NAVMC 3500.7C

From: Commandant of the Marine Corps
To: Distribution List
Subj: ARTILLERY TRAINING AND READINESS MANUAL
Ref: (a) MCO P3500.72A
Encl: (1) Artillery T&R Manual

1. Purpose. Per the reference, the Training and Readiness (T&R) Manual, contained in enclosure (1), establishes training standards, regulations, and policies regarding the training of Marines in the logistics occupational field.

2. Cancellation. NAVMC 3500.7B.

3. Scope. Highlights of the major changes included in this Manual are:
   a. Chapter 1 adjusted to reflect current organization of this T&R Manual.
   b. Chapter 2 revised to reflect the communities approved and published Marine Corps Tasks.
   c. Chapters 3 through 17 adjusted to reflect event additions, deletions, modifications, and improved functional area naming conventions.
   d. Chapter 11 removed all Expeditionary Fire Support System events as a result of the Marine Corps’ divestment of the weapon system.
   e. Chapter 17 adjusted to reflect the minimum standard quantities of ammunition for events where ammunition is required. Simulation prioritization implemented to deconflict training in simulation facilities.
   f. Chapter 18 adjusted to reflect common T&R events required for multiple artillery military occupational specialties.
   g. Appendices A through D adjusted to reflect T&R program-wide standardized language.
   h. Appendix E adjusted to reflect new ammunition tracking format with accompanying terms, definitions, and ammunition quantities.
   i. Appendix F added to standardize gear loads across the Marine Corps, specific to hiking.
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.

\[
\text{W. F. MULLEN III}
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CHAPTER 1

OVERVIEW

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ARTILLERY T&R MANUAL

CHAPTER 1

OVERVIEW

1000. INTRODUCTION

1. The training and readiness (T&R) program is the Corps' primary tool for planning, conducting and evaluating training, and assessing training readiness. Subject matter experts (SME) from the operating forces (OPFOR) developed core capability mission essential task lists (METL) for ground communities derived from the Marine Corps task list. This T&R Manual is built around these METLs and other related Marine Corps tasks (MCT). All events contained in this 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. This T&R Manual contains the collective and individual training requirements to prepare units to accomplish their combat mission. This 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. This 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. This 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. This manual focuses on individual and collective tasks performed by OPFOR units and supervised by personnel in the performance of unit mission essential task(s) (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.

2. Commanders will ensure that all training is focused on their combat mission. Unit training should focus on achieving proficiency in the unit METL. This 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 Defense Readiness Reporting System (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. Unit training management 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 military occupational specialty (MOS) at the appropriate grade or billet to which assigned. Leaders are responsible for recording the training achievements of their Marines. For collective or individual 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 Artillery T&R Manual is comprised of 18 chapters and seven appendices. Chapter 1 is an overview of the ground T&R program. Chapter 2 lists the core METs supported by the community, which are used as part of DRRS. Chapter three through eight contains collective events. Chapters nine through 18 contain individual events specific to a particular MOS and/or billet, as noted. Appendix A contains acronyms; Appendix B contains terms and definitions; Appendix C references; Appendix D simulation; Appendix E ammunition; Appendix F Load Terms and Definitions, and Appendix G contains MOS-Specific Physical Standards.

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.

<table>
<thead>
<tr>
<th>Collective Training</th>
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<th>Collective Training</th>
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<tbody>
<tr>
<td>Command Element</td>
<td>Regiment/Group</td>
<td>Battalion/Squadron</td>
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<tr>
<td>9000-level</td>
<td>8000-level</td>
<td>7000-level</td>
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<td>Collective Training</td>
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<td>Collective Training</td>
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<tr>
<td>Company</td>
<td>Platoon</td>
<td>Squad</td>
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<tr>
<td>6000-level</td>
<td>5000-level</td>
<td>4000-level</td>
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<tr>
<td>Collective Training</td>
<td>Individual Training</td>
<td>Individual Training</td>
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<td>Team/Section/Crew</td>
<td>Skills Progression</td>
<td>Entry-Level</td>
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<td>MOJT, Advanced Level</td>
<td>Formal School</td>
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<td>Training</td>
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<td></td>
<td>(Core Plus Skills)</td>
<td>(Core Skills)</td>
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<tr>
<td>3000-level</td>
<td>2000-level</td>
<td>1000-level</td>
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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 this 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 (OccFld), then the events should start 4431-ADMIN-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 collective (3000-9000 level) or individual (1000-2000 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 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 force (MAGTF) command element events. An example of event coding is displayed in figure 1-2.

<table>
<thead>
<tr>
<th>Functional Area</th>
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<tr>
<td>MOS/Community------&gt; ####-####-#### &lt;-1st event in sequence</td>
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</table>

**Event level**

Figure 1-2. T&R Event Coding

### 1006. T&R EVENT COMPOSITION

1. An event contained within a T&R manual is a collective or individual 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.

<table>
<thead>
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<th>Event component.</th>
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<tbody>
<tr>
<td>SUPPORTED MET(S):</td>
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<tr>
<td>EVALUATION CODED:</td>
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<tr>
<td>SUSTAINMENT INTERVAL:</td>
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<tr>
<td>DESCRIPTION:</td>
</tr>
<tr>
<td>CONDITION:</td>
</tr>
<tr>
<td>STANDARD:</td>
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**EVENT COMPONENTS:**

1. Event component.
2. Event component.
3. Event component.

**REFERENCES:**

1. Reference
2. Reference
3. Reference

**PREREQUISITE EVENTS:**

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<th>XXXX-XXXX-####</th>
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**INTERNAL SUPPORTING:**

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</table>
SUPPORT REQUIREMENTS:

EQUIPMENT: XXX

MISCELLANEOUS: XXX

ADMINISTRATIVE INSTRUCTIONS: XXX

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

XXX-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:
XXX-XXXX-#### XXXX-XXXX-####

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

INTERNAL SUPPORTING:
XXX-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 one object.

3. **Evaluation-Coded (E-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. These E-Coded events are derived from the training measures of effectiveness (MOE) for the METs for units that must report readiness in 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 OccFld drafting the T&R manual, even if those events are not listed as MOE 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 OPFORs. 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, Marine on the Job Training (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, computer-based training, MarineNet, etc. This notation is included when, in the opinion of the T&R manual group charter in consultation with the Marine Air-Ground Task Force T&R Standards Division 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 OccFld representatives will be careful not to "double count" ammunition that might be employed in the performance of collective and individual 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.

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

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 command and control 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 (LVC) 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 DL 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 formal learning centers 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. Combat readiness percentage 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 E-Coded Events. E-Coded events and unit CRP calculation are described in follow-on paragraphs. The 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. The 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%

1-13  Enclosure (1)
3. Combat readiness percentage 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 OPFOR must be trained in chemical, biological, radiological, and nuclear (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 OPFOR 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. Risk management 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. Risk management minimizes risks to acceptable levels, commensurate with mission accomplishment.

2. All leaders and Marines will integrate RM 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. Risk management 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, 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 RM 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 MOS, 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 in order-to ensure personnel assigned to the OPFOR train and maintain proficiency in C-IED tactics, techniques, and procedures.
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CHAPTER 2

MISSION ESSENTIAL TASKS

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<th>PAGE</th>
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</thead>
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<td>PURPOSE</td>
<td>2000</td>
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<tr>
<td>ARTILLERY REGIMENT CORE METS.</td>
<td>2001</td>
</tr>
<tr>
<td>ARTILLERY REGIMENT HEADQUARTERS CORE METS</td>
<td>2002</td>
</tr>
<tr>
<td>ARTILLERY BATTALION (CANNON) CORE METS.</td>
<td>2003</td>
</tr>
<tr>
<td>ARTILLERY BATTALION (CANNON) (UDP) CORE METS.</td>
<td>2004</td>
</tr>
<tr>
<td>ARTILLERY BATTALION (ROCKET) CORE METS.</td>
<td>2005</td>
</tr>
</tbody>
</table>
2000. **PURPOSE.** The MET tables list the standardized core METs for units within the artillery community.

**2001. ARTILLERY REGIMENT CORE METS**

<table>
<thead>
<tr>
<th>MCT</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.2</td>
<td>Provide Task-Organized Forces</td>
</tr>
<tr>
<td>1.1.2.3</td>
<td>Provide Headquarters Personnel and Infrastructure</td>
</tr>
<tr>
<td>1.12.2</td>
<td>Support Amphibious Operations</td>
</tr>
<tr>
<td>3.1.3.2</td>
<td>Identify Target Acquisition (TA) Taskings</td>
</tr>
<tr>
<td>3.2.1</td>
<td>Conduct Fire Support Tasks</td>
</tr>
<tr>
<td>3.2.1.3</td>
<td>Integrate Fire Support with the Scheme of Maneuver</td>
</tr>
<tr>
<td>3.2.4</td>
<td>Conduct Ground Delivered Fires</td>
</tr>
<tr>
<td>3.2.4.2</td>
<td>Conduct Indirect Fires</td>
</tr>
<tr>
<td>3.2.4.3</td>
<td>Conduct Counterfire Operations</td>
</tr>
<tr>
<td>3.2.4.5</td>
<td>Conduct Sensor Operations</td>
</tr>
<tr>
<td>5</td>
<td>Exercise Command and Control</td>
</tr>
</tbody>
</table>

**2002. ARTILLERY REGIMENT HEADQUARTERS CORE METS**

<table>
<thead>
<tr>
<th>MCT</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.2.3</td>
<td>Provide Headquarters Personnel and Infrastructure</td>
</tr>
<tr>
<td>3.2.1</td>
<td>Conduct Fire Support Tasks</td>
</tr>
<tr>
<td>3.2.4.3</td>
<td>Conduct Counterfire Operations</td>
</tr>
<tr>
<td>3.2.4.5</td>
<td>Conduct Sensor Operations</td>
</tr>
<tr>
<td>5</td>
<td>Exercise Command and Control</td>
</tr>
</tbody>
</table>

**2003. ARTILLERY BATTALION (CANNON) CORE METS**

<table>
<thead>
<tr>
<th>MCT</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.2</td>
<td>Provide Task-Organized Forces</td>
</tr>
<tr>
<td>1.12.2</td>
<td>Support Amphibious Operations</td>
</tr>
<tr>
<td>3.2.1</td>
<td>Conduct Fire Support Tasks</td>
</tr>
<tr>
<td>3.2.4</td>
<td>Conduct Ground Delivered Fires</td>
</tr>
</tbody>
</table>

**2004. ARTILLERY BATTALION (CANNON) (UDP) CORE METS**

<table>
<thead>
<tr>
<th>MCT</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.2</td>
<td>Provide Task-Organized Forces</td>
</tr>
<tr>
<td>1.12.2</td>
<td>Support Amphibious Operations</td>
</tr>
<tr>
<td>3.2.1</td>
<td>Conduct Fire Support Tasks</td>
</tr>
<tr>
<td>3.2.4</td>
<td>Conduct Ground Delivered Fires</td>
</tr>
</tbody>
</table>

**2005. ARTILLERY BATTALION (ROCKET) CORE METS**

<table>
<thead>
<tr>
<th>MCT</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.2</td>
<td>Provide Task-Organized Forces</td>
</tr>
<tr>
<td>MCT 1.12</td>
<td>Conduct Expeditionary Operations</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>MCT 3.2.4</td>
<td>Conduct Ground Delivered Fires</td>
</tr>
</tbody>
</table>
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CHAPTER 3

8000 LEVEL COLLECTIVE EVENTS

<table>
<thead>
<tr>
<th>PARAGRAPH</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURPOSE</td>
<td>3000</td>
</tr>
<tr>
<td>EVENT CODING</td>
<td>3001</td>
</tr>
<tr>
<td>INDEX OF 8000-LEVEL REGIMENT COLLECTIVE EVENTS</td>
<td>3002</td>
</tr>
<tr>
<td>8000-LEVEL REGIMENT COLLECTIVE EVENTS</td>
<td>3003</td>
</tr>
</tbody>
</table>
ARTILLERY T&R MANUAL

CHAPTER 3

8000 LEVEL COLLECTIVE EVENTS

3000. PURPOSE. Chapter 3 contains 8000 level collective training and readiness (T&R) events for the artillery community.

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-XXXX. This chapter utilizes the following methodology:

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTY</td>
<td>Artillery</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C2</td>
<td>Command and Control</td>
</tr>
<tr>
<td>CSS</td>
<td>Combat Service Support</td>
</tr>
<tr>
<td>FSPT</td>
<td>Fire Support</td>
</tr>
<tr>
<td>OPS</td>
<td>Operations</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8000</td>
<td>Regiment</td>
</tr>
</tbody>
</table>

3002. INDEX OF 8000-LEVEL REGIMENT COLLECTIVE EVENTS

<table>
<thead>
<tr>
<th>Event Code</th>
<th>E-Coded</th>
<th>Event Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTY-C2-8001</td>
<td>YES</td>
<td>Establish a Command Post</td>
<td>3-3</td>
</tr>
<tr>
<td>ARTY-C2-8002</td>
<td>YES</td>
<td>Conduct Combat Operations Center operations (L/S)</td>
<td>3-4</td>
</tr>
<tr>
<td>ARTY-C2-8003</td>
<td>YES</td>
<td>Plan for operations</td>
<td>3-4</td>
</tr>
<tr>
<td>ARTY-CSS-8001</td>
<td>NO</td>
<td>Conduct Combat Service Support operations</td>
<td>3-5</td>
</tr>
<tr>
<td>ARTY-FSPT-8001</td>
<td>YES</td>
<td>Conduct artillery planning as part of a fire support plan</td>
<td>3-6</td>
</tr>
<tr>
<td>ARTY-OPS-8001</td>
<td>YES</td>
<td>Provide artillery support</td>
<td>3-7</td>
</tr>
<tr>
<td>ARTY-OPS-8002</td>
<td>YES</td>
<td>Conduct target acquisition operations</td>
<td>3-8</td>
</tr>
<tr>
<td>ARTY-OPS-8003</td>
<td>YES</td>
<td>Conduct amphibious operations (L/S)</td>
<td>3-9</td>
</tr>
</tbody>
</table>
3003. 8000-LEVEL REGIMENT COLLECTIVE EVENTS

**ARTY-C2-8001**: Establish a Command Post

**SUPPORTED MET(S):**
- MCT 1.12.2
- MCT 3.1.3.2
- MCT 3.2.1
- MCT 3.2.4
- MCT 3.2.4.3

**EVALUATION-CODED**: YES  
**SUSTAINMENT INTERVAL**: 6 months

**DESCRIPTION**: The artillery regimental command post provides for counterfire, intelligence operations, CSS, aviation support, and ground fires. To accomplish these tasks, the headquarters of the artillery unit may be organized into three echelons: forward, main, and rear. Any one of the three echelons may function as the command post. At any one time, there is only one command post. -MCWP 3-1 GROUND OPERATIONS - This event requires the unit's staff to exercise uninterrupted command and control of operations while displacing command posts (CP) throughout the area of operations.

**CONDITION**: Given supporting attachments, a Regimental TO&E, an operations order and commander's guidance.

**STANDARD**: To integrate and establish systems, personnel and processes to support command and control of operations.

**EVENT COMPONENTS**:
1. Organize staff sections for forward, main and rear.
2. Establish security.
3. Establish Combat Operations Center (COC) to include a Fire Direction Center (FDC) and Target Processing Center (TPC), as required.
4. Establish communication with Higher, Adjacent, Subordinate and Supporting (HASS) units.
5. Establish Administration and Logistics Operations Center (ALOC).
6. Establish systems control.
7. Plan Information Exchange Requirements (IER).
8. Establish displacement procedures.
9. Maintain continuity of operations.

**REFERENCES**:
1. MCTP 3-10E Artillery Operations
2. MCWP 3-10 MAGTF Ground Operations

**CHAINED EVENTS**:

**INTERNAL SUPPORTING EVENTS**:
- ARTY-C2-7001
- BTRY-C2-6001
- RCKT-C2-6001

**ARTY-C2-8002**: Conduct Combat Operations Center operations (L/S)

**SUPPORTED MET(S):**
- MCT 1.12.2
- MCT 3.1.3.2
- MCT 3.2.1
- MCT 3.2.4
- MCT 3.2.4.3
EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The Combat Operations Center (COC) is the location where the aggregation and dissemination of information provides the commander and staff with situational awareness which facilitates the decision making process.

CONDITION: Given an established command post, operations order, and supporting attachments.

STANDARD: To integrate systems, personnel and processes to execute command and control of operations.

EVENT COMPONENTS:
1. Organize staff.
2. Establish COC watch.
3. Maintain battle rhythm.
4. Coordinate movement of forces with HASS units.
5. Execute Information Management procedures.
6. Maintain communications with HASS units.
7. Conduct battle drills.
10. Conduct cross boundary coordination.
11. Synchronize staff section operations.

REFERENCES:
1. MCDP 1-0 Marine Corps Operations
2. MCTP 3-10E Artillery Operations
3. MCWP 3-10 MAGTF Ground Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS: ARTY-C2-7002

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

<table>
<thead>
<tr>
<th>SIMULATED</th>
<th>SUITABILITY</th>
<th>SIMULATOR</th>
<th>UNIT OF MEASURE</th>
<th>HOURS</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>L/S</td>
<td>MTWS</td>
<td>Unit Hours</td>
<td>16</td>
<td>Y</td>
</tr>
</tbody>
</table>

ARTY-C2-8003: Plan for operations

SUPPORTED MET(S):

<table>
<thead>
<tr>
<th>MCT 1.1.2</th>
<th>MCT 1.12.2</th>
<th>MCT 3.1.3.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCT 3.2.1</td>
<td>MCT 3.2.4</td>
<td>MCT 3.2.4.3</td>
</tr>
</tbody>
</table>

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The process which develops an order/plan to direct actions and focus subordinate activities toward accomplishing the mission.
CONDITION: Given Commander's Guidance, higher headquarters order/plan and staff.

STANDARD: To communicate the commander's intent, guidance, and decisions in a clear, useful form that is easily understood by those who must execute the order/plan.

EVENT COMPONENTS:
1. Determine time available.
2. Establish timeline for planning and preparation.
3. Determine planning process (MCP, R2P2, or other method).
4. Establish Operational Planning Team (OPT).
5. Conduct Problem Framing.
6. Conduct Course of Action (COA) development.
7. Conduct COA wargaming.
8. Conduct COA comparison and decision.
10. Conduct transition.
11. Implement feedback mechanisms.

REFERENCES: MCTP 3-10E Artillery Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
ARTY-C2-7003 BTRY-C2-6001 BTRY-C2-6002
RCKT-C2-6001 RCKT-C2-6002

ARTY-CSS-8001: Conduct Combat Service Support operations

SUPPORTED MET(S):
MCT 1.1.2 MCT 1.12.2 MCT 3.1.3.2
MCT 3.2.1 MCT 3.2.4 MCT 3.2.4.3

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

CONDITION: Given an operation order, commander's guidance, and a scheme of maneuver.

STANDARD: To ensure equipment and personnel sustainment in accordance with the commander's intent and priorities of support.

EVENT COMPONENTS:
1. Determine the logistics requirements.
2. Organize service support in a secure manner.
3. Maintain status of subordinate unit equipment.
4. Coordinate logistical support.
5. Coordinate resupply.
6. Direct recovery efforts, as required.
7. Conduct maintenance on organic equipment.
8. Prioritize maintenance efforts and replacements based on mission precedence.
9. Report logistics status to higher headquarters.
**REFERENCES:** MCWP 3-40 Logistics Operations

**CHAINED EVENTS:**

**INTERNAL SUPPORTING EVENTS:**
ARTY-C2-7001   BTRY-CSS-6001   RCKT-CSS-6001

**ARTY-FSPT-8001:** Conduct artillery planning as part of a fire support plan

**SUPPORTED MET(S):**
- MCT 1.1.2
- MCT 1.12.2
- MCT 3.1.3.2
- MCT 3.2.1
- MCT 3.2.4
- MCT 3.2.4.2

**EVALUATION-CODED:** YES  **SUSTAINMENT INTERVAL:** 6 months

**DESCRIPTION:** Fire support planning is the continuous and concurrent process of analyzing, allocating and scheduling fire support to integrate it with the maneuver forces and maximize combat power.

**CONDITION:** Given a MAGTF operation order/plan, a Ground Combat Element OPT, commander's guidance, and a scheme of maneuver.

**STANDARD:** To plan and coordinate artillery operations within an area of operations.

**EVENT COMPONENTS:**
1. Determine the requirements for artillery support and organization for combat.
2. Determine artillery ammunition requirements.
3. Develop the radar and sensor employment plan to support the area of operations.
4. Support the targeting process (D3A).
5. Provide the artillery estimate of supportability.
6. Recommend artillery positioning to support operations.
7. Assist with the development of Essential Fire Support Tasks.
8. Disseminate approved fire support tasks.
9. Publish field artillery support plan.

**REFERENCES:**
1. JP 3-09 Joint Fire Support
2. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
3. MCTP 3-10E Artillery Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
5. MCWP 3-31 Marine Air-Ground Task Force Fires

**CHAINED EVENTS:**

**INTERNAL SUPPORTING EVENTS:**
ARTY-OPS-7001   ARTY-OPS-7002   ARTY-OPS-7003
FSCC-DFST-4000   FSCC-DFST-4005   FSCC-DFST-4010
FSCC-DFST-4015   FSCC-DFST-4020
SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

ARTY-OPS-8001: Provide artillery support

SUPPORTED MET(S):

<table>
<thead>
<tr>
<th>MCT 1.1.2</th>
<th>MCT 1.12.2</th>
<th>MCT 3.1.3.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCT 3.2.1</td>
<td>MCT 3.2.4</td>
<td>MCT 3.2.4.3</td>
</tr>
</tbody>
</table>

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: A fire support plan is provided. The regiment will perform all actions necessary to provide artillery support.

CONDITION: Given an operation order, commander's guidance, and a fire support plan.

STANDARD: To achieve the desired effects outlined in the operations order.

EVENT COMPONENTS:
1. Recommend artillery organization for combat, positioning, and logistics to support current/future operations.
2. Coordinate artillery fires.
3. Participate in the targeting process.
4. Conduct counter-battery operations.
5. Conduct sensor operations.
6. Sustain the unit.

REFERENCES:
1. JP 3-02 Amphibious Operations
2. JP 3-09 Joint Fire Support
3. MCTP 3-10E Artillery Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
5. MCWP 3-31 Marine Air-Ground Task Force Fires
6. MCWP 3-42.1 Fire Support in MAGTF Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
ARYT-OPS-7001    ARTY-OPS-7002    ARTY-OPS-7003

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range
**ARTY-OPS-8002**: Conduct target acquisition operations

**SUPPORTED MET(S):**
- MCT 1.12.2
- MCT 3.1.3.2
- MCT 3.2.1
- MCT 3.2.4
- MCT 3.2.4.3

**EVALUATION-CODED**: YES  
**SUSTAINMENT INTERVAL**: 6 months

**DESCRIPTION**: The regiment provides both radar and sensor capabilities to the MAGTF by providing a Target Acquisition Platoon (TAP). Sensor capabilities includes, but is not limited to, survey, meteorological support, and acoustic ground sensors.

**CONDITION**: Given an operations order, a TAP, and associated equipment.

**STANDARD**: To provide target information to fire support agencies, and support commander’s information requirements.

**EVENT COMPONENTS**:
1. Conduct planning.
2. Task organize assets.
3. Position assets to support operations.
4. Execute assigned task(s).
5. Report acquisitions.
10. Standby for future tasks.

**REFERENCES**:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
3. MCTP 3-10E Artillery Operations

**CHAINED EVENTS**:

**INTERNAL SUPPORTING EVENTS**:
- ARTY-OPS-7003
- ARTY-OPS-7005
- ARTY-TAP-4001
- ARTY-TAP-4001
- TAP-OPS-5001
- TAP-OPS-5002
- TAP-OPS-5003

**SUPPORT REQUIREMENTS**:

**RANGE/TRAINING AREA**:
Facility Code 17420 Maneuver/Training Area, Heavy Forces

---

**ARTY-OPS-8003**: Conduct amphibious operations (L/S)

**SUPPORTED MET(S):**
- MCT 1.1.2
- MCT 1.12.2
- MCT 3.1.3.2
- MCT 3.2.1
- MCT 3.2.4
- MCT 3.2.4.2
DESCRIPTION: Full readiness and task completion can be achieved only through accomplishment of the event components as described within the events. Full amphibious readiness can only be achieved via embarked actions while underway aboard L-class amphibious shipping conducting combined surface and air activities. In the event that amphibious shipping availability unexpectedly is reduced to a level where full execution of the event components becomes impossible, alternate (shore based or shore-to-shore) event components for certain training events may be used to attain an alternatively acceptable level of amphibious training readiness. Only in this amphibious shipping resource constrained situation will an alternatively acceptable level of amphibious training readiness be achieved through a combination of primary and alternate event components. The statement, "Alternate Event Component Available" is listed at the end of each event component where an alternate means of training is acceptable. Details are contained within the Administrative Instructions. Additionally, units should use the alternate event components as preparation for completing the primary event components.

CONDITION: Given a TO Artillery Regiment and required attachments, Navy and Marine Corps supporting elements (Amphibious Ship with LFOC and SACC, Embarked Navy Amphibious Staff, Landing/Assault Craft, Assault Support Aircraft) operating with a Division Higher Headquarters, ACE, and LCE with a hostile or potentially hostile enemy situation, a higher headquarters operations order to conduct an amphibious operation, and commander's guidance.

STANDARD: To accomplish the mission and meet the commander's intent.

EVENT COMPONENTS:
1. Conduct integrated planning with Navy and Marine Corps supporting elements.
2. Conduct pre-landing operations, as required.
4. Support the creation of a landing diagram.
5. Determine Landing Force scheme of maneuver and fire support plan.
6. Plan artillery positions, routes, and beach exits for artillery unit movement and resupply.
7. Support the development of a ship-to-shore movement plan.
8. Schedule battery advance parties to land in the initial waves of the ship to shore movement plan.
9. Support the creation Landing Force Serial Assignment Table consisting of the Serial Assignment Table (Surface), and Assault Support Serial Assignment Table (ASSAT).
10. Coordinate the scheduling of ship to shore movement of artillery ammunition resupply.
11. Conduct embarkation of at least one battalion and the regimental headquarters. (Alternate Event Component Available- 10a)
12. Conduct rehearsals.
13. Coordinate with Intelligence, Surveillance, and Reconnaissance (ISR) assets to update intelligence picture.
14. Disseminate intelligence updates to subordinate units.
15. Assemble, stage, and prepare landing/ craft teams and assault support teams.
16. Conduct ship to shore movement with Landing/ Craft and Assault Support Aircraft for at least two battalions and the regimental headquarters.
17. Execute artillery portion of Landing Force scheme of maneuver; coordinate and adjust the employment of forces as the situation develops and changes.

18. Where applicable, coordinate with the Landing Force Support Party (LFSF), the Beach Operations Group (BOG), and the port operations group (POG) for Reception, Staging, Onward, and Integration (RSO&I) of follow-on forces.

19. Coordinate logistics support for landing elements.

20. Accomplish mission objectives based on the commander's intent.

21. Process casualties and detainees, as required.

REFERENCES:
1. ATP-38 Amphibious Operations
2. JP 3-02 Amphibious Operations
3. JP 3-02.1 Amphibious Embarkation and Debarkgation
4. MCDP 1-0 Marine Corps Operations
5. MCDP 3 Expeditionary Operations
6. MCTP 13-10E Ship-to-Shore Movement
7. MCTP 3-01B Helicopterborne Operations
8. MCTP 3-10E Artillery Operations
9. MCWP 3-10 MAGTF Ground Operations
10. MCWP 3-31 Marine Air-Ground Task Force Fires

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
ARTY-OPS-7002 ARTY-OPS-7004

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

<table>
<thead>
<tr>
<th>SIMULATED</th>
<th>SUITABILITY</th>
<th>SIMULATOR</th>
<th>UNIT OF MEASURE</th>
<th>HOURS</th>
<th>PM</th>
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<tr>
<td>Yes</td>
<td>L/S</td>
<td>MTWS</td>
<td>Unit Hours</td>
<td>0</td>
<td>Y</td>
</tr>
</tbody>
</table>

RANGE/TRAINING AREA:
Facility Code 17411 Maneuver/Training Area, Amphibious Forces

AIRCRAFT:
-Assault Support Aircraft (CH-53, MV-22)

EQUIPMENT:
-L-Class Amphibious Ship with LFOC and SACC
-Landing Craft (LCU and LCAC)

UNITS/PERSOMNEL:
-Embarked Navy amphibious staff

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Alternate Event Components: 10a. Conduct embarkation of representative elements from one battalions batteries and the regimental headquarters to at least a pier-side L-class amphibious ship and develop of a full embarkation plan for validation by naval and combat cargo planners. 17a. Simulating embarked procedures, conduct both surface and air shore to shore movement through the use of Landing and Assault Support Aircraft with representative elements from at least one battalion and the regimental headquarters.
ARTILLERY T&R MANUAL

CHAPTER 4

7000 LEVEL COLLECTIVE EVENTS

<table>
<thead>
<tr>
<th>PARAGRAPH</th>
<th>PAGE</th>
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</thead>
<tbody>
<tr>
<td>PURPOSE</td>
<td>4000</td>
</tr>
<tr>
<td>EVENT CODING</td>
<td>4001</td>
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<td>INDEX OF 7000-LEVEL BATTALION COLLECTIVE EVENTS</td>
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<td>4003</td>
</tr>
</tbody>
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ARTILLERY T&R MANUAL

CHAPTER 4

7000 LEVEL COLLECTIVE EVENTS

4000. PURPOSE. Chapter 4 contains 7000 level collective training and readiness (T&R) events for the artillery community.

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-XXXX. This chapter utilizes the following methodology:

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTY</td>
<td>Artillery</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>C2</td>
<td>Command and Control</td>
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<tr>
<td>COND</td>
<td>Conditioning</td>
</tr>
<tr>
<td>CSS</td>
<td>Combat Service Support</td>
</tr>
<tr>
<td>FSPT</td>
<td>Fire Support</td>
</tr>
<tr>
<td>OPS</td>
<td>Operations</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7000</td>
<td>Battalion</td>
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</tbody>
</table>

4002. INDEX OF 7000-LEVEL BATTALION COLLECTIVE EVENTS

<table>
<thead>
<tr>
<th>Event Code</th>
<th>E-Coded</th>
<th>Event</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTY-C2-7001</td>
<td>YES</td>
<td>Establish a Command Post</td>
<td>4-3</td>
</tr>
<tr>
<td>ARTY-C2-7002</td>
<td>YES</td>
<td>Conduct Combat Operations Center operations (L/S)</td>
<td>4-4</td>
</tr>
<tr>
<td>ARTY-C2-7003</td>
<td>YES</td>
<td>Plan for operations</td>
<td>4-4</td>
</tr>
<tr>
<td>ARTY-COND-7001</td>
<td>NO</td>
<td>Conduct a forced march</td>
<td>4-5</td>
</tr>
<tr>
<td>ARTY-CSS-7001</td>
<td>NO</td>
<td>Conduct Combat Service Support operations</td>
<td>4-6</td>
</tr>
<tr>
<td>ARTY-FSPT-7001</td>
<td>YES</td>
<td>Conduct artillery planning as part of a fire support plan</td>
<td>4-7</td>
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<tr>
<td>ARTY-OPS-7001</td>
<td>YES</td>
<td>Provide artillery support</td>
<td>4-8</td>
</tr>
<tr>
<td>ARTY-OPS-7002</td>
<td>YES</td>
<td>Support amphibious operations</td>
<td>4-9</td>
</tr>
<tr>
<td>ARTY-OPS-7003</td>
<td>YES</td>
<td>Conduct sensor operations</td>
<td>4-10</td>
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<tr>
<td>ARTY-OPS-7004</td>
<td>YES</td>
<td>Conduct amphibious operations (L/S)</td>
<td>4-11</td>
</tr>
</tbody>
</table>

4-2 Enclosure (1)
4003. 7000-LEVEL BATTALION COLLECTIVE EVENTS

ARTY-C2-7001: Establish a Command Post

SUPPORTED MET(S):
- MCT 1.12.2
- MCT 3.1.3.2
- MCT 3.2.1
- MCT 3.2.4
- MCT 3.2.4.3

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The artillery battalion command post provides for intelligence operations, CSS, and ground fires. To accomplish these tasks, the headquarters of the artillery unit may be organized into three echelons: forward, main, and rear. Any one of the three echelons may function as the command post. At any one time, there is only one command post. -MCWP 3-1 GROUND OPERATIONS - This event requires the unit's staff to exercise uninterrupted command and control of operations while displacing command posts (CP) throughout the area of operations.

CONDITION: Given supporting attachments, a battalion TO&E, an operations order and commander's guidance.

STANDARD: To integrate and establish systems, personnel and processes to support command and control of operations.

EVENT COMPONENTS:
1. Organize staff sections for forward, main and rear.
2. Establish security.
3. Establish Combat Operations Center (COC) to include a Fire Direction Center (FDC) and Target Processing Center, as required.
4. Establish communication with Higher, Adjacent, Subordinate and Supporting (HASS) units.
5. Establish Administration and Logistics Operations Center (ALOC).
6. Establish systems control.
7. Plan Information Exchange Requirements (IER).
8. Establish displacement procedures.
9. Maintain continuity of operations.

REFERENCES:
1. MCTP 3-10E Artillery Operations
2. MCWP 3-10 MAGTF Ground Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
- BTRY-C2-6001
- RCKT-C2-6001

ARTY-C2-7002: Conduct Combat Operations Center operations (L/S)
SUPPORTED MET(S):
MCT 1.12.2   MCT 3.1.3.2   MCT 3.2.1
MCT 3.2.4   MCT 3.2.4.3

EVALUATION-CODED:  YES  SUSTAINMENT INTERVAL:  6 months

DESCRIPTION: The Combat Operations Center (COC) is the location where the aggregation and dissemination of information provides the commander and staff with situational awareness which facilitates the decision making process.

CONDITION: Given an established command post, operations order, and supporting attachments.

STANDARD: To integrate systems, personnel and processes to execute command and control of operations.

EVENT COMPONENTS:
1. Organize staff.
2. Establish COC watch.
3. Maintain battle rhythm.
4. Coordinate movement of forces with HASS units.
5. Execute Information Management procedures.
6. Maintain communications with HASS units.
7. Conduct battle drills.
10. Synchronize staff section operations.

REFERENCES:
1. MCDP 1-0 Marine Corps Operations
2. MCTP 3-10E Artillery Operations
3. MCWP 3-10 MAGTF Ground Operations

CHAINEED EVENTS:

INTERNAL SUPPORTING EVENTS:
BTRY-OPS-6001   BTRY-OPS-6002

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:
<table>
<thead>
<tr>
<th>SIMULATED</th>
<th>SUITABILITY</th>
<th>SIMULATOR</th>
<th>UNIT OF MEASURE</th>
<th>HOURS</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>L/S</td>
<td>MTWS</td>
<td>Unit Hours</td>
<td>24</td>
<td>Y</td>
</tr>
</tbody>
</table>

ARTY-C2-7003: Plan for operations

SUPPORTED MET(S):
MCT 1.1.2   MCT 1.12.2   MCT 3.1.3.2
MCT 3.2.1   MCT 3.2.4   MCT 3.2.4.3

EVALUATION-CODED:  YES  SUSTAINMENT INTERVAL:  6 months
DESCRIPTION: The process which develops an order/plan to direct actions and focus subordinate activities toward accomplishing the mission.

CONDITION: Given Commander's Guidance, higher headquarters order/plan and staff.

STANDARD: To communicate the commander's intent, guidance, and decisions in a clear, useful form that is easily understood by those who must execute the order/plan.

EVENT COMPONENTS:
1. Determine time available.
2. Establish timeline for planning and preparation.
3. Determine planning process (MCPF, R2P2, or other method).
4. Establish Operational Planning Team (OPT).
5. Conduct Problem Framing.
6. Conduct Course of Action (COA) development.
7. Conduct COA wargaming.
8. Conduct COA comparison and decision.
10. Conduct transition.
11. Implement feedback mechanisms.

REFERENCES: MCTP 3-10E Artillery Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
BTRY-C2-6002 RCKT-C2-6002

ARTY-COND-7001: Conduct a forced march

SUPPORTED MET(S): MCT 1.12

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 24 months

DESCRIPTION: MCO 3501.1 Marine Corps Combat Readiness Evaluation (MCCRE) directs non-load bearing units to incorporate the execution of this event into their respective unit MCCRE within the following parameters: Forced march will be integrated as part of the MCCRE, but may be executed as a stand-alone event. Design of the integration shall be directed by the Marine Division Commander.

CONDITION: Given a unit carrying a fighting load of 55 pounds (+/- 10%) with additional organic weapons and mission essential equipment.

STANDARD: To move 15 kilometers in a time limit of 4 hours, with 95% of the force remaining mission capable.

EVENT COMPONENTS:
1. Determine unit capabilities and limitations.
2. Ensure proper execution of a progressive unit hike program.
3. Ensure proper execution of Pre-Combat Checks (PCCs) and Pre-
Combat Inspections (PCIs).
4. Execute forced march.
5. Conduct follow-on actions.

REFERENCES:
1. ATP 3-21.18 Foot Marches
2. MCO 3501.1 Marine Corps Combat Readiness Evaluation (MCCRE)
3. MCO 3570.1 RANGE SAFETY
4. MCRP 3-30.7 Commander's Tactical Handbook
5. MCRP 8-10B.4 Marine Physical Readiness Training for Combat
6. MCRP 8-10B.8 Marine Troop Leader's Guide
7. MCTP 8-10A Unit Training Management Guide
8. MCTP 8-10B How to Conduct Training

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS: 08XX-COND-1001

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. This foot movement can be incorporated into tactical training scenarios or executed as a stand-alone event.
2. The defined loads and weights in the tables provided in NAVMC 3500.44 Infantry Training and Readiness Manual, Appendix E are to be used in training as a benchmark standard as they reflect the most likely sets of items, and their associated weight, carried in actual combat operations. In the event that the items in the table are not available for training, items of similar weight may be substituted in order to meet the event standard. The unit commander still retains the authority to modify the actual load requirements based on their assessment of the situation.

ARTY-CSS-7001: Conduct Combat Service Support operations

SUPPORTED MET(S):

| MCT 1.1.2 | MCT 1.12.2 | MCT 3.1.3.2 |
| MCT 3.2.1 | MCT 3.2.4 | MCT 3.2.4.3 |

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 12 months

CONDITION: Given an operation order, commander's guidance, and a scheme of maneuver.

STANDARD: To ensure equipment and personnel sustainment in accordance with the commander's intent and priorities of support.

EVENT COMPONENTS:
1. Determine the logistics requirements.
2. Organize service support in a secure manner.
3. Maintain status of subordinate unit equipment.
4. Coordinate logistical support.
5. Coordinate resupply.
6. Direct recovery efforts, as required.
7. Conduct maintenance on organic equipment.
8. Prioritize maintenance efforts and replacements based on mission precedence and Higher Headquarters (HHQ) guidance.
9. Report logistics status to HHQ.

REFERENCES:
1. MCTP 3-40B Tactical-Level Logistics
2. MCWP 3-40 Logistics Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
BTRY-CSS-6001   RCKT-CSS-6001

ARTY-FSPT-7001: Conduct artillery planning as part of a fire support plan

SUPPORTED MET(S):

| MCT 1.12.2 | MCT 3.2.1 | MCT 3.2.1.3 |
| MCT 3.2.4 | MCT 3.2.4.3 |

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: Fire support planning is the continuous and concurrent process of analyzing, allocating and scheduling fire support to integrate it with the maneuver forces and maximize combat power.

CONDITION: Given an operation order/plan, an operational planning team (OPT), commander's guidance, and a scheme of maneuver.

STANDARD: To plan and coordinate artillery operations within an area of operations.

EVENT COMPONENTS:
1. Determine the requirements for artillery support.
2. Determine artillery ammunition requirements.
3. Develop the radar employment plan to support the area of operations, as required.
4. Develop the sensor employment plan to support the area of operations.
5. Provide the artillery estimate of supportability.
6. Recommend artillery positioning to support operations.
7. Assist with the development of essential fire support tasks (EFST), as required.
8. Disseminate approved fire support tasks.
9. Publish field artillery support plan.

REFERENCES:
1. JP 3-02 Amphibious Operations
2. JP 3-09 Joint Fire Support
3. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
4. MCTP 3-10E Artillery Operations
5. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
6. MCWP 3-31 Marine Air-Ground Task Force Fires
CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
BTRY-C2-6002    RCKT-C2-6002

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
Simulation of most staff-level operations is possible via CPX, however the preferred option is live-fire.
Not applicable to HIMARS battalions.

ARTY-OPS-7001: Provide artillery support

SUPPORTED MET(S):
MCT 1.1.2    MCT 1.12.2    MCT 3.1.3.2
MCT 3.2.1    MCT 3.2.4    MCT 3.2.4.3

EVALUATION-CODED: YES    SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: A fire support plan is provided. The battalion will perform all actions necessary to provide artillery support.

CONDITION: Given an operation order, commander's guidance, and a fire support plan.

STANDARD: To achieve the desired effects outlined in the operations order.

EVENT COMPONENTS:
1. Plan for operations.
2. Position forces to mass fires in support of operations.
3. Conduct sensor operations.
4. Execute planned artillery fires.
5. Conduct counter-battery operations, as required.
6. Execute fires on targets of opportunity.
7. Sustain the unit.

REFERENCES:
1. JP 3-09 Joint Fire Support
2. MCTP 3-10E Artillery Operations
3. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
4. MCWP 3-31 Marine Air-Ground Task Force Fires

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
BTRY-OPS-6001    BTRY-OPS-6002
SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

ARTY-OPS-7002: Support amphibious operations

SUPPORTED MET(S):
MCT 1.1.2  MCT 1.12.2  MCT 3.2.1  MCT 3.2.4

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 12 months

DESCRIPTION: The command has been alerted to support a maneuver force. The supported force's OPORDER or OPLAN has been received. The commander has issued his guidance that permits planning to proceed per doctrine. Intelligence information, transportation means and methods of supply have been determined. The staff conducts all actions necessary to alert subordinate units, plan, deploy, and execute an amphibious operation. This event also applies to expeditionary operations.

CONDITION: Given an operations order.

STANDARD: In order to provide fire support and fires planning guidance during an amphibious operation in accordance with JP 3-02 Amphibious Operations.

EVENT COMPONENTS:
1. Conduct planning.
2. Prepare the Artillery fire plan.
3. Prepare the staging plan.
4. Conduct embarkation.
5. Conduct rehearsals.
6. Conduct debarkation/assault.

REFERENCES:
1. ATP-38 Amphibious Operations
2. JP 3-02 Amphibious Operations
3. MCTP 3-10E Artillery Operations
4. MCWP 3-31 Marine Air-Ground Task Force Fires

CHAINED EVENTS:

INTERNAL SUPPORTED EVENTS: ARTY-FSPT-8001

INTERNAL SUPPORTING EVENTS:
BTRY-OPS-6001  BTRY-OPS-6002

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17411 Maneuver/Training Area, Amphibious Forces
Facility Code 17420 Maneuver/Training Area, Heavy Forces
ARTY-OPS-7003: Conduct sensor operations

SUPPORTED MET(S):
MCT 1.12.2   MCT 3.2.4

EVALUATION-CODED: YES   SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The battalion sensor section performs Position Area Survey to support the firing battery's emplacement; as well as providing a meteorological operations capability.

CONDITION: Given an operations order, commander's intent, Essential Field Artillery Tasks, and a sensor section with associated table of equipment.

STANDARD: To provide accurate meteorological data and common grid.

EVENT COMPONENTS:
1. Conduct planning.
2. Task organize assets.
3. Position assets to support operations.
4. Perform target area survey.
5. Perform Connection Area Survey.
6. Conduct meteorological operations.
7. Establish declination stations, as required.
8. Submit reports, as required.
10. Standby for future tasks.

REFERENCES:
1. DMA TM 8358.1 Datums, Ellipsoids, Grids and Grid Reference Systems
2. DMA TR 8350.2 DoD World Geodetic System 1984
3. MCRP 3-10E.6 Marine Artillery Survey Operations
4. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
5. MCTP 3-10E Artillery Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS: TAP-OPS-5002

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces

ARTY-OPS-7004: Conduct amphibious operations (L/S)

SUPPORTED MET(S):
MCT 1.1.2   MCT 1.12.2   MCT 3.1.3.2
MCT 3.2.1   MCT 3.2.4   MCT 3.2.4.3

EVALUATION-CODED: YES   SUSTAINMENT INTERVAL: 12 months
DESCRIPTION: Full readiness and task completion can be achieved only through accomplishment of the event components as described within the events. Full amphibious readiness can only be achieved via embarked actions while underway aboard L-class amphibious shipping conducting combined surface and air activities. In the event that amphibious shipping availability unexpectedly is reduced to a level where full execution of the event components becomes impossible, alternate (shore based or shore-to-shore) event components for certain training events may be used to attain an alternatively acceptable level of amphibious training readiness. Only in this amphibious shipping resource constrained situation will an alternatively acceptable level of amphibious training readiness be achieved through a combination of primary and alternate event components. The statement, "Alternate Event Component Available" is listed at the end of each event component where an alternate means of training is acceptable. Details are contained within the Administrative Instructions. Additionally, units should use the alternate event components as preparation for completing the primary event components.

CONDITION: Given a TO Artillery Bn and required attachments, Navy and Marine Corps supporting elements (Amphibious Ship with LFOC and SACC, Embarked Navy Amphibious Staff, Landing/Assault Craft, Assault Support Aircraft) operating with a RLT or Artillery Regiment Higher Headquarters, ACE, and LCE with a hostile or potentially hostile enemy situation, a higher headquarters operations order to conduct an amphibious operation, and commander's guidance.

STANDARD: To accomplish the mission and meet the commander's intent.

EVENT COMPONENTS:
1. Conduct integrated planning with Navy and Marine Corps supporting elements.
2. Conduct pre-landing operations, as required.
4. Support the creation of a landing diagram.
5. Determine Landing Force scheme of maneuver and fire support plan.
6. Plan artillery positions, routes, and beach exits for artillery unit movement and resupply.
7. Support the development of a ship-to-shore movement plan.
8. Schedule battery advance parties to land in the initial waves of the ship to shore movement plan.
9. Support the creation Landing Force Serial Assignment Table consisting of the Serial Assignment Table (Surface), and Assault Support Serial Assignment Table (ASSAT).
10. Coordinate the scheduling of ship to shore movement of artillery ammunition resupply.
11. Conduct embarkation of at least two batteries and the battalion headquarters. (Alternate Event Component Available- 10a).
12. Conduct rehearsals.
13. Coordinate with Intelligence, Surveillance, and Reconnaissance (ISR) assets to update intelligence picture.
14. Disseminate intelligence updates to subordinate units.
15. Assemble, stage, and prepare anding/ craft teams and assault support teams.
16. Conduct ship to shore movement with Landing/ Craft and Assault Support Aircraft for at least two batteries and the battalion headquarters.
17. Execute artillery portion of Landing Force scheme of maneuver; coordinate and adjust the employment of forces as the situation develops and changes.
18. Where applicable, coordinate with the Landing Force Support Party (LFSP), the Beach Operations Group (BOG), and the port operations group (POG) for Reception, Staging, Onward, and Integration (RSO&I) of follow-on forces.
19. Coordinate logistics support for landing elements.
20. Accomplish mission objectives based on the commander's intent.
21. Process casualties and detainees, as required.
22. Conduct withdrawal from the objective, as required.

REFERENCES:
1. JP 3-02 Amphibious Operations
2. JP 3-02.1 Amphibious Embarkation and Debarkation
3. MCDP 1-0 Marine Corps Operations
4. MCDP 3 Expeditionary Operations
5. MCTP 13-10E Ship-to-Shore Movement
6. MCTP 3-01B Helicopterborne Operations
7. MCTP 3-10E Artillery Operations
8. MCWP 3-10 MAGTF Ground Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
BTRY-OPS-6001 BTRY-OPS-6002

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

<table>
<thead>
<tr>
<th>SIMULATED</th>
<th>SUITABILITY</th>
<th>SIMULATOR</th>
<th>UNIT OF MEASURE</th>
<th>HOURS</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>L/S</td>
<td>MTWS</td>
<td>Unit Hours</td>
<td>0</td>
<td>Y</td>
</tr>
</tbody>
</table>

RANGE/TRAINING AREA:
Facility Code 17411 Maneuver/Training Area, Amphibious Forces

AIRCRAFT: -Assault Support Aircraft (CH-53, MV-22)

EQUIPMENT:
-L-Class Amphibious Ship with LFOC and SACC
-Landing Craft (LCU and LCAC)

UNITS/PERSONNEL: -Embarked Navy amphibious staff

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Alternate Event Components: 10a. Conduct embarkation of representative elements from one battalions batteries and the regimental headquarters to at least a pier-side L-class amphibious ship and develop of a full embarkation plan for validation by naval and combat cargo planners. 17a. Simulating embarked procedures, conduct both surface and air shore to shore movement through the use of Landing and Assault Support Aircraft with representative elements from at least one battalion and the regimental headquarters.
ARTY-OPS-7005: Conduct TAP operations

SUPPORTED MET(S):
MCT 1.1.2.3   MCT 3.2.4.3   MCT 3.2.4.5

EVALUATION-CODED: YES    SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The regimental HQ Battery Target Acquisition Platoon (TAP) provides both RADAR and Sensor capabilities to the MAGTF.

CONDITION: Given a target acquisition platoon.

STANDARD: To provide the MAGTF RADAR and Sensor capabilities

EVENT COMPONENTS:
1. Provide counter-fire capabilities to the MAGTF.
2. Provide sensor capabilities to the MAGTF.

REFERENCES:
1. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. MCRP 3-16.25 Field Artillery Target Acquisition

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
ARTY-TAP-4001   TAP-OPS-5001   TAP-OPS-5003

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
## CHAPTER 5

### 6000 LEVEL COLLECTIVE EVENTS

<table>
<thead>
<tr>
<th>Paragraph</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURPOSE</td>
<td>5000</td>
</tr>
<tr>
<td>EVENT CODING</td>
<td>5001</td>
</tr>
<tr>
<td>INDEX OF 6000-LEVEL COLLECTIVE EVENTS</td>
<td>5002</td>
</tr>
<tr>
<td>6000-LEVEL CANNON BATTERY COLLECTIVE EVENTS</td>
<td>5003</td>
</tr>
<tr>
<td>6000-LEVEL ROCKET BATTERY COLLECTIVE EVENTS</td>
<td>5004</td>
</tr>
</tbody>
</table>
CHAPTER 5

6000 LEVEL COLLECTIVE EVENTS

5000. PURPOSE. Chapter 5 contains 6000 level collective training and readiness (T&R) events for the artillery community.

5001. EVENT CODING. 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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTRY</td>
<td>Cannon Battery</td>
</tr>
<tr>
<td>RCKT</td>
<td>Rocket Battery</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSS</td>
<td>Combat Service Support</td>
</tr>
<tr>
<td>C2</td>
<td>Command and Control</td>
</tr>
<tr>
<td>OPS</td>
<td>Operations</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6000</td>
<td>Battery</td>
</tr>
</tbody>
</table>

5002. INDEX OF 6000-LEVEL COLLECTIVE EVENTS

<table>
<thead>
<tr>
<th>Event Code</th>
<th>E-Coded</th>
<th>Event</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTRY-C2-6001</td>
<td>YES</td>
<td>Establish a battery operations center</td>
<td>5-3</td>
</tr>
<tr>
<td>BTRY-C2-6002</td>
<td>YES</td>
<td>Plan for operations</td>
<td>5-3</td>
</tr>
<tr>
<td>BTRY-CSS-6001</td>
<td>YES</td>
<td>Sustain the battery</td>
<td>5-4</td>
</tr>
<tr>
<td>BTRY-OPS-6001</td>
<td>YES</td>
<td>Execute fire mission</td>
<td>5-5</td>
</tr>
<tr>
<td>BTRY-OPS-6002</td>
<td>NO</td>
<td>Conduct an emergency fire mission</td>
<td>5-6</td>
</tr>
<tr>
<td>BTRY-OPS-6003</td>
<td>YES</td>
<td>Conduct a tactical march</td>
<td>5-7</td>
</tr>
<tr>
<td>BTRY-OPS-6004</td>
<td>YES</td>
<td>Occupy a position</td>
<td>5-8</td>
</tr>
<tr>
<td>BTRY-OPS-6005</td>
<td>NO</td>
<td>Conduct a hasty displacement</td>
<td>5-8</td>
</tr>
<tr>
<td>BTRY-OPS-6006</td>
<td>NO</td>
<td>Conduct an emergency displacement</td>
<td>5-9</td>
</tr>
<tr>
<td>BTRY-OPS-6007</td>
<td>NO</td>
<td>Conduct reconnaissance, selection and preparation of a position</td>
<td>5-10</td>
</tr>
<tr>
<td>BTRY-OPS-6008</td>
<td>YES</td>
<td>Conduct local security</td>
<td>5-11</td>
</tr>
</tbody>
</table>
5003. 6000-LEVEL CANNON BATTERY COLLECTIVE EVENTS

BTRY-C2-6001: Establish a battery operations center

SUPPORTED MET(S):

- MCT 1.12.2
- MCT 3.1.3.2
- MCT 3.2.1
- MCT 3.2.4
- MCT 3.2.4.3

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 6 months

CONDITION: Given supporting attachments, a battery TO&E, an operations order and commander's guidance.

STANDARD: To integrate and establish systems, personnel and processes to support command and control of operations.

EVENT COMPONENTS:
1. Task organize personnel.
2. Establish security.
3. Establish battery operations center (BOC).
4. Establish communication with Higher, Adjacent, Subordinate and Supporting (HASS) units.
5. Plan Information Exchange Requirements (IER).
7. Maintain continuity of operations.

REFERENCES:
1. MCTP 3-10E Artillery Operations
2. MCWP 3-10 MAGTF Ground Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:

- CANN-OPS-5002
- CANN-OPS-5003

BTRY-C2-6002: Plan for operations

SUPPORTED MET(S):

- MCT 1.1.2
- MCT 3.1.3.2
- MCT 3.2.1
- MCT 3.2.4
- MCT 3.2.4.3

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The process which develops an order/plan to direct actions and focus subordinate activities toward accomplishing the mission.
CONDITION: Given Commander's Guidance, higher headquarters order/plan and key leaders.

STANDARD: To communicate the commander's intent, guidance, and decisions in a clear, useful form that is easily understood by those who must execute the order/plan.

EVENT COMPONENTS:
1. Determine time available.
2. Establish timeline for planning and preparation.
3. Beginning planning.
4. Arrange reconnaissance.
5. Make reconnaissance.
6. Complete planning.
7. Issue the order.

REFERENCES:
1. MCTP 3-10E Artillery Operations
2. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
CANN-OPS-5002 CANN-OPS-5003

BTRY-CSS-6001: Sustain the battery

SUPPORTED MET(S):
MCT 1.1.2 MCT 3.2.1 MCT 3.2.4

EVALUATION-CODED: YES SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: The battery is conducting tactical operations. Battery personnel will conduct all actions necessary to maintain equipment and conduct resupply.

CONDITION: Given a firing battery and an operation order.

STANDARD: To ensure the battery is able to conduct continuous 24-hour operations.

EVENT COMPONENTS:
1. Identify personnel requirements.
2. Allocate personnel.
3. Conduct preventative maintenance.
4. Maintain all required classes of supply.
5. Coordinate logistics movement.
6. Provide medical services.
7. Conduct corrective maintenance.

REFERENCES: MCTP 3-10E Artillery Operations
CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS: CANN-CSS-5001

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Units shall be evaluated in day and night conditions.
2. Units shall be evaluated in CBRN environment.

BTRY-OPS-6001: Execute fire mission

SUPPORTED MET(S):
MCT 1.12.2     MCT 3.2.4     MCT 3.2.4.2

EVALUATION-CODED: YES     SUSTAINMENT INTERVAL: 3 months

CONDITION: Given a call for fire.

STANDARD: To achieve desired effects on target.

EVENT COMPONENTS:
1. Receive call for fire.
2. Process the call for fire.
3. Conduct a fire mission.

REFERENCES:
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
2. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
3. MCTM 10407C-10/1 Operators Manual for Howitzer, Medium, 155mm, M777A2
4. MCTP 3-10E Artillery Operations
5. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
6. MCWP 3-16.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS: CANN-OPS-5005

SUPPORT REQUIREMENTS:

ORDNANCE:

<table>
<thead>
<tr>
<th>DODIC</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>D529 Projectile, 155mm High Explosive M795</td>
<td>192 projectiles per Battery</td>
</tr>
<tr>
<td>DA12 Charge, Propellant 155mm MACS M231</td>
<td>96 charges per Battery</td>
</tr>
<tr>
<td>DA13 Charge, Propellant 155mm MACS M232</td>
<td>192 charges per Battery</td>
</tr>
<tr>
<td>N340 Fuze, Point Detonating M739/M739A1</td>
<td>192 fuzes per Battery</td>
</tr>
</tbody>
</table>
N523 Primer, Percussion M82 192 primers per Battery

ORDNANCE NOTES:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

BTRY-OPS-6002: Conduct an emergency fire mission

SUPPORTED MET(S):
MCT 1.12.2  MCT 3.2.4  MCT 3.2.4.2

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: The battery receives a call for fire during a tactical march. Lead vehicle is between 500 and 700 meters from a suitable firing position. Battery expeditiously occupies a position and conducts an adjust fire (fuze quick) fire mission.

CONDITION: Given a call for fire during a tactical march, without prior reconnaissance or preparation of a position.

STANDARD: To execute the call for fire within a time limit of 13 minutes and a maximum of 3 rounds for adjustment.

EVENT COMPONENTS:
1. Acknowledge receipt of fire mission at FDC.
2. Halt convoy.
3. Establish local security.
4. Process fire mission through the FDC.
5. Determine (convoy leader) best method of lay (when degraded).
7. Maintain security during the emergency fire mission.
8. Execute the mission.
9. Reassemble convoy.
10. Continue tactical movement.

REFERENCES:
1. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery
2. MCTP 3-10E Artillery Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS: CANN-OPS-5008

SUPPORT REQUIREMENTS:

ORDNANCE:

DODIC  QUANTITY
D529 Projectile, 155mm High Explosive M795 192 projectiles per Battery
DA12 Charge, Propellant 155mm MACS M231 96 charges per Battery
DA13 Charge, Propellant 155mm MACS M232 192 charges per Battery
N340 Fuze, Point Detonating M739/M739A1 192 fuzes per Battery
N523 Primer, Percussion M82 192 primers per Battery

**RANGE/TRAINING AREA:**
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. Time Starts: When battery receives the target location in the CFF.
2. Time Stops: Last round fired in FFE.

**BTRY-OPS-6003:** Conduct a tactical march

**SUPPORTED MET(S):**
MCT 1.1.2.3  MCT 3.2.1  MCT 3.2.4

**EVALUATION-CODED:** YES  **SUSTAINMENT INTERVAL:** 3 months

**DESCRIPTION:** Conduct a deliberate movement between an established position to an alternate position based off the tactical situation.

**CONDITION:** Given a displaced battery and a movement order.

**STANDARD:** To move the battery to a specified position in accordance with the order.

**EVENT COMPONENTS:**
1. Issue the convoy order.
2. Conduct reconnaissance, selection, and preparation of position, as required.
3. On order, execute the convoy order.
4. Coordinate with higher and adjacent units.
5. Submit required reports.
6. Occupy the position.

**REFERENCES:**
1. MCTP 3-10E Artillery Operations
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery
   Cannon Battery
3. ST 6-50-20 Battery Executive Officer's/Platoon Leader's Handbook

**CHAINED EVENTS:**

**INTERNAL SUPPORTING EVENTS:**
CANN-OPS-5001

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17420 Maneuver/Training Area, Heavy Forces
**BTRY-OPS-6004:** Occupy a position

**SUPPORTED MET(S):**
- MCT 1.1.2
- MCT 3.2.1
- MCT 3.2.4

**EVALUATION-CODED:** YES  **SUSTAINMENT INTERVAL:** 3 months

**CONDITION:** Given an operations order, a position which has been reconnoitered, selected, and prepared by the advanced party, and the main body located the pickup point.

**STANDARD:** To establish a firing capability.

**EVENT COMPONENTS:**
1. Cross pickup point at specified time.
2. Maintain security.
3. Execute track plan.
4. Position vehicle(s) to allow for rapid displacement.
5. Occupy designated sites.
6. Determine site-to-crest.
7. Transmit Firing Capability (FIRECAP) Report to higher headquarters.

**REFERENCES:** MCTP 3-10E Artillery Operations

**CHAINED EVENTS:**

**INTERNAL SUPPORTING EVENTS:** CANN-OPS-5003

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. Time Starts: The first howitzer has stopped in its designated gun position.
2. Time Stops: A minimum of 1 gun FIRECAP sent to higher headquarters.
3. Time standard is within 11 minutes during daylight or 19 minutes in darkness.

**BTRY-OPS-6005:** Conduct a hasty displacement

**SUPPORTED MET(S):**
- MCT 1.1.2
- MCT 3.2.1
- MCT 3.2.4

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**DESCRIPTION:** The tactical situation requires the battery to conduct a displacement due to an imminent attack by the threat. The battery conducts all actions necessary to displace according to the tactical situation.
CONDITION: Given a battery in position and providing fires.

STANDARD: To ensure the movement is conducted within 8 minutes in daylight or 12 minutes in darkness, displacing all gear except ammunition and dunnage.

EVENT COMPONENTS:
1. Conduct planning.
2. Task organize forces.
3. Issue the order.
4. Displace the battery.
5. Conduct tactical march.

REFERENCES: MCTP 3-10E Artillery Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS: CANN-OPS-5006

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17650 Field Artillery Direct Fire Range
- Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Time Starts: Displacement order given to battery.
2. Time Stops when the last vehicle starts to move.

BTRY-OPS-6006: Conduct an emergency displacement

SUPPORTED MET(S):
- MCT 1.12.2
- MCT 3.2.1
- MCT 3.2.4

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: A tactical situation is presented which requires the battery to conduct an emergency displacement.

CONDITION: Given a battery in position, conducting battery operations, which comes under attack.

STANDARD: To displace the battery within 4 minutes in daylight, 6 minutes in darkness, ensuring mission essential gear has been transported to maintain a firing capability and sustain the battery in follow on operations.

EVENT COMPONENTS:
1. Battery issues emergency displacement order.
2. Displace mission essential gear.
3. Consolidate the battery at the rally point.

REFERENCES: MCTP 3-10E Artillery Operations
CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS: CANN-OPS-5009

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Emergency Displacement.
   a. Time Starts: Displacement order given to battery.
   b. Time Stops: When the last mission essential vehicle starts to move toward the rally point. The travel time from the primary position to the rally point is not timed.

   BTRY-OPS-6007: Conduct reconnaissance, selection and preparation of a position

SUPPORTED MET(S):
MCT 1.1.2    MCT 3.2.1    MCT 3.2.4

EVALUATION-CODED: NO     SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: Battery has received an order that will require its displacement. Battalion has designated a position area to be occupied. An advance party has been designated. The advance party conducts all actions necessary for the battery to efficiently occupy the position.

CONDITION: Given an order, a prospective firing position.

STANDARD: To ensure the advance party conducts all actions in order to support the emplacement of the battery.

EVENT COMPONENTS:
1. Conduct planning.
2. Task organize personnel and equipment.
3. Select position that enhances the accomplishment of the mission.
4. Secure the position.
5. Select firing positions.
6. Select sites for battery sections.
7. Brief section guides on pickup point, track plan, entrance and exit points, as required.
8. Determine initial mission essential information (deflections, sub tense, and vertical angles to indirect fire weapon system).
9. Communicate pertinent data to battery, as required.
10. Continue position improvement until the main body arrives.

REFERENCES:
1. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
3. ST 6-50-20 Battery Executive Officer's/ Platoon Leader's Handbook

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS: CANN-OPS-5002

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. RSOP can be executed via vertical lift operations.
2. If a DFCS enabled weapon system is with the advanced party, send all pertinent data digitally to the FDC via the Digital Fire Control System (DFCS).

BTRY-OPS-6008: Conduct local security

SUPPORTED MET(S):
- MCT 1.12.2
- MCT 3.2.1
- MCT 3.2.4

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: The battery is in support of tactical operations and is responsible for defending its own position. Conduct all actions necessary to defend the battery.

CONDITION: Given an emplaced battery.

STANDARD: To defend the battery position through the integration of all organic equipment and personnel.

EVENT COMPONENTS:
1. Conduct planning.
2. Identify sectors of fire.
3. Prepare fighting positions.
4. Prepare crew-served weapons.
5. Prepare range cards for howitzers and crew-serve weapons.
6. Construct defensive diagram within 3 hours of occupying the position.
7. Establish rotation schedule for 24 hr operations.
8. Organize and rehearse react force.
9. Establish supplementary and alternate positions.
10. Establish medevac procedures.
11. Integrate air defense assets into the defense plan.

REFERENCES:
1. MCTP 3-01C Machine Guns and Machine Gun Gunnery
2. MCTP 3-10E Artillery Operations
3. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
4. ST 6-50-20 Battery Executive Officer's/ Platoon Leader's Handbook

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:  CANN-OPS-5004

SUPPORT REQUIREMENTS:

ORDNANCE:

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<tr>
<th>DODIC</th>
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<th>QUANTITY</th>
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<tr>
<td>A059</td>
<td>Cartridge, 5.56mm Ball M855 10/Clip</td>
<td>38400 cartridges per Marine</td>
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<tr>
<td>A063</td>
<td>Cartridge, 5.56mm Tracer M856 Single Round</td>
<td>2000 cartridges per Battery</td>
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<td>A064</td>
<td>Cartridge, 5.56mm 4 Ball M855/1 Tracer M856 Linked</td>
<td>20000 cartridges per Battery</td>
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<tr>
<td>A131</td>
<td>Cartridge, 7.62mm 4 Ball M80/1 Tracer M62 Linked</td>
<td>16000 cartridges per Battery</td>
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<td>A518</td>
<td>Cartridge, Caliber .50 4 SLAP M903/1 SLAP-T M962 Linked</td>
<td>4800 cartridges per Battery</td>
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<td>A576</td>
<td>Cartridge, Caliber .50 4 API M8/1 API-T M20 Linked</td>
<td>8000 cartridges per Battery</td>
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<td>B542</td>
<td>Cartridge, 40mm HEDP M430/M430A1 Linked</td>
<td>8000 cartridges per Battery</td>
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<td>B546</td>
<td>Cartridge, 40mm HEDP M433</td>
<td>8000 cartridges per Battery</td>
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<td>D529</td>
<td>Projectile, 155mm High Explosive M795</td>
<td>48 projectiles per Battery</td>
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<td>DA12</td>
<td>Charge, Propellant 155mm MACS M231</td>
<td>48 charges per Battery</td>
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<tr>
<td>DA13</td>
<td>Charge, Propellant 155mm MACS M232</td>
<td>96 charges per Battery</td>
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<td>K143</td>
<td>Mine, AP M18A1 w/Accessories Electric Initiation</td>
<td>80 mines per Battery</td>
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<tr>
<td>L328</td>
<td>Signal, Cartridge Red Flare</td>
<td>120 flares per Battery</td>
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<tr>
<td>L495</td>
<td>Flare, Surface Trip M49/A1 Series</td>
<td>200 flares per Battery</td>
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<td>N340</td>
<td>Fuze, Point Detonating M739/M739A1</td>
<td>48 fuzes per Battery</td>
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<tr>
<td>N523</td>
<td>Primer, Percussion M82</td>
<td>96 cartridges per Battery</td>
</tr>
</tbody>
</table>

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:  Concertina Wire, sandbags, and all other fortification items needed.

RCKT-C2-6001:  Establish a battery operations center

SUPPORTED MET(S):

<table>
<thead>
<tr>
<th>MCT 1.1.2</th>
<th>MCT 3.1.3.2</th>
<th>MCT 3.2.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCT 3.2.4</td>
<td>MCT 3.2.4.3</td>
<td></td>
</tr>
</tbody>
</table>

Enclosure (1)
EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 6 months

CONDITION: Given supporting attachments, a battery TO&E, an operations order and commander's guidance.

STANDARD: To integrate and establish systems, personnel and processes to support command and control of operations.

EVENT COMPONENTS:
1. Task organize personnel.
2. Establish security.
3. Establish battery operations center (BOC).
4. Establish communication with Higher, Adjacent, Subordinate and Supporting (HASS) units.
5. Plan Information Exchange Requirements (IER).
7. Maintain continuity of operations.

REFERENCES:
1. MCTP 3-10E Artillery Operations
2. MCWP 3-10 MAGTF Ground Operations

CHAINED EVENTS:
INTERNAL SUPPORTING EVENTS:
RCKT-OPS-5003  RCKT-OPS-5009

RCKT-C2-6002: Plan for operations

SUPPORTED MET(S):
MCT 1.1.2  MCT 1.12.2  MCT 3.1.3.2
MCT 3.2.1  MCT 3.2.4  MCT 3.2.4.3

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The process which develops an order/plan to direct actions and focus subordinate activities toward accomplishing the mission.

CONDITION: Given Commander's Guidance, higher headquarters order/plan and key leaders.

STANDARD: To communicate the commander's intent, guidance, and decisions in a clear, useful form that is easily understood by those who must execute the order/plan.

EVENT COMPONENTS:
1. Determine time available.
2. Establish timeline for planning and preparation.
3. Beginning planning.
4. Arrange reconnaissance.
5. Make reconnaissance.
6. Complete planning.
7. Issue the order.
REFERENCES:
1. MCTP 3-10E Artillery Operations
2. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
RCKT-OPS-5003

RCKT-CSS-6001: Sustain the battery

SUPPORTED MET(S):
MCT 1.1.2             MCT 1.12.2             MCT 3.2.1
MCT 3.2.4

EVALUATION-CODED: YES       SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The battery is conducting tactical operations. Battery personnel will conduct all actions necessary to maintain equipment and conduct resupply.

CONDITION: Given a HIMARS battery and an operations order.

STANDARD: To ensure the battery is able to conduct 24-hour operations.

EVENT COMPONENTS:
1. Identify personnel requirements.
2. Allocate personnel.
3. Conduct preventative maintenance.
4. Maintain all required classes of supply.
5. Coordinate logistics movement.
6. Provide medical services
7. Conduct corrective maintenance.

REFERENCES:
1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCTP 3-10E Artillery Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS: RCKT-CSS-5001

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

5004. 6000-LEVEL ROCKET BATTERY COLLECTIVE EVENTS

RCKT-C2-6001: Establish a battery operations center
SUPPORTED MET(S):
MCT 1.1.2   MCT 3.1.3.2   MCT 3.2.1
MCT 3.2.4   MCT 3.2.4.3

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 6 months

CONDITION: Given supporting attachments, a battery T0&E, an operations order and commander's guidance.

STANDARD: To integrate and establish systems, personnel and processes to support command and control of operations.

EVENT COMPONENTS:
1. Task organize personnel.
2. Establish security.
3. Establish battery operations center (BOC).
4. Establish communication with Higher, Adjacent, Subordinate and Supporting (HASS) units.
5. Plan Information Exchange Requirements (IER).
7. Maintain continuity of operations.

REFERENCES:
1. MCTP 3-10E Artillery Operations
2. MCWP 3-10 MAGTF Ground Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
RCKT-OPS-5003   RCKT-OPS-5009

RCKT-C2-6002: Plan for operations

SUPPORTED MET(S):
MCT 1.1.2   MCT 1.12.2   MCT 3.1.3.2
MCT 3.2.1   MCT 3.2.4   MCT 3.2.4.3

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The process which develops an order/plan to direct actions and focus subordinate activities toward accomplishing the mission.

CONDITION: Given Commander's Guidance, higher headquarters order/plan and key leaders.

STANDARD: To communicate the commander's intent, guidance, and decisions in a clear, useful form that is easily understood by those who must execute the order/plan.

EVENT COMPONENTS:
1. Determine time available.
2. Establish timeline for planning and preparation.
3. Beginning planning.
4. Arrange reconnaissance.
5. Make reconnaissance.
6. Complete planning.
7. Issue the order.

REFERENCES:
1. MCTP 3-10E Artillery Operations
2. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
RCKT-OPS-5003

RCKT-CSS-6001: Sustain the battery

SUPPORTED MET(S):
MCT 1.1.2
MCT 1.12.2
MCT 3.2.1
MCT 3.2.4

EVALUATION-CODED: YES
SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The battery is conducting tactical operations. Battery personnel will conduct all actions necessary to maintain equipment and conduct resupply.

CONDITION: Given a HIMARS battery and an operations order.

STANDARD: To ensure the battery is able to conduct 24-hour operations.

EVENT COMPONENTS:
1. Identify personnel requirements.
2. Allocate personnel.
3. Conduct preventative maintenance.
4. Maintain all required classes of supply.
5. Coordinate logistics movement.
6. Provide medical services
7. Conduct corrective maintenance.

REFERENCES:
1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCTP 3-10E Artillery Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
RCKT-CSS-5001

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range
# ARTILLERY T&R MANUAL

## CHAPTER 6

### 5000 LEVEL COLLECTIVE EVENTS

<table>
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<tr>
<th>PARAGRAPH</th>
<th>PAGE</th>
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<tbody>
<tr>
<td>PURPOSE</td>
<td>6000</td>
</tr>
<tr>
<td>EVENT CODING</td>
<td>6001</td>
</tr>
<tr>
<td>INDEX OF 5000-LEVEL COLLECTIVE EVENTS</td>
<td>6002</td>
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<td>5000-LEVEL CANNON PLATOON COLLECTIVE EVENTS</td>
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<tr>
<td>5000-LEVEL ROCKET PLATOON COLLECTIVE EVENTS</td>
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</tbody>
</table>
ARTILLERY T&R MANUAL

CHAPTER 6

5000 LEVEL COLLECTIVE EVENTS

6000. PURPOSE. Chapter 6 contains 5000 level collective training and readiness (T&R) events for the artillery community.

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-XXXX. This chapter utilizes the following methodology:

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

      Code      Description
      CANN      Cannon Platoon
      RCKT      Rocket Platoon
      TAP       Target Acquisition Platoon

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

      Code      Description
      CSS       Combat Service Support
      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
      5000      Platoon

6002. INDEX OF 5000-LEVEL COLLECTIVE EVENTS

<table>
<thead>
<tr>
<th>Event Code</th>
<th>E-Coded</th>
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<tbody>
<tr>
<td>CANN-CSS-5001</td>
<td>YES</td>
<td>Sustain the platoon</td>
</tr>
<tr>
<td>CANN-OPS-5001</td>
<td>YES</td>
<td>Conduct a tactical march</td>
</tr>
<tr>
<td>CANN-OPS-5002</td>
<td>NO</td>
<td>Conduct reconnaissance, selection, and preparation of a position</td>
</tr>
<tr>
<td>CANN-OPS-5003</td>
<td>YES</td>
<td>Occupy a position</td>
</tr>
<tr>
<td>CANN-OPS-5004</td>
<td>NO</td>
<td>Conduct local security</td>
</tr>
<tr>
<td>CANN-OPS-5005</td>
<td>YES</td>
<td>Execute a fire mission</td>
</tr>
<tr>
<td>CANN-OPS-5006</td>
<td>NO</td>
<td>Conduct a hasty displacement</td>
</tr>
<tr>
<td>CANN-OPS-5007</td>
<td>NO</td>
<td>Conduct vertical lift operations</td>
</tr>
<tr>
<td>CANN-OPS-5008</td>
<td>NO</td>
<td>Conduct emergency fire mission</td>
</tr>
<tr>
<td>CANN-OPS-5009</td>
<td>NO</td>
<td>Conduct an emergency displacement</td>
</tr>
<tr>
<td>RCKT-CSS-5001</td>
<td>NO</td>
<td>Sustain the platoon</td>
</tr>
<tr>
<td>RCKT-OPS-5001</td>
<td>NO</td>
<td>Conduct tactical march</td>
</tr>
</tbody>
</table>
RCKT-OPS-5002 | NO | Conduct reconnaissance, selection, and preparation of a position
RCKT-OPS-5003 | NO | Occupy a position
RCKT-OPS-5004 | YES | Conduct local security
RCKT-OPS-5005 | YES | Execute fire mission
RCKT-OPS-5006 | NO | Execute an emergency fire mission
RCKT-OPS-5007 | NO | Conduct a hasty displacement
RCKT-OPS-5008 | NO | Conduct an emergency displacement
TAP-OPS-5001 | YES | Provide field artillery RADAR support to the ground combat element
TAP-OPS-5002 | YES | Provide field artillery sensor support to the ground combat element
TAP-OPS-5003 | YES | Provide field artillery target acquisition platoon (TAP) support to the MAGTF

6003.  5000-LEVEL CANNON PLATOON COLLECTIVE EVENTS

CANN-CSS-5001: Sustain the platoon

SUPPORTED MET(S): MCT 1.12.2  MCT 3.2.1  MCT 3.2.4

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: The battery is conducting tactical operations. Battery personnel will conduct all actions necessary to maintain equipment and conduct resupply.

CONDITION: Given a platoon and an operations order.

STANDARD: To ensure the unit is able to conduct 24-hour operations.

EVENT COMPONENTS:
1. Identify personnel requirements.
2. Allocate personnel.
3. Conduct preventative maintenance.
4. Maintain all required classes of supply.
5. Coordinate logistics movement.
6. Provide medical services.
7. Conduct corrective maintenance.

REFERENCES:
1. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery
2. Unit SOP Unit's Standing Operating Procedures

CHAINED EVENTS:

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<tr>
<th>INTERNAL SUPPORTING EVENTS</th>
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<td>0811-GUNS-2011</td>
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<td>0811-GUNS-2104</td>
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<tr>
<td>0811-GUNS-2117</td>
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<tr>
<td>0811-GUNS-2313</td>
</tr>
<tr>
<td>0811-GUNS-2313</td>
</tr>
</tbody>
</table>
SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces

CANN-OPS-5001: Conduct a tactical march

SUPPORTED MET(S):
MCT 1.12.2 MCT 3.2.1 MCT 3.2.4

EVALUATION-CODED: YES SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: This event is designed to facilitate independent platoon operations. Conduct a deliberate movement between an established position to an alternate position based off the tactical situation.

CONDITION: Given a displaced platoon and a movement order.

STANDARD: To move the unit to a designated location in accordance with the convoy brief.

EVENT COMPONENTS:
1. Issue the convoy order.
2. Conduct reconnaissance, selection, and preparation of position, as required.
3. On order, execute the convoy order.
4. Coordinate with higher and adjacent units.
5. Submit required reports.
6. Occupy the position.

REFERENCES:
1. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
2. MCRP 4-11.3F Convoy Operations Handbook
3. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery
4. ST 6-50-20 Battery Executive Officer's/ Platoon Leader's Handbook

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS: 0811-GUNS-2309

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

CANN-OPS-5002: Conduct reconnaissance, selection, and preparation of a position

SUPPORTED MET(S):
MCT 1.12.2 MCT 3.2.1 MCT 3.2.4

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months
DESCRIPTION: Platoon has received an order that will require its displacement. Battery has designated a position area to be occupied. An advance party has been designated. The advance party conducts all actions necessary for the platoon to efficiently occupy the position.

CONDITION: Given an order and a prospective firing position.

STANDARD: To ensure the position supports the emplacement of the platoon.

EVENT COMPONENTS:
1. Conduct planning.
2. Task organize personnel and equipment.
3. Select position that enhances the accomplishment of the mission.
4. Secure the position.
5. Select firing positions.
6. Select sites for battery sections.
7. Brief section guides on pickup point, track plan, entrance and exit points, as required.
8. Determine initial mission essential information (deflections, subtense, and vertical angles to indirect fire weapon system).
9. Communicate pertinent data to battery, as required.
10. Continue position improvement until the main body arrives.

REFERENCES:
1. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery
3. ST 6-50-20 Battery Executive Officer's/Platoon Leader's Handbook

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0811-GUNS-2201 0811-GUNS-2202 0811-GUNS-2301
0811-GUNS-2302 0811-GUNS-2303

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: RSOP can be executed via vertical lift operations.

CANN-OPS-5003: Occupy a position

SUPPORTED MET(S):
MCT 1.12.2 MCT 3.2.1 MCT 3.2.4

EVALUATION-CODED: YES SUSTAINMENT INTERVAL: 3 months
**CONDITION:** Given an operations order, a position which has been reconnoitered, selected, and prepared by the advanced party, and the main body located the pickup point.

**STANDARD:** To establish a firing capability.

**EVENT COMPONENTS:**
1. Cross pickup point at specified time.
2. Maintain security.
3. Execute track plan.
4. Position vehicle(s) to allow for rapid displacement.
5. Occupy designated sites.
6. Determine site-to-crest.
7. Transmit Firing Capability (FIRECAP) Report to higher headquarters.

**REFERENCES:**
1. MCWP 3-16.1 Artillery Operations
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

**CHAINED EVENTS:**

**INTERNAL SUPPORTING EVENTS:**

0811-GUNS-2004 0811-GUNS-2304 0811-GUNS-2305
0811-GUNS-2307

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17561 Automated Sniper Field Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. Time Starts: The first howitzer has stopped in its designated gun position.
2. Time Stops: A minimum of 1 gun FIRECAP sent to higher headquarters.
3. Time standard is within 11 minutes during daylight or 19 minutes in darkness.

**CANN-OPS-5004:** Conduct local security

**SUPPORTED MET(S):**
MCT 1.12.2  MCT 3.2.1  MCT 3.2.4

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**DESCRIPTION:** The platoon is in support of tactical operations and is responsible for defending its own position. Conduct all actions necessary to defend the platoon.
CONDITION: Given an emplaced platoon.

STANDARD: To defend the position through the integration of all organic equipment and personnel.

EVENT COMPONENTS:
1. Conduct planning.
2. Identify sectors of fire.
3. Prepare fighting positions.
4. Prepare crew-served weapons.
5. Prepare range cards for howitzers and crew-serve weapons.
6. Construct defensive diagram within 3 hours of occupying the position.
7. Establish rotation schedule for 24 hour operations.
8. Organize and rehearse reaction force.
9. Establish supplementary and alternate positions.
10. Establish medevac procedures.
11. Integrate air defense assets into the defense plan.

REFERENCES: MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0811-GUNS-2203 0811-GUNS-2204 0811-GUNS-2205
0811-GUNS-2206 0811-GUNS-2307

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Concertina Wire, sandbags and all other fortification items needed.

CANN-OPS-5005: Execute a fire mission

SUPPORTED MET(S):
MCT 1.12.2  MCT 3.2.1  MCT 3.2.4

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 3 months

CONDITION: Given a call for fire.

STANDARD: To achieve desired effects on target.

EVENT COMPONENTS:
1. Receive call for fire.
2. Process the call for fire.
3. Conduct a fire mission.
REFERENCES:
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
2. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
3. MCTM 10407C-10/1 Operators Manual for Howitzer, Medium, 155mm, M777A2
4. MCWP 3-16.1 Artillery Operations