground Radio.** Ground radio equipment operates in the 10 kilohertz to 3,000,000 megahertz range and includes handheld, manpack, man-portable, transportable, vehicle-mounted, and fixed-site equipment. Ground radio equipment also includes antennas and remoting units.

**Ground Sensor System.** Ground sensor system equipment provides all-weather remote monitoring of activity within and near a given objective area. An example of ground sensor system equipment is the Tactical Remote Sensor System (TRSS).

**Ground Vehicle Intercommunication.** Ground vehicle intercommunication equipment is a two-way intercommunication system for localized use within crew-served vehicles. Functions may include remote selection of frequencies, selection of operational mode and/or available equipment, etc. Examples of ground vehicle intercommunication equipment include the AN/VIC-2(v) and TOCNET.

Ι

**Information Technology (IT).** Information technology equipment includes computers, routers, printers, plotters, data switching equipment, IP accelerators, and associated equipment used in a variety of platforms.

Inspection and Classification. Inspection and classification are the first and last tasks that a user and maintenance activity perform on equipment. Inspection is the checking or testing of an item against established standards. The inspection process determines maintenance requirements and satisfactory maintenance performance. It determines if something is wrong with the equipment. Classification is the assignment of an item to a maintenance category based on established procedures. The assigned classification determines who repairs the item and where the repairs are made. Inspection and classification include limited technical inspections (LTI), quality control (QC) inspections, acceptance inspections, etc. Inspection and classification is a sub-function of maintenance at the tactical level of logistics.

Installation, Operation, and Maintenance (IOM). The operational tasks associated with using equipment. These tasks are performed by the equipment operators, with the maintainers providing technical assistance. Installation refers to the emplacement, configuration, and initialization of equipment for use. Operation refers to the sustained actions of using the equipment. Maintenance refers to the crew/operator tasks associated with restoring equipment to operation.

For the purpose of this T&R manual, crew/operator maintenance, part of the Field level, is covered under IOM events and is not included in Field level maintenance events.

Intelligence-Based Systems. Intelligence-based systems equipment includes the electronics components/items of signals intelligence (SIGINT) equipment (electronic attack and collections equipment) and human intelligence (HUMINT) equipment not associated with force protection (FORCEPRO).

Intermediate (Maintenance Category). Intermediate maintenance is performed by designated activities in direct or general support of using organizations. It includes calibration and repair/replacement of damaged or unserviceable parts, and provides technical assistance, support through a secondary reparable float, and/or contact team support to using organizations. Intermediate maintenance normally includes third and fourth echelon maintenance and in instances when supporting overflow organizational requirements, may include second echelon as well. Refer to MCO 4790.23\_Ground Equipment Maintenance Program.

г

Laboratory Standards. Laboratory standards are equipment utilized to take quantitative/qualitative (Q/Q) measurements as a source of accurately known stimuli (signals), or as a decision to accept, reject, adjust, repair, or to replace TMDE being tested or measured.

Low Density (LD). Low density equipment is found in small quantities and/or in a small number of units within the MAGTF.

М

Maintenance. Maintenance involves those actions taken to keep materiel in serviceable condition (preventive maintenance) and actions required to return materiel to serviceable condition (corrective maintenance). Maintenance tasks are grouped by levels of support that determine assignment of maintenance responsibilities.

In the context of this T&R manual, "maintenance" generally refers to the organizational and intermediate maintenance tasks performed by specially trained personnel. Exceptions to this include maintenance tasks associated with organic equipment (crew/operator tasks), technical assistance provided to equipment operators during the IOM of equipment (crew/operator tasks), crew/operator tasks performed by TECHCON personnel on TECHCON equipment, and

network maintenance tasks performed by TECHCON personnel. Maintenance is a function of the tactical level of logistics (refer to MCWP 4-11.4 Maintenance Operations).

Maintenance Administration Section. A maintenance administration (or administrative) section performs functions associated with equipment receipt and transfer, technical data research, tool issue, shop property control, and the recording and reporting of completed maintenance actions within the shop. In large maintenance shops, there may be several personnel in each element of the section. In small shops, one individual may perform all of these functions. Administrative sections are known by many names including Organics, Shop Support, Shipping & Receiving, etc. Refer to MCO P4790.2\_ MIMMS Field Procedures Manual.

Maintenance Categories. The Department of Defense (DOD) identifies two levels of maintenance - field and depot. The field level is further divided into the "organizational" and "intermediate" maintenance categories. Refer to MCO 4790.23\_ Ground Equipment Maintenance Program.

Maintenance Section. The actual performance of maintenance in a maintenance shop is accomplished by the maintenance sections. These sections may be organized in a number of different ways, including function (e.g., PMCS, CM, modification), equipment (e.g., heavy, single sideband, electro-optics), or by commodity (e.g., engineer, ground ordnance, ground electronics, motor transport). Refer to MCO P4790.2\_ MIMMS Field Procedures Manual.

