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Subj: GROUND SAFETY TRAINING AND READINESS MANUAL

Ref: (a) MCO P3500.72A
(b) MCO 1553.3B
(c) MCRP 3-0A
(d) MCRP 3-0B
(e) MCO 1553.2B

Encl: (1) Ground Safety T&R Manual

1. Purpose. 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 and assigned in the Ground Safety occupational field.

2. Cancellation. NAVMC 3500.110

3. Scope

a. Per reference (b), commanders will conduct an internal assessment of the unit's ability to execute its mission and develop long-, mid-, and short-range 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. References (c) and (d) provide amplifying information for effective planning and management of training within the unit.

b. Formal school and training detachment commanders will use references (a) and (e) 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. Information. 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 466), 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.

J. W. LUKEMAN
By direction

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TRAINING AND READINESS MANUAL

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CHAPTER 1

OVERVIEW

1000. INTRODUCTION

1. The 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) (METLs) 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 pre-deployment training requirements in preparation for training and for Formal Schools and Training Detachments to create Programs of Instruction (POI). 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 (METs).

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.

2. Commanders will ensure that all training is focused on their combat mission. Unit training should focus on achieving proficiency in the unit METL. The T&R Manual is a tool to help develop the unit's training plan based on the unit METL, as approved by their higher commander and reported in the DRRS. Training will support the unit METL and be designed to meet T&R standards. Commanders at all levels are responsible for effective combat training. The conduct of standards based training consistent with Marine Corps T&R standards cannot be over emphasized.

1002. UNIT TRAINING MANAGEMENT

1. Effective Unit Training Management (UTM) focuses the overall organization on development of training plans based on the unit METL and standards-based community T&R events. 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 mission.

2. UTM techniques, described in reference (b), (c), and (d) provide commanders with the requisite tools and techniques to analyze, design, develop, implement, and evaluate the training of their unit. To maintain an efficient and effective training program, leaders at every level must understand and implement UTM.

1003. SUSTAINMENT AND EVALUATION OF TRAINING

1. 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. For individual or collective training events not executed and evaluated as part of the daily routine, leaders must ensure proficiency is sustained by requiring retraining of each event at or before expiration of the designated sustainment interval.

2. 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). 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.

3. 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.

1004. ORGANIZATION

This Community/Unit T&R Manual is comprised of 2 chapters and 3 appendices. Chapter 1 is an overview of the Ground T&R Program. Chapter 2 lists the core METs/Marine Corps tasks supported by the Community, which are used as part of

the DRRS. Chapter 3 contains collective events. Chapters 4 contains the individual events specific to a particular MOS and/or billet, as noted. Appendix A contains acronyms; Appendix B contains terms and definitions; Appendix C contains references.

1005. T&R EVENT CODING

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

a. First up to 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.)

c. Third 4 characters indicate the unit size and supported unit, if applicable (1000 through 9000), and sequence. 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 **Entry-Level Formal School Training (Core Skills)**	**Individual Training** **Skills Progression MOJT, Advanced Level Schools (Core Plus Skills)**	**Collective Training** **Crew/Team**
1000-level	2000-level	3000-level
Collective Training **Squad/Section**	**Collective Training** **Platoon**	**Collective Training** **Company**
4000-level	5000-level	6000-level
Collective Training **Battalion/Squadron**	**Collective Training** **Regiment/Group**	**Collective Training** **Command Element**
7000-level	8000-level	9000-level

Figure. 1-1 T&R Event Levels

2. Grouping. Categorizing events with the use of a recognizable code makes the type of skill or capability being referenced fairly obvious. Examples include: PAT for patrolling events, DEF for events in the defense, FSPT for events related to fire support, 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 seven Administrative events 4431 occupational field, then the events should start 4431-ADMN-1001 and run through 1007. Next, the Bulk Fuel events, BUFL should start at 4431-

BUFL-1001.

3. Sequencing. 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. EXCEPTION: Events that relate to staff planning, to the conduct of a command operations center or to staff level decision making processes will be numbered according to the level of the unit to which the staff belongs. For example: an infantry battalion staff conducting planning for an offensive attack would be labeled as INF-PLAN-7001 even though the entire battalion is not actively involved in the planning of the operation. T&R event sequence numbers that begin with "9" are reserved for Marine Air Ground Task Forces (MAGTF) Command Element (CE) events. An example of event coding is displayed in Figure 1-2.

Functional Area

MOS/Community--------> ####-####-#### <-1st event in sequence

Event level

Figure 1-2: T&R Event Coding

1006. T&R EVENT COMPOSITION

1. An event contained within a T&R Manual is an individual or collective training standard. This section explains each of the components that make up the 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.

2. An example of a collective T&R event is provided in figure 1-3 and an example of an individual T&R event is provided in figure 1-4. Events shown in figures are for illustrative purposes only and are not actual T&R events.

XXXX-XXXX-####: Provide interior guard

SUPPORTED MET(S): MCT #.#.#

EVALUATION CODED: YES/NO SUSTAINMENT INTERVAL: 12 months

DESCRIPTION: Text

CONDITION: Text

STANDARD: Text

EVENT COMPONENTS:
1. Event component.
2. Event component.
3. Event component.

REFERENCES:

1. Reference
2. Reference
3. Reference

PREREQUISITE EVENTS:
XXXX-XXXX-#### XXXX-XXXX-####

INTERNAL SUPPORTED:
XXXX-XXXX-#### XXXX-XXXX-####

INTERNAL SUPPORTING:
XXXX-XXXX-#### XXXX-XXXX-####

SUPPORT REQUIREMENTS:

  EQUIPMENT: XXX

MISCELLANEOUS: XXX

  ADMINISTRATIVE INSTRUCTIONS: XXX

Figure 1-3: Example of a Collective T&R Event

XXXX-XXXX-####: Stand a sentry post

EVALUATION CODED: NO SUSTAINMENT INTERVAL: 12 months

DESCRIPTION: Text

MOS PERFORMING: ####, ####

INITIAL TRAINING SETTING: XXX

CONDITION: Text

STANDARD: Text

PERFORMANCE STEPS:
1. Event component.
2. Event component.
3. Event component.

REFERENCES:
1. Reference
2. Reference
3. Reference

PREREQUISITE EVENTS:
XXXX-XXXX-#### XXXX-XXXX-####

INTERNAL SUPPORTED:
XXXX-XXXX-#### XXXX-XXXX-####

INTERNAL SUPPORTING:
XXXX-XXXX-#### XXXX-XXXX-####

SUPPORT REQUIREMENTS:

EQUIPMENT: XXX

MISCELLANEOUS: XXX

ADMINISTRATIVE INSTRUCTIONS: XXX

Figure 1-4: Example of an Individual Event

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

2. Title. 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. Supported MET(s). 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. Sustainment Interval. It is critical to understand the intent of the Sustainment Interval so training time is not wasted with duplicated training. Sustainment Interval is expressed in number of months. Most individual T&R events and many lower level collective events are never out of sustainment because they are either part of a Marine's daily routine, or are frequently executed within the sustainment interval. Sustainment Interval is relevant when an individual or collective event is not observed and evaluated within the sustainment period, has atrophied, and therefore retraining and evaluation is required.

6. Billet/MOS. 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. Grade. The Grade field indicates the rank at which Marines are required to complete the event.

8. Description. 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 is required for collective events. This field can be of great value guiding a Formal School or OPFOR unit trying to discern the intent behind an event that might not be readily apparent.

9. Condition. 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. Standard. 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 and event descriptions. The event components help the user determine what must be accomplished and the proper sequence of execution of subordinate events. 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. They must be sequenced to demonstrate the building block approach to training.

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.

12. Chained Events. Enables unit leaders to effectively identify prerequisite, supporting, and supported events that ultimately support MCTs/METs. Supported events are chained to supporting events to enable the accomplishment of the supported event to standard and therefore are considered "chained". The completion of identified supported events can be

utilized to update sustainment interval credit for supporting events, based on the assessment of the commander.

13. Prerequisite Events. 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.

14. Supported Event. An event whose performance is inherently supported by the performance of one or more supporting events. A supported event will be classified as internal supported if it has been developed specifically for the community. A supported event that has been chained to an event from an external community T&R will be classified as external supported.

15. Supporting Event. An event whose performance inherently supports the performance of a supported event. A supporting event will be classified as internal supporting if it has been developed specifically for the community. A supporting event that has been chained to a community event from an external community T&R will be classified as external supporting.

16. Initial Training Setting. All individual events will designate the setting at which the skill is first taught, either formally, MOJT within the OPFOR, or via a distance learning product (DL).

17. References. 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. For individual events only one authoritative reference is required.

18. Distance Learning Products. Distance learning products include: Individual Multimedia Instruction (IMI), Computer-Based Training (CBT), MarineNet, etc. This notation is included when, in the opinion of the TRMG in consultation with the MTESD representative, the event can be taught via one of these media vice attending a formal course of instruction or receiving MOJT.

19. Support Requirements. 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 Area
- Ordnance
- Equipment
- Materials
- Other 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.

20. Suitability of Simulation/Simulators/DL products. The following "Suitability and Sequence" codes listed in Figure 1-5 have been developed to communicate characteristics for employing simulations during training. Units of measure have been assigned based on the amount of time it takes a Marine or unit to train to task utilizing a particular simulator. Suitability and Sequence codes are captured in the event title in a parenthetical remark, as well as within the simulation field of the T&R event. The simulation field also identifies the type of simulation, units of measure, and any other pertinent information.

Code	Requirement
L	The event can only be trained to standard in a Live environment. Any event assessed as "NO" for Simulatab1e was coded "L."
P	The event must be performed to standard in simulator as a PREREQUISITE to live fire qualification as per current policy, T&R manual, or doctrine.
S/L	Event must be trained to standard in simulation then live unless simulation capacity is not available, then live only training is appropriate.
L/S	Event must be trained to standard in a live environment then simulation unless simulation capacity is not available, then live only training is appropriate.
S	Event can ONLY be conducted to standard and qualification in simulator.

Figure 1-5: Suitability and Sequence codes

a. Training simulation capabilities offer an opportunity to build and sustain proficiency while achieving and/or maintaining certain economies. Commanders should take into consideration simulation tools as a matter of course when designing training.

b. Simulation Terms:

(1) Simulation: A model of a system animated discretely or continuously over a period of time. A simulation may be closed-loop (i.e., it executes based in initial inputs without human intervention), or it may be open-loop (i.e., human input to alter the variables in the system during execution is allowed). A simulation is an approximation of how the modeled system will behave over time. Simulations are constructed based on verified and validated mathematical models of actual systems. Simulations can be very

simple or complex depending on the degree of fidelity and resolution needed to understand the behavior of a system.

(2) Simulator: A simulator is the physical apparatus employed as the interface for humans to interact with a model or observe its output. A simulator has input controls and outputs in the form of human sensory stimuli (visual, auditory, olfactory, tactile/haptic, and taste). For instance, some of the features of the vehicle cab (the seat, steering wheel, turn signals, accelerator pedal, brakes, and windshield) and projection screen. Both the vehicle cab and projection screen are the interface by which a human being interacts with the simulated environment of a driving a vehicle and observe the outputs of the mathematical models of vehicle dynamics.

(3) Model: A mathematical representation of the behavior (i.e., shows the behavior of projectiles, combat simulations, etc.) of a system at a distinct point in time.

(4) Live: Real people operates real systems to include both live people operating real platforms or systems on a training range and battle staffs from joint, component or service tactical headquarters using real world C2 systems.

(5) Virtual: Real people operating simulated systems. Virtual simulations inject humans-in-the-loop in a central role by exercising motor control skills (e.g., flying an air platform simulator, engaging targets in indoor simulated marksmanship trainer), decision skills, and/or communication skills.

(6) Constructive: Models and simulations that involve simulated people operating simulated systems (i.e., MAGTF Tactical Warfare Simulation). Real people make inputs to such simulations, but are not involved in determining the outcomes.

(7) Live, Virtual and Constructive Training Environment: Defined by combining any of the three training domains (LVC) to create a common operational environment, by which units can interact across LVC domains as though they are physically located in the same operational environment.

(8) Distance Learning: Any instruction and evaluation provided through a variety of distance learning delivery systems (i.e., MarineNet) where the students and instructors are separated by time and/or location.

c. Figure 1-6 depicts an event title with simulation code and simulation and/or simulators that can be used, as displayed within a T&R event.

XXXX-XXX-XXXX: Call for indirect fire using the grid method (L/S)

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

SIMULATED	SUITABILITY	SIMULATOR	UNIT OF MEASURE	HOURS	PM
Yes	L/S	ODS	Marine Hours	12	Y

Figure 1-6: Example of Simulation/Simulators displayed within a T&R event

21. 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

1007. 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.

1008. 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%

3. CRP is a valuable tool to assist commanders in readiness reporting by providing objective data to support and inform their subjective assessment.

1009. CHEMICAL BIOLOGICAL RADIOLOGICAL NUCLEAR 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 clime 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. RISK MANAGEMENT (RM)

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

2. All leaders and Marines will integrate risk management in the planning process and implement hazard controls to reduce risk to acceptable levels. Applying the RM process will reduce mishaps, injuries, and damage they cause, thereby increasing both individual performance and unit readiness. RM assists the commander in avoiding unnecessary risk, determining the balance between training realism and unnecessary risks in training, making an informed decision to implement a course of action (COA), identifying feasible and effective control measures, adjusting training plans to fit the level of proficiency and experience of Marines/Sailors, and providing reasonable alternatives for mission accomplishment.

3. Specifically, Commanders are required to implement and document deliberate risk management in the planning and execution of all training evolutions and activities. Furthermore, the authority to approve or accept Risk Assessment Code (RAC) 1 or 2 hazards will not be delegated below Lieutenant Colonel (O5). Further guidance for RM is found in Marine Corps Order 3500.27_.

1012. IMPROVISED EXPLOSIVE TRAINING

1. Improvised Explosive Device (IED) threat impacts all elements of the MAGTF and all Marines regardless of military occupational specialty, location, or operational environment. The ability to effectively operate and survive in environments with an IED threat is critical to force protection, maintaining combat effectiveness, and mission accomplishment.

2. Per Marine Corps Policy on Organizing, Training, and Equipping for Operations in an IED Environment (MCO 3502.9), Marines must be capable of not only accomplishing their assigned mission, but also accomplishing their mission in environments with an IED threat. Counter-Improvised Explosive Device (C-IED) training must be integrated into the unit training plan IOT ensure personnel assigned to the Operating Forces train and maintain proficiency in C-IED tactics, techniques, and procedures.

1013. MOS-SPECIFIC PHYSICAL STANDARDS

1. This T&R Manual contains MOS-specific physical standards, which must be demonstrated, in order to achieve MOS qualification. These MOS-specific physical standards have been identified throughout this T&R Manual within the administrative instructions to the event.

2. Assessments for MOS-specific physical standards have been developed and are contained within Appendix E. These assessments provide Commanders reasonable assurance that a Marine has the physical capacity to perform the regularly assigned and recurrent duties of the MOS.

3. These MOS-specific physical standards are not the sole requirement for MOS qualification.

GROUND SAFETY TRAINING AND READINESS MANUAL

CHAPTER 2

MARINE CORPS TASKS

GROUND SAFETY TRAINING AND READINESS MANUAL

CHAPTER 2

MARINE CORPS TASKS

2000. MARINE CORPS TASKS (MCT). The Ground Safety T&R manual does not contain Defense Readiness Reporting System (DRRS) reportable METs. However, the collective events contained in this manual can directly support a DRRS reporting organizations Mission Essential Task Listing (METL). Ground Safety collective events are developed in direct support of Marine Corps' ability to meet capabilities identified in the Marine Corps Task List (MCO 3500.26_). The MCT table lists the MCTL tasks supported by the Ground Safety community.

2001. GROUND SAFETY MCTS

a. Ground Safety community supports the following MCTs:

MCT 4.6.2.10	Support Safety Programs
MCT 4.6.2.14.3	Conduct Civilian Skills Training Programs

GROUND SAFETY TRAINING AND READINESS MANUAL

CHAPTER 3

COLLECTIVE EVENTS

THIS CHAPTER IS RESERVED FOR FUTURE USE

GROUND SAFETY TRAINING AND READINESS MANUAL

CHAPTER 4

8012 INDIVIDUAL EVENTS

GROUND SAFETY TRAINING AND READINESS MANUAL

CHAPTER 4

8012 INDIVIDUAL EVENTS

4000. PURPOSE. This chapter details the individual events that pertain to the Ground Safety community. 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

1. Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-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
8012	Ground Safety Officer
8012	Ground Safety Specialist

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

Code	Description
ASMT	Assessment
LDRS	Leadership
RMGT	Risk Management
TRNG	Training

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
2000	Core Plus Skills

4002. INDEX OF INDIVIDUAL EVENTS

4003. 2000-LEVEL EVENTS

8012-ASMT-2001: Manage Unit Safety Inspection Program

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

DESCRIPTION: The Ground Safety Officer/Specialist is tasked to manage, implement, and maintain a comprehensive unit inspection program. This includes inspecting and coordinating inspections of a unit's facilities, equipment, and processes.

MOS PERFORMING: 8012

BILLETS: Ground Safety Officer, Ground Safety Specialist

GRADES: SSGT, GYSGT, MSGT, WO-1, CWO-2, CWO-3, 2NDLT, 1STLT, CAPT, MAJ, LTCOL, NV-PO-1, NV-CPO, NV-SCPO, NV-ENS, NV-LTJG, NV-LT, NV-LCDR, NV-CDR

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a situation, resources, and references.

STANDARD: To measure safety compliance, performance, effectiveness, and advise the commander on corrective actions.

PERFORMANCE STEPS:
1. Identify inspection requirements.
2. Develop inspection checklists.
3. Coordinate inspection support.
4. Conduct inspection.
5. Develop corrective action plan.
6. Brief commander on inspection results.
7. Maintain inspection records.
8. Monitor follow-up actions.

REFERENCES:
1. 29 CFR 1910 Occupational Safety and Health Standards for General Industry
2. 29 CFR 1915 Occupational Safety and Health Standards for Shipyard Employment
3. 29 CFR 1926 Safety and Health Regulations for Construction
4. ANSI Z87.1-2010 Practice for Occupational/Educational Eye and Face Protection Devices
5. ANSI Z88.2 Practices for Respiratory Protection
6. DoDI 6055.01 DoD Safety and Occupational Health (SOH) Program
7. DoDI 6055.07 Mishap Notification, Investigation, Reporting, and Record Keeping
8. MARADMIN 111/15 Marine Corps Heat and Cold Stress Injury Prevention Program
9. MARADMIN 581/15 Occupational Health Medical Surveillance Examination Programs Tracking and Reporting
10. MCO 3500.27 _ Risk Management (RM)
11. MCO 5100.29B Marine Corps Safety Program
12. MCO 5104.1_ Navy LASER Hazards Control Program
13. MCO 5104.3_ Marine Corps Radiation Safety Program
14. MCO 6260.3 Marine Corps Hearing Conservation Program
15. MCO P5102.1_ Navy and Marine Corps Mishap and Safety Investigation Reporting and Record Keeping Manual
16. NAVMC DIR 5040.6H Marine Corps Readiness Inspections And Assessments
17. NAVMC DIR 5100.8_ Marine Corps Occupational Safety and Health (OSH)

Program Manual
18. NAVSEA Instr 9310.1_ Naval Lithium Battery Safety Program

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8012-ASMT-2002: Conduct Mishap Investigation, Reporting, and Recordkeeping

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

DESCRIPTION: The Ground Safety Officer/Specialist is tasked to conduct mishap investigations, reporting, and recordkeeping related to deaths, injuries, occupational illnesses, and property damage in order to minimize mishap reoccurrence and reduce or eliminate loss of personnel and resources.

MOS PERFORMING: 8012

BILLETS: Ground Safety Officer, Ground Safety Specialist

GRADES: SSGT, GYSGT, MSGT, WO-1, CWO-2, CWO-3, 2NDLT, 1STLT, CAPT, MAJ, LTCOL, NV-PO-1, NV-CPO, NV-SCPO, NV-ENS, NV-LTJG, NV-LT, NV-LCDR, NV-CDR

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a situation, resources, and references.

STANDARD: To identify causal factors, recommend corrective actions, conduct trend analysis, maintain records, and disseminate lessons learned.

PERFORMANCE STEPS:
1. Conduct initial mishap assessment.
2. Determine initial mishap classification.
3. Determine reporting requirements.
4. Investigate the mishap.
5. Report investigation findings.
6. Maintain a log of all mishaps.
7. Advise command on trend analysis.
8. Take appropriate actions.

REFERENCES:
1. DoDI 6055.07 Mishap Notification, Investigation, Reporting, and Record Keeping
2. MCO 5100.29_ Marine Corps Safety Program
3. MCO P5102.1_ Navy and Marine Corps Mishap and Safety Investigation Reporting and Record Keeping Manual
4. NAVMC DIR 5100.8_ Marine Corps Occupational Safety and Health (OSH) Program Manual

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8012-LDRS-2003: Manage a Comprehensive Safety Program

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

DESCRIPTION: The Ground Safety Officer/Specialist is tasked to manage a comprehensive unit safety program. This task includes, but is not limited to: determining program, policy, and organizational requirements; executing or assisting in planning (training, operations, events, emergency action, mishap response, etc.); advising the Commander on risk management, regulations, safety issues, trends and corrective action; implementing appropriate courses of action (e.g., industry best practices and lessons learned); and evaluating program performance and assessing program effectiveness to achieve safe and healthful environments, both on and off-duty, in order to enhance mission readiness and individual performance.

MOS PERFORMING: 8012

BILLETS: Ground Safety Officer, Ground Safety Specialist

GRADES: SSGT, GYSGT, MSGT, WO-1, CWO-2, CWO-3, 2NDLT, 1STLT, CAPT, LTCOL, NV-PO-1, NV-CPO, NV-SCPO, NV-CWO-2, NV-CWO-3, NV-ENS, NV-LTJG, NV-LT, NV-LCDR, NV-CDR

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a situation, resources, and references.

STANDARD: To support the command in providing a safe and healthful environment both on and off-duty.

PERFORMANCE STEPS:
1. Identify program requirements.
2. Review policy.
3. Conduct planning.
4. Advise commander.
5. Implement the program.
6. Assess the program.

REFERENCES:
1. 29 CFR 1910 Occupational Safety and Health Standards for General Industry
2. 29 CFR 1915 Occupational Safety and Health Standards for Shipyard Employment
3. 29 CFR 1917 Marine Terminals
4. 29 CFR 1926 Safety and Health Regulations for Construction
5. ANSI Z87.1-2010 Practice for Occupational/Educational Eye and Face Protection Devices
6. ANSI Z88.2 Practices for Respiratory Protection
7. DoDI 6050.05 DoD Hazard Communication (HAZCOM) Program
8. DoDI 6055.01 DoD Safety and Occupational Health (SOH) Program
9. DoDI 6055.04 DoD Traffic Safety Program
10. DoDI 6055.07 Mishap Notification, Investigation, Reporting, and Record Keeping
11. DoDI 6055.12 Hearing Conservation Program (HCP)
12. MARADMIN 111/15 Marine Corps Heat and Cold Stress Injury Prevention Program
13. MARADMIN 581/15 Occupational Health Medical Surveillance Examination Programs Tracking and Reporting
14. MCO 3500.27 _ Risk Management (RM)
15. MCO 5100.19_ Marine Corps Traffic Safety Program (Drivesafe)
16. MCO 5100.29_ Marine Corps Safety Program
17. MCO 5100.30_ Marine Corps Recreation and Off-Duty Safety (RODS) Program

18. MCO 5104.1_ Navy LASER Hazards Control Program
19. MCO 5104.3_ Marine Corps Radiation Safety Program
20. MCO 6260.3 Marine Corps Hearing Conservation Program
21. MCO P440010.5_ Radioactive Commodities in DoD Supply System
22. MCO P4450.45 Joint Hazmat
23. MCO P5102.1_ Navy and Marine Corps Mishap and Safety Investigation Reporting and Record Keeping Manual
24. MCO P8020.10_ Marine Corps Ammunition and Explosives Safety Program
25. NAVMC DIR 5100.8 Marine Corps Occupational Safety and Health (OSH) Program Manual
26. NAVSEA S6470-AA-SAF-010 Gas Free Engineering Manual
27. NFPA 101 Life Safety Code
28. NFPA 70 - NEC National Fire Protection Association (NFPA) National Electrical Code (NEC)
29. UFC Unified Facilities Criteria

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. In order to manage specialized programs, the Ground Safety Officer/Specialist shall attend additional training such as Respiratory Protection Program Management (RPPM), Confined Space Safety, Radiation Safety, and LASER Safety (Fall protection and lock-out/Tag-out specific training as required).
2. Recommend advanced training for the Ground Safety Officer/Specialist assigned to an O-6 command level and higher which can consist of: any service level safety schools, National Safety Council (NSC), American Society of Safety Engineers (ASSE), and Occupational Safety and Health Administration Outreach Training Institute (OTI).

8012-RMGT-2004: Conduct Hazard Prevention and Control

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

DESCRIPTION: The Ground Safety Officer/Specialist is tasked to conduct hazard prevention and control within their assigned commands. This includes identifying and analyzing hazards; developing, implementing, and evaluating controls; and communicating hazards to command and leadership. This task may be completed in garrison or in the field, on or off-duty.

Hazardous exposures can include but are not limited to: asbestos; lead; noise; physical; chemical; biological; work-related musculoskeletal disorders (WMSDs); hazardous energy sources; walking and working surfaces; elevated work stations/platforms; wildlife; traffic; materials handling; radiation; lasers; respiratory; electrical; fire; machines and machinery; recreational and off duty activities; high risk activities; environmental conditions; hazardous materials; ammunition and explosives; and tactical operations.

MOS PERFORMING: 8012

BILLETS: Ground Safety Officer, Ground Safety Specialist

GRADES: SSGT, GYSGT, MSGT, WO-1, CWO-2, CWO-3, 2NDLT, 1STLT, CAPT, MAJ, LTCOL, NV-PO-1, NV-CPO, NV-SCPO, NV-ENS, NV-LTJG, NV-LT, NV-LCDR, NV-CDR

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a situation, resources, and the references.

STANDARD: To identify, assess, and control hazards.

PERFORMANCE STEPS:
1. Analyze the situation.
2. Perform a hazard assessment.
3. Coordinate with internal/external agencies.
4. Determine courses of action.
5. Advise the commander.
6. Implement control measures.
7. Evaluate control measures.
8. Submit required reports.

REFERENCES:
1. 29 CFR 1910 Occupational Safety and Health Standards for General Industry
2. 29 CFR 1915 Occupational Safety and Health Standards for Shipyard Employment
3. 29 CFR 1917 Marine Terminals
4. 29 CFR 1926 Safety and Health Regulations for Construction
5. ANSI Z87.1-2010 Practice for Occupational/Educational Eye and Face Protection Devices
6. ANSI Z88.2 Practices for Respiratory Protection
7. DoDI 6055.01 DoD Safety and Occupational Health (SOH) Program
8. DoDI 6055.04 DoD Traffic Safety Program
9. DoDI 6055.07 Mishap Notification, Investigation, Reporting, and Record Keeping
10. DoDI 6055.12 Hearing Conservation Program (HCP)
11. MCO 3500.27 _ Risk Management (RM)
12. MCO 5100.19_ Marine Corps Traffic Safety Program (Drivesafe)
13. MCO 5100.29_ Marine Corps Safety Program
14. MCO 5100.30_ Marine Corps Recreation and Off-Duty Safety (RODS) Program
15. MCO 5104.1_ Navy LASER Hazards Control Program
16. MCO 5104.3_ Marine Corps Radiation Safety Program
17. MCO 6260.3 Marine Corps Hearing Conservation Program
18. MCO P5102.1_ Navy and Marine Corps Mishap and Safety Investigation Reporting and Record Keeping Manual
19. MCO P8020.10_ Marine Corps Ammunition and Explosives Safety Program
20. NAVMC Dir 5100.8 Marine Corps Ground Occupational Safety and Health Program
21. NAVSEA S6470-AA-SAF-010 Gas Free Engineering Manual
22. NFPA 101 Life Safety Code
23. NFPA 70 - NEC National Fire Protection Association (NFPA) National Electrical Code (NEC)
24. UFC 4-010-01 Unified Facilities Criteria

8012-TRNG-2005: Facilitate Safety Training

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

DESCRIPTION: Ground Safety Officers/Specialists are tasked to provide, coordinate, and record safety training for applicable personnel. Safety training may include, but is not limited to: risk management; personnel and supervisor safety training; unit safety representatives; job specific training; mishap investigation and reporting requirements; operational pauses, Back-In-The Saddle (BITS); safety councils/committees; applicable recreational and off-duty activities; traffic; and occupational health.

MOS PERFORMING: 8012

BILLETS: Ground Safety Officer, Ground Safety Specialist

GRADES: SSGT, GYSGT, MSGT, WO-1, CWO-2, CWO-3, CWO-4, 2NDLT, 1STLT, CAPT, MAJ, LTCOL, NV-PO-1, NV-CPO, NV-SCPO, NV-ENS, NV-LTJG, NV-LT, NV-LCDR, NV-CDR

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a situation, resources, and references.

STANDARD: To provide training to applicable personnel in the identification, prevention, and control of hazards.

PERFORMANCE STEPS:
1. Identify required training.
2. Coordinate required training.
3. Conduct required training.
4. Document training.
5. Submit required reports.

REFERENCES:
1. 29 CFR 1910 Occupational Safety and Health Standards for General Industry
2. 29 CFR 1960 Basic Program Elements For Federal Employee Occupational Safety And Health Programs And Related Matters
3. MCO 3500.27 _ Risk Management (RM)
4. MCO 5100.19_ Marine Corps Traffic Safety Program (Drivesafe)
5. MCO 5100.29_ Marine Corps Safety Program
6. MCO 5100.30_ Marine Corps Recreation and Off-Duty Safety (RODS) Program
7. MCO 5104.3_ Marine Corps Radiation Safety Program
8. MCO 6260.3 Marine Corps Hearing Conservation Program
9. MCO P5102.1_ Navy and Marine Corps Mishap and Safety Investigation Reporting and Record Keeping Manual
10. MCO P8020.10_ Marine Corps Ammunition and Explosives Safety Program
11. NAVMC DIR 5100.8 Marine Corps Occupational Safety and Health (OSH) Program Manual

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. In order to instruct specialized training, the Ground Safety Officer/Specialist shall attend additional training such as Respiratory Protection Program Management (RPPM), Confined Space Safety, Radiation Safety, and LASER Safety.
2. Recommend advanced training for the Ground Safety Officer/Specialist assigned to an O-6 command level and higher which can consist of: any service level safety schools, National Safety Council (NSC), American Society of Safety Engineers (ASSE), and Occupational Safety and Health Administration Outreach Training Institute (OTI), and other CMC (SD) approved training".

(VLB)

GROUND SAFETY TRAINING AND READINESS MANUAL

APPENDIX A

ACRONYMS AND ABBREVIATIONS

BMOS . . . . . Billet Military Occupational Specialty
CMC . . . . . .Commandant of the Marine Corps
COMMARFOR . . . . . Commander, Marine Corps Forces
COMMARFORLANT . . . . . Commander, Marine Corps Forces, Atlantic
COMMARFORPAC . . . . . Commander, Marine Corps Forces, Pacific
CONUS . . . . . Continental United States
DoD . . . . . Department of Defense
DoDD . . . . . Department of Defense directive
DoDI . . . . . Department of Defense instruction
DON . . . . . Department of the Navy
DRRS . . . . . Defense Readiness Reporting System
FY . . . . . .fiscal year
G-1 . . . . . manpower or personnel staff officer
G-2 . . . . . intelligence staff officer
G-3 . . . . . operations staff officer
G-4 . . . . . logistics staff officer
G-6 . . . . . communications and information systems officer
LOD . . . . . .Line of Duty
LOI . . . . . Letter of Instruction
LWAS . . . . . Leave While Awaiting Separation
MACOM . . . . . major command
MAGTF . . . . . Marine Air-Ground Task Force
MAO . . . . . mail address only
MARDIV . . . . . Marine Division
MARFOR . . . . . Marine Corps Forces
MCB . . . . . Marine Corps Base
MCC . . . . . Monitor Command Code
MCCS . . . . . .Marine Corps Community Services
MCCSSS . . . . . Marine Corps Combat Service Support Schools
MCO . . . . . Marine Corps Order
MCPDS . . . . . Marine Corps Publication Distribution System
MCPEL . . . . . Marine Corps Publications Electronic Listing
MCWP . . . . . .Marine Corps Warfighting Publication
MCTFS . . . . . Marine Corps Total Force System
MEF . . . . . Marine Expeditionary Force
MEU . . . . . Marine Expeditionary Unit
MEU(SOC) . . . . . Marine Expeditionary Unit (special operations capable)
MLG . . . . . .Marine Logistics Group
MSC . . . . . Major Subordinate Command
MSE . . . . . Major Subordinate Element
NAVMC . . . . . Navy and Marine Corps
OCONUS . . . . . Outside the Continental United States
OPCON . . . . . operational control
OPFOR . . . . . .Operating Forces
OPLAN . . . . . operations plan
OPNAV . . . . . Office of the Chief of Naval Operations
OPORD . . . . . operations order
OPT . . . . . Operational Planning Team
OPREP . . . . . Operations Report

PCR. . . . . Personnel Casualty Report
PII . . . . . Personally Identifiable Information
RUC . . . . . Reporting Unit Code
SECNAVINST . . . . . .Secretary of the Navy Instruction
SNCO . . . . . .Staff Noncommissioned Officer
SNM . . . . . Subject Named Marine
SOP . . . . . standing operating procedure
SPMAGTF . . . . . Special-Purpose Marine Air-Ground Task Force
UIC . . . . . .Unit Identification Code

GROUND SAFETY TRAINING AND READINESS MANUAL

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.

A

After Action Review. 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.

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.

C

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 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 infer 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 performed 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.

Condition. The condition describes the training situation or environment under which the training event or task will take place. It 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; and 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, ammo, 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.

E

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. As such, 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 Commanding General, Marine Expeditionary Force or his appointee will fill this role, unless authority is delegated to the respective commander of the Division, Wing, or FSSG. 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.

M

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.

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.

O

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. May be used in a general sense or to express a level or degree of readiness.

P

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.

S

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).

Simulation Training. Simulators provide the additional capability to develop and hone core and core plus skills. Accordingly, the development of simulator training events for appropriate T&R syllabi can help maintain valuable combat resources while reducing training time and cost. Therefore, 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.

T

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.

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.

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, experienced and knowledgeable in evaluation techniques. 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; and 5) preparing and conducting a detailed exercise debrief for the evaluated unit(s).

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.

U

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 unit's 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.

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.

GROUND SAFETY TRAINING AND READINESS MANUAL

APPENDIX C

REFERENCES

Field Manual (FM)
FM 4-01.45 Multi Service TTP for Tactical Convoy Operations

Marine Corps Order (MCO)
MCO 3000.19_ Marine Corps Total Force Mobilization
MCO 4000.51_ Automatic Identification Technology (AIT)
MCO P4030.19_ Preparing Hazardous Materials for Military Air Shipments
MCO P4030.36_ Marine Corps Packaging Manual
MCO 4600.40_ Government Travel Charge Card Program (GTCC)
MCO 4600.41 Marine Corps Distribution Manual
MCO P4600.7_ Marine Corps Transportation Manual
MCO P4610.19 Commercial Service Plan
MCO 4630.16 Air Transportation Eligibility
MCO 4631.3 Military Airlift "Blue Bark" Passengers
MCO 4631.8 Management System / 463L Pallets, Nets, and Tied
MCO 4650.39_ Defense Travel System
MCO 4690.1 Marine Corps Container Management Policy

Department of Defense
DoDI 4000.19, Interservice and Intra-governmental Support
DoDI 4150.7, DoD Pest Management Program
DoD 4160.21-M, Defense Materiel Disposition Manual
DoDI 4715.1, Environmental Security
DoDI 6050.5, DoD Hazard Communication Program
DoDI 6055.1, DoD Safety and Occupational Health (SOH) Program
DoDI 6055.4, DoD Traffic Safety Program
DoDI 6055.5, Industrial Hygiene and Occupational Health
DoDI 6055.6, Fire & Emergency Services (F&ES) Program
DoDI 6055.7, Mishap Notification, Investigation, Reporting, and Record Keeping
DoDI 6055.8, Occupational Radiation Protection Program
DoD 6055.9-M Department of Defense Explosives Safety Board (DDESB) & DoD Component Explosives Safety Responsibilities
DoDI 6055.11, Protection of DoD Personnel from Exposure to Radiofrequency, Radiation, & Lasers
DoDI 6055.12, DoD Hearing Conservation Program
DoD HFACS 7.0, Human Factors Analysis and Classification System

DOD Unified Facilities Criteria 3-560-01, Electrical Safety O&M"

Marine Corps Warfighting Publication (MCWPs)
MCDP 1-0, Marine Corps Operations
MCRP 4-11.3H, Convoy Operations Handbook
MCWP 3-13, Employment of Amphibious Assault Vehicles (AAV's)

Miscellaneous
American Conference of Governmental Industrial Hygienists (ACGIH), Industrial Ventilation: A Manual of Recommended Practice

CENTCOM Regulation 415-1, Construction & Base Camp Development in the USCENTCOM AOR (The Sand Book)
Civilian Personnel Instruction 752, Department of Navy Adverse Actions
Compressed Gas Association, Inc., CGA Pamphlet G-7.1, Commodity Specification for Air, August 27 2004
DHHS (NIOSH) Publication No. 94-110, Applications Manual for the Revised NIOSH Lifting Equation
ERDC/CERL TR-05-36 Military Requirements for JP-8 Reformers and Solid Oxide Fuel Powered Systems
Executive Memorandum 385-1-1, Safety ¿ Safety and Health Requirements (U.S. Army Corps of Engineers)
Executive Order 12196, Occupational Safety and Health Programs for Federal Employees
Globally Harmonized System of Classification and Labeling of Chemicals (GHS), 4th Edition (Purple Book)
Joint Publication 3-02, Amphibious Operations
MIL-STD 882D, Department of Defense Standard Practice for System Safety
MIL-STD-1472F, Department of Defense Design Criteria Standard - Human Engineering
National Electrical Code (NEC) ¿ 2014 Edition
NFPA 70E Electrical Safety Requirements for Employee Workplaces
NFPA 101 Life Safety Code, 2015 Edition
NEHC-TM IH 6290.91-2B, Industrial Hygiene Field Operations Manual
NEHC TM OEM 6260.96-2, Occupational Medicine Field Operations Manual
NEHC-TM OM-6260, Occupational Medicine Surveillance Procedures Manual and Medical Matrix
NIOSH Pub 97-117, Elements of Ergonomics Programs: A primer Based on Evaluations of Musculoskeletal Disorders
Office of Personnel Management (OPM) Civilian Personnel Instruction (752)
Office of Personnel Management (OPM) General Schedule Position Classification Standards
Public Law 91-596, Occupational Safety and Health Act of 1970
Public Law 95-454, Civil Service Reform Act of 1978
Public Law 104-113, National Technology Transfer and Advancement Act of 1995
Uniform Code of Military Justice
United States Marine Corps Safety Campaign Plan
United Facilities Code (UFC) 3-560-01 Electrical Safety O&M
U.S. Army TB 43-134, Battery Disposition and Disposal
U.S. Army SB 11-6, CECOM-Managed Battery Supply and Management Data (Communications-Electronics Command)
5 U.S.C. 7902, Safety Programs"