The maintenance section level events in this T&R manual are constructed around a maintenance section focusing on providing field level maintenance support for specific equipment types of electronics equipment (e.g., a Radio Repair Section performing maintenance on ground radio equipment, vehicle intercommunications equipment, and mechanized vehicle electronics.

Maintenance Shop. A maintenance shop is a maintenance activity providing direct or general support field level maintenance for one or more commodities and one or more equipment types within the supported commodities. The basic functions and tasks of a maintenance shop are the same, regardless of the shop size or type of maintenance performed. A maintenance shop's organization will vary. In general, it will consist of a shop office/ operations section, a maintenance administrative section, a services section, and one or more maintenance sections. Refer to MCWP 4-11.4 Maintenance Operations and MCO P4790.2\_ MIMMS Field Procedures Manual.

The maintenance shop level events in this T&R manual are constructed around a shop focusing on providing field level maintenance support for ground electronics equipment, though they are easily adapted for a maintenance shop supporting other commodities or multiple commodities.

Marine Corps Ground Training and Readiness (T&R) Program. The T&R Program is the Marine Corps' primary tool for planning and conducting training, for planning and conducting training evaluation, and for assessing training readiness. The program will provide the commander with standardized programs of instruction for units within the ground combat, combat support, and combat service support communities. It consolidates the ITS, CTS, METL and other individual and unit training management tools. T&R is a program of standards

that systematizes commonly accepted skills, is open to innovative change, and above all, tailors the training effort to the unit's mission. Further, T&R serves as a training guide and provides commanders an immediate assessment of unit combat readiness by assigning a CRP to key training events. In short, the T&R Program is a building block approach to training that maximizes flexibility and produces the best-trained Marines possible.

Mechanized Vehicle Electronics. Mechanized vehicle communication electronics are comprised of a cadre of C2 systems which intersect all battlefield functions. Communication electronic maintenance responsibilities include items identified as communication assets, ancillary items, and specific wiring to ensure function of said equipment. Examples included but are not limited to intercom systems such as TOCNET or VIC-3, wiring and cabling, mounting apparatuses and antennas that are specifically used for C2 systems.

**Mission Essential Task(s) MET(s).** A MET is a collective task in which an organization must be proficient in order to accomplish an appropriate portion of its wartime mission(s). MET listings are the foundation for the T&R manual; all events in the T&R manual support a MET.

Mission Essential Task List (METL). Descriptive training document that provides units a clear, war fighting focused description of collective actions necessary to achieve wartime mission proficiency. The service-level METL, that which is used as the foundation of the T&R manual, is developed using Marine Corps doctrine, operational plans, T/Os, UJTL, UNTL, and MCTL. For community based T&R manuals, an occupational field METL is developed to focus the community's collective training standards. Commanders develop their unit METL from the service-level METL, operational plans, contingency plans, and SOPs.

**Modification.** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modification's purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). For the purpose of this T&R manual, modification also refers to software/firmware upgrades. Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

Ν

Non-Standard Equipment (NS-E). Non-standard equipment items are defined as those items that are not properly catalogued with national stock numbers (NSN)/Marine Corps Stock Numbers (MCSN) and critical asset data registered in the Federal Logistics Information System (FLIS) that can not be accounted for within GCSS-MC, SCS, or DPAS. Marines in the 2800 Ground Electronics Maintenance occupational field are able to provide maintenance support for the electronics components of NS-E.

0

**Operational Readiness (OR)(DOD, NATO).** OR is the capability of a unit/ formation, ship, weapon system, or equipment to perform the missions or

functions for which it is organized or designed. It may be used in a general sense or to express a level or degree of readiness.

**Organizational (Maintenance Category).** That maintenance production, scheduled or unscheduled, which is the responsibility of and performed by the using unit on its assigned equipment. Refer to MCO 4790.23\_ Ground Equipment Maintenance Program.

Ρ

**Power Supply.** Power supply equipment supplies electric power to an electrical load and most commonly applies to converters, but also includes inverters, adapters, amplifiers, as well as "green" electric power converters such as solar panels. Power supply equipment may be a standalone device such as the PP-8436/P or it might be a component of an end item such as a computer power supply. Power supply equipment does not include power generation equipment (which is supported by the Utilities occupational field).

**Prerequisite Event**. Prerequisites are the academic training and/or T&R events that must be completed prior to attempting the event.

R

**Readiness (DOD)**. Readiness is the ability of U.S. military forces to fight and meet the demands of the national military strategy. Readiness is the synthesis of two distinct but interrelated levels: a) Unit readiness – the ability to provide capabilities required by combatant commanders to execute assigned missions. This is derived from the ability of each unit to deliver the outputs for which it was designed. b) Joint readiness – the combatant commander's ability to integrate and synchronize ready combat and support forces to execute assigned missions.

**Rebuilding and Overhauling.** Rebuilding restores items to like new condition. The rebuilt item's appearance, performance, and capabilities are the same as originally manufactured. Overhauling restores items to a serviceable condition under maintenance serviceability standards. Rebuilding is a depot maintenance function. Depending on the item, overhauling may be either a depot or intermediate maintenance function. Rebuilding and overhauling is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**Reclamation.** Reclamation is action taken to restore condemned, scrapped, abandoned, or damaged materiel, parts, and components. Reclamation actions include repair, refabrication, or renovation. Reclamation is a depot function. Reclamation is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**Recovery and Evacuation.** Recovery is the process of retrieving or freeing immobile, inoperative, or abandoned materiel. It includes returning it to operation or taking it to a collection point for repair, evacuation, or disposal. Recovery is the responsibility of the owning unit. Evacuation moves materiel from one combat service support (CSS) maintenance activity to another for repair or disposal. It includes moving equipment between the owning unit's maintenance site and the supporting combat service support

element (CSSE). Evacuation is the responsibility of the combat service support element. Recovery and evacuation is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**Repair.** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**Requirement.** When used as an element of a T&R event condition and standard, a "requirement" covers a range of items. These generally refer to a requirement provided by some higher and/or external authority such as a commanding officer or supported unit, and include things such as maintenance requests, missions, fragmentary orders, warning orders, operations orders, etc. When used in this manner, the requirement establishes the parameters for successful performance, including accuracy, completeness, sequence, timeliness, etc.

When used as an element of a performance step, a "requirement" refers to the desired outcome and the resources required to accomplish the assigned task. Resources include things such as personnel, skill sets, facilities, TMDE, tools, MHE, supply parts, scheduling of support, etc.

ន

Satellite Communications (SATCOM). SATCOM equipment includes C, X, Ka, Ku, and L-band systems and associated antennas/dishes. Low density SATCOM equipment is found in small quantities and/or in a small number of units within the MAGTF. Examples of low density SATCOM equipment include the AN/TSC-85C(V)1, AN/TSC-154, and AN/TSQ-226(V)1. Ground common SATCOM equipment is found in large quantities and/or in a large number of units within the MAGTF. An example of ground common SATCOM equipment is VSAT.

**Section Skill Tasks.** Section skills are those competencies directly related to unit functioning. They are group, rather than individual, in nature, and require participation by a section (S-1, S-2, S-3, etc).

Services Section. A services section performs functions in support of equipment maintenance; for example, welding, battery shop, inspection, and quality control. In small shops or shops not requiring all of these services, the functions of the services section may be performed by one individual or assigned to other sections. The inspection and quality control functions are required in all shops. This function may be performed by one individual, several individuals, or a team. Refer to MCO P4790.2\_ MIMMS Field Procedures Manual.

Servicing, Adjustment, and Tuning. Servicing, adjustment, and tuning tasks do not have precise definitions. Servicing may include all repairs or maintenance, including adjustment and tuning. Tuning is a process of adjusting equipment to achieve precise functioning. For example, tuning often refers to engine adjustments; however engines are not the only components that need adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

Shop Office/Operations Section. A shop office/operations section manages the overall conduct of maintenance within the shop. This includes assigning personnel within the shop; scheduling maintenance and the orderly flow of equipment requiring maintenance through the shop; ensuring the economic use of maintenance resources, including the proper use of maintenance floats; ensuring that maintenance operations interface with maintenance-related programs; establishing and executing the shop safety program; supervising maintenance training within the shop; and ensuring that proper transactions are submitted. Refer to MCO P4790.2\_ MIMMS Field Procedures Manual.

Simulation Training. Simulators provide the additional capability to develop and hone core and core plus skills. The development of simulator training events for appropriate T&R syllabi can help maintain valuable combat resources while reducing training time and cost. In cases where simulator fidelity and capabilities are such that simulator training closely matches that of actual training events, T&R Manual developers may include the option of using simulators to accomplish the training. CRP credit will be earned for E-Coded simulator events based on assessment of relative training event performance.

**Standard.** A standard is a statement that establishes criteria for how well a task or learning objective must be performed. The standard specifies how well, completely, or accurately a process must be performed or product produced. For higher-level collective events, it describes why the event is being done and the desired end-state of the event. Standards become more specific for lower-level events and outline the accuracy, time limits, sequencing, quality, product, process, restrictions, etc., that indicate the minimum acceptable level of performance required of the event. At a minimum, both collective and individual training standards consist of a task, the condition under which the task is to be performed, and the evaluation criteria that will be used to verify that the task has been performed to a satisfactory level.

Sustainment Training. Periodic retraining or demonstration of an event required maintaining the minimum acceptable level of proficiency or capability required to accomplish a training objective. Sustainment training goes beyond the entry-level and is designed to maintain or further develop proficiency in a given set of skills.

Systems Approach to Training (SAT). An orderly process for analyzing, designing, developing, implementing, and evaluating a unit's training program to ensure the unit, and the Marines of that unit acquire the knowledge and skills essential for the successful conduct of the unit's wartime missions.

т

**Tactical Exercise Control Group (TECG).** A TECG is formed to provide subject matter experts in the functional areas being evaluated. The benefit of establishing a permanent TECG is to have resident, dedicated evaluation

authority experience, and knowledgeable in evaluation technique. The responsibilities and functions of the TECG include: 1) developing a detailed exercise scenario to include the objectives and events prescribed by the EC/ED in the exercise LOI; 2) conducting detailed evaluator training prior to the exercise; 3) coordinating and controlling role players and aggressors; 4) compiling the evaluation data submitted by the evaluators and submitting required results to the ED; 5) preparing and conducting a detailed exercise debrief for the evaluated unit(s).

**Technical Control.** Technical control equipment ensures fast, reliable, and secure exchange of information; typically includes distribution frames and associated panels, jacks, and switches for monitoring, test, conditioning, and orderwire equipment; and allows telecommunications systems control personnel to exercise operational control of communications paths and facilities, make quality analyses of communications and communications channels, monitor operations and maintenance functions, recognize and correct deteriorating conditions, restore disrupted communications, provide requested on-call circuits, and take or direct such actions as may be required to provide effective telecommunications services.

Technical Exercise Controller (TEC). The TEC is appointed by the ED, and usually comes from his staff or a subordinate command. The TEC is the senior evaluator within the TECG and should be of equal or higher grade than the commander(s) of the unit(s) being evaluated. The TEC is responsible for ensuring that the evaluation is conducted following the instructions contained in this order and MCO 1553.3A. Specific T&R manuals are used as the source for evaluation criteria.

**Telecommunications.** Telecommunications equipment includes voice gateway routers, voice switching equipment, telephones, call managers, session boundary controllers, etc.

Test, Measurement, and Diagnostic Equipment (TMDE). TMDE is equipment used to take quantitative/qualitative (Q/Q) measurements as a source of accurately known stimuli (signals), or as a decision to accept, reject, adjust, repair, or to replace a device, system module, or component being tested or measured. Supported TMDE is listed in TM-10510-OD/1\_.

**Testing and Calibration.** Testing and calibration are terms that apply to the maintenance of precision instruments. These instruments may be components of larger items, or they may be maintenance test equipment. Testing compares the accuracy of the instrument to an established standard. Calibration is the adjustment of precision instruments that have deviated from their standards. Testing and calibration is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

For the purpose of this T&R manual "calibration" refers to a set of operations, performed in accordance with a definite documented procedure that compares the measurements performed by an instrument to those made by a more accurate instrument or standard, for the purpose of detecting and reporting, or eliminating by adjustment, errors in the instrument tested. Refer to *Calibration: Philosophy in Practice. (2nd edition, pp. G-4). Glossary. Everett, Wash.: Fluke Corporation.* 

**Training Plan.** Training document that outlines the general plan for the conduct of individual and collective training in an organization for specified periods of time.

**Training Task**. This describes a direct training activity that pertains to an individual Marine. A task is composed of 3 major components: a description of what is to be done, a condition, and a standard.

υ

Unit CRP. Unit CRP is a percentage of the E-Coded collective events that support the unit METL accomplished by the unit. Unit CRP is the average of all MET CRP.

Unit Evaluation. All units in the Marine Corps must be evaluated, either formally or informally, to ensure they are capable of conducting their combat mission. Informal evaluations should take place during all training events. The timing of formal evaluations is critical and should, when appropriate, be directly related to the units' operational deployment cycle. Formal evaluations should take place after the unit has been staffed with the majority of its personnel, has had sufficient time to train to individual and collective standards, and early enough in the training cycle so there is sufficient time to correctly identified weaknesses prior to deployment. All combat units and units' task organized for combat require formal evaluations prior to operational deployments.

Unit Training Management (UTM). Unit training management is the use of the SAT and Marine Corps training principles in a manner that maximizes training results and focuses the training priorities of the unit on its wartime mission. UTM governs the major peacetime training activity of the Marine Corps and applies to all echelons of the Total Force.

**Unmanned Systems.** Unmanned systems include a broad range of remotely operating systems such as robots, unmanned aerial vehicles (UAV), etc. Unmanned systems support is limited to the electronics components and the chassis, and does not include optics and components supported by other occupational fields.

W

Waived Event. An event that is waived by a commanding officer when in his or her judgment, previous experience or related performance satisfies the requirement of a particular event.

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APPENDIX C

REFERENCES

# Department of Defense Publications

DISA Circulars/Publications		
DoDD 8500.1	Information Assurance (IA)	
DoDD 8570.01M	Information Assurance Workforce Improvement Program	
	Incorporating Change 2	
DOD-HDBK-263B	Electrostatic Discharge Control Handbook for	
	Protection of Electrical and Electronic Parts,	
	Assemblies and Equipment	
DoDI 4151.18	Maintenance of Military Material	
DoDI 8523.01	Communication Security	
DOD-STD-1686	Electrostatic Discharge Control	

## Joint Publications

CJCSI 3170.01_	Joint Capabilities Integration and Development System (JCIDS)
CJCSM 6231 (Series) JCIDS	Manual for Employing Joint Tactical Communications Manual for the Operation of the Joint Capabilities Integration and Development System

## Secretary of the Navy Publications

SECNAVINST 5510.30\_ Information and Personnel Security Program SECNAVINST 5510.36\_ Dept of the Navy Information and Personnel Security Program Regulations

# Marine Corps Doctrinal Publications (MCDP)

Short Title Long title

# Marine Corps Warfighting Publications (MCWP)

MCWP	3-40.3	MAGTF Communications System
MCWP	4-1	Logistics Operations
MCWP	4-11	Tactical-Level Logistics
MCWP	4-11.4	Maintenance Operations
MCWP	5-1	Marine Corps Planning Process (MCPP)

# Marine Corps Reference Publications (MCRP)

MCRP	3-0A	Unit Training Management Guide
MCRP	3-0B	How to Conduct Training
MCRP	4-11.3G	Unit Embarkation Handbook

# Marine Corps Orders (MCO)

MCO	1200.17_	Military Occupational Specialty Manual (MOS Manual)
MCO	1553.1_	The Marine Corps Training and Education System
MCO	1553.3_	Unit Training Management (UTM) Program
MCO	1560.25_	Marine Corps Lifelong Learning Program
MCO	2281.1_	Electronic Key Management System (EKMS) Policy
MCO	2410.2_	Electromagnetic Environmental Effects (E3) Control

		Program
MCO	3000.11_	Ground Equipment Condition and Supply Materiel
		Readiness Reporting (MRR) Policy
MCO	3000.18_	Marine Corps Force Deployment Planning and Execution
		(FDP&E) Manual
MCO	3500.27_	Operational Risk Management (ORM)
MCO	3504.1_	Marine Corps Lessons Learned Program (MCCLP) and the
	—	Marine Corps Center for Lessons Learned (MCCLL)
MCO	3900.15_	Marine Corps Expeditionary Force Development System
	—	(EFDS)
MCO	4000.51_	Automatic Identification Technology (AIT)
	4000.57_	Marine Corps Total Life Cycle Management (TLCM) of
	—	Ground Weapons Equipment and Material
MCO	4000.58_	Marine Corps Logistics Command
	4081.2_	Marine Corps Performance Based Logistics (PBL)
	4105.2_	Marine Corps Warranty Program
	4200.33_	Contractor Logistics Support (CLS) for Ground
		Equipment, Weapon Systems, Munitions, and Information
		Systems
MCO	4400.113_	Defense Logistics Agency Maintenance Instructions or
		Technical Maintenance Standards
MCO	4400.16_	Uniform Material Movement and Issue Priority System
		(UMMIPS)
MCO	4631.10	Operational Support Airlift Management
	4733.1	Marine Corps Test, Measurement, and Diagnostic
		Equipment (TMDE) Calibration and Maintenance Program
		(CAMP)
MCO	4790.18_	Corrosion Prevention and Control (CPAC) Program
	4790.8	Repair of Micro-Miniature Electronic Circuits -
		(obsolete MCO or incorrect Pub ID)
MCO	4855.10_	Product Quality Deficiency Report (PQDR)
	5040.6_	Marine Corps Readiness Inspections and Assessments
		Marine Corps Directives Management Program
	5215.16_	Interservicing of Technical Manuals and Related
		Technology
MCO	5311.1	Total Force Structure Process (TFSP)
	P3500.72_	Marine Corps Ground Training and Readiness (T&R)
	_	Program
MCO	P4030.19_	Preparing Hazardous Materials for Military Air
		Shipments
MCO	P4400.150_	Consumer Level Supply Policy Manual
	P4400.151_	Intermediate-Level Supply Management Policy Manual
	P4400.160_	Field Supply and Maintenance Analysis Office Program
		(FSMAO)
MCO	P4400.82_	Regulated/Controlled Item Management Manual
	P4790.1_	Marine Corps Integrated Maintenance Management System
'	—	(MIMMS) Introduction Manual
MCO	P4790.2_	MIMMS Field Procedures Manual
	P5090.2_	Environmental Compliance and Protection Manual
	P5215.17	The Marine Corps Technical Publications System
	P7100.8_	Field Budget Guidance Manual
	_	-

# Navy and Marine Corps Directives (NAVMC)

NAVMC 1553.1\_ Systems Approach to Training (SAT) Users Guide

NAVMC 2761 NAVMC 3500.6_	Catalog of Publications Ground Electronics Maintenance Training and Readiness
	Manual
Technical Publications	
Applicable technical re	ferences*
TI 10793-ID_	AN/USM-674 Test Station Gold Disk and Silver Disk
11 10,755 10_	Miniature/Microminiature (2M)/Module Test and Repair
	Program
TI 4400-15/1_	Packaging, Handling, Storage, and Transportation of
—	Electrostatic Discharge Sensitive Items
TI 4733 Series	Calibration and TMDE Requirements and Programs
TI 4733-15/13	Metrology Requirements List (METRL)
TI 4733-15/6_	Test Measurement and Diagnostic Equipment (TMDE)
	Calibration and Maintenance Support
TI 4733-15/7_	Procedural Publication Index for Marine Corps Test,
	Measurement, and Diagnostic Equipment Calibration and
	Maintenance Program
TI 4733-15/9_	Radiac Instrument Calibration Requirements
TI 4733-35/24_	United States Marine Corps Metrology Calibration
_	Quality Assurance Program
TI 4733-35/5_	Calibration Equipment Recommendations for the Marine
	Corps Calibration Program
TI 4733-ID/8_	Marine Corps Transfer Standards Program
TI 4733-OD/1_	Calibration Requirements Marine Corps Test,
	Measurement and Diagnostic Equipment Calibration and
	Maintenance Program
TI 4733-OD/10_	Special Calibration of Torque Tools
TI 4733-OD/11_	Infantry Weapons Gage Calibration Program (IWGCP)
TI 4733-OD/21_	Survey Instrument Calibration Program (SICP)
TI 5820-25/22_	Electromagnetic Environmental Effects (E3) Procedures
	for Installation of Communication Equipment on Marine
	Corps Platforms
TI-4733-35/23_	Navy and Marine Corps Calibration Laboratory Audit/
	Certification Manual
TM 09810A-50/5_	MTR Gold Disk Test Routine Development Requirements
_	Manual
TM 10209-10/1_	Use and Care of Hand Tools and Measuring Tools
TM 10510-OD/1	General Purpose Test Measurement and Diagnostic
_	Equipment (TMDE) Listing (Including Ancillary Support
	Items & Tool Kits)
TM 10664A-CD	Operator and Organizational Maintenance of Digital
	Technical Control Facility
TM 10793A-OD/1_	Module Test & Repair Tracking System (Marines) User's
	Guide
TM 10812A-10/2	User's Manual for OneTouch Series II Network
	Assistant
TM 10986B-01/1	Getting Started Guide for OptiView Series II
111 109000 01/1	Integrated Network Analyzer
TM 10986B-01/2	Help Guide for OptiView Series II Integrated Network
	Analyzer
TM 11366A-OD/1	Getting Started Guide for Network Analyzer (MODEL ES-
++00011 0D/+	700)
TM 2000-OD/2_	Principal Technical Characteristics of U.S. Marine

TM 4700-15/1_ TM 4795-34/2_	Corps Communication-Electronics Equipment Ground Equipment Record Procedures Corrosion Prevention and Control, Rustproofing and Underbody Coating Procedures for Tactical Vehicles,	
TM 4795-OR/1_	Trailers, and Engineering Equipment Organizational Corrosion Prevention and Control	
TM 5411-14&P/2	Procedures for USMC Ground Combat Equipment Marine Corps Expeditionary Shelter System (MCESS) (Small Shelter Family) 10-Foot Rigid General Purpose Shelter Operation and Maintenance Instructions with	
TM 5411-14/1_	Repair Parts List Marine Corps Expeditionary Shelter System (MCESS) (Small Shelter Family) Operation and Maintenance Instructions	
TM 5895-45/1_	Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair Organizational/Intermediate/Depot Level	
TM 9406-15_	Grounding Procedures for Electromagnetic Interference Control and Safety	
TM 9999-15/1_ TM 9999-15/2_	Electro-Static Discharge (ESD) Awareness Electro-static Discharge (ESD) Management	
User's Manuals		
ST-90	Shortrak 90 User's Manual	
UM 4400-123	FMF SASSY Management Unit Procedures	
UM 4400-124	SASSY Using Unit Procedures	
UM 4400-125	FMF SASSY Accounting Manual (VOL IV) Maintenance	
	Float Procedures	
UM 4400-60	Materiel Returns Program	
UM 4790-5	MIMMS AIS, Field Maintenance Procedures	
UM PLMS	User's Manual, Publication Library Management System	
Miscellaneous		
CAL and LUBF	Consolidated Account Listing and Loaded Unit Balance File	
CMR	Consolidated Memorandum Receipt	
CNSS 4000	Communication Security (COMSEC) Maintenance and Maintenance Training	
Contracted Logistics Support (CLS) Statement of Requirements/Objectives/ Work (SOR/SOO/SOW)		
Contracting Officer's R	epresentative (COR) Duties & Responsibilities Guidebook(s)	
Cut Sheets	Programming Cut Sheets	
DLA Customer Assistance	Handbook	
EKMS-1 (series)	EKMS Policy and Procedures for Navy EKMS Tiers 2 & 3	
EKMS-5A	Cryptographic Equipment Information/Guidance Manual	
FEDLOG	Federal Logistic Data	
FM 11-55	Mobile Subscriber Equipment (MSE) Operations	
FM 24-16	Communication-Electronic Operations Orders, Records and Reports	
FMFRP 4-14	Field Grounding Procedures for Computers and Generators	
Maintenance Float Catal		
MALINCE FIGAL CALAIN	Unit Mechanized Allowance List (MAL)	

MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment MCBUL 5600 Marine Corps Doctrinal Publication Status MCCLL Marine Corps Center for Lessons Learned web site http://www.mccll.usmc.mil MIL-STD-1686B Electro-Static Discharge Control Program for Protection of Electrical and Electronic Parts Military Standard for Grounding MIL-STD-188-124A MMSOP Maintenance Management Standing Operating Procedures MOS Roadmap Military Occupational Specialty (MOS) Roadmaps MPS Load Plan MSGID 141844Z Aug 12 (NS-E) Navy Electricity and Electronics Training Series N6283300014 (NEETS) NAVAIR 17-35 FR-06 Facility Requirements NAVSEA ST900-HN-GPT-020 Technical Reference and Operation Manual for PROTRACK I Model 20A/PROTRACK Scanner I NSTISSI 4000 COMSEC Maintenance and Maintenance Training Policy (NSA) Operations Order Annex K Communications Security (COMSEC) Maintenance and OPNAVINST 2221.3\_ Maintenance Training Operational Order 0p0rd PLMS V3 UG Publication Library Management System Version 3 Users Guide POM Program Objective Memorandum (POM) SAT Manual Systems Approach to Training Manual SDS Safety Data Sheets Index of Authorized Publications in Stock SL 1-2/3 T/O&ETable of Organization and Equipment TECOMO 1500.1 Military Occupational Specialty Roadmaps TEED Training, Exercise and Evaluation Plan Unit SOP Unit's Standing Operating Procedures Unit Training Plan Web Tools Web Based Maintenance Management Applications

\* "applicable technical references" refers to any technical references that pertain to the equipment under maintenance, the equipment used to perform maintenance actions, and the techniques and procedures utilized in the performance of maintenance actions. Implicit in this is the requirement for maintainers to identify the references required to perform the maintenance actions.

## 2800 T&R MANUAL

## APPENDIX D

### MAINTENANCE SHOP ORGANIZATION

Maintenance shop organization is covered in MCWP 4-11.4 Maintenance Operations Chapter 4 Maintenance Organizations and MCO P4790.2\_ MIMMS Field Procedures Manual Appendix E Shop Administration Procedures.

A unit's organization for maintenance is dependent on the unit's T/O. The T/O provides the resources and the structure; however, the actual arrangement of personnel, equipment, and other resources is dependent upon the mission, situation, facilities, terrain, and other circumstances. The alternative organizations are central shop, contact teams, task organizations, or a mixture of these. This manual uses the central shop as the structure for the T&R events.

A central shop maintenance shop organization will vary. In general, it will consist of a shop office/operations section, administrative section, services section, and a number of maintenance sections. An issue point is often included in a central shop. A basic central shop is depicted in figure D-1.

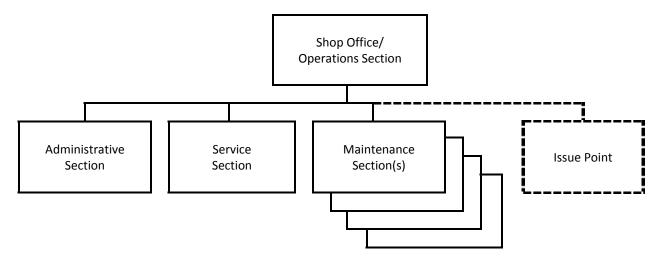


Figure D-1

Some of the sections may be consolidated and/or performed functionally rather than as discrete organizational elements. For example, quality control, a function of the services section, may be performed within maintenance sections.

A maintenance shop may range in size from a few Marines (e.g., the Electronics Maintenance Section within a Marine Wing Support Squadron) up to a battalion (e.g., Maintenance Battalion).

## Shop Office/Operations Section

A shop office manages the overall conduct of maintenance within the shop. This includes, but is not limited to:

- recommending personnel assignment
- scheduling maintenance
- ensuring that maintenance operations interface with maintenance-related programs
- ensuring the economic use of maintenance resources
- supervising maintenance training within the shop
- ensuring that proper transactions are submitted into the maintenance automated information system for maintenance actions completed and changes in work order status

A shop office/operations section will include a maintenance chief and, if large enough, a maintenance officer. Additional Marines may be included depending upon the size of the maintenance shop and other factors.

### Administrative Section

The administrative section performs functions associated with equipment receipt and transfer, technical data research, tool issue, shop property control, and the recording and reporting of completed maintenance actions within the shop. An administrative section can range from one Marine in small shops to several Marines in larger shops.

## Services Section

A services section performs functions in support of equipment maintenance; for example, welding, battery shop service, inspection, quality control.

Often, elements of the shop office/operations section, administrative section, and services section may be consolidated into a single entity such as a shop support section.

## Issue Point

The issue point is not an organic element of the shop. The issue point may be internal or external to the shop or a central issue point serving a major command or geographical location.

#### Maintenance Sections

The actual performance of maintenance is accomplished by maintenance sections. These sections may be organized in a number of different ways, including, but not limited to:

- by function (e.g., repair, modification)
- by equipment (e.g., ground radio, telecommunications)

A maintenance section can range from one or two Marines in small shops to a dozen or more Marines in larger shops.

In addition, while the shop office/operations section, administrative section, and services section perform their functions with regard to the entire shop, each maintenance section may perform elements of those functions with regard to the maintenance performed within the section. For example, a maintenance section might maintain a publications library that is a location of the main shop publications library.

A maintenance section will include a section chief and maintainers. If large enough, a maintenance section may also include a maintenance officer.

#### T&R Event Structure

The structure of the T&R events in this manual is based on a central shop organization. The "maintenance shop" described in this manual would be the largest unit at which all maintenance performed is on the equipment types supported by occupational field 2800 Marines. The "maintenance sections" described in this manual would each perform maintenance on one or more of the equipment types listed in this manual. The ground electronics maintenance shop would support all of the equipment types that are either organic to the unit (if a using unit) or organic to the units supported by the maintenance shop (if a supporting unit). For example, a radio repair section might support ground equipment, ground vehicle intercommunications equipment, and ground common satellite communications equipment. Refer to Figure D-2 for a depiction of the basic ground electronics maintenance shop around which the T&R events in this manual are structured.

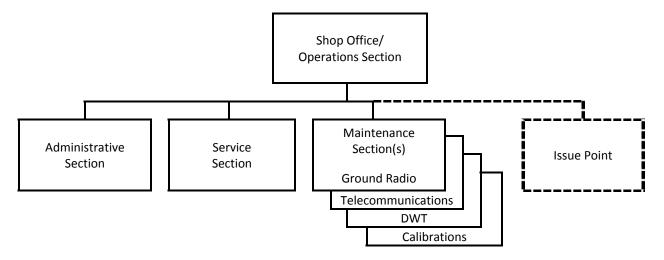
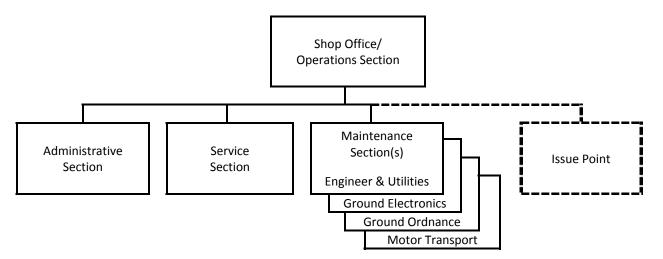


Figure D-2

The events in this manual apply equally well to the other types of maintenance organizations, including maintenance shops where multiple commodities are supported. In such cases, the shop office/operations section, administrative section, and services section would support multiple commodities and ground electronics maintenance might be performed within one maintenance section. Refer to Figure D-3 for a depiction of a multiple-commodity maintenance shop.





The naming conventions for sections will vary from shop to shop. In cases where an equipment type does not apply, the relevant individual and collective events may be waived. For example, most ground electronics maintenance shops have no requirement to support TMDE and artillery electronics equipment, so the relevant collective and individual T&R events for those equipment types are waived for the purposes of training and readiness reporting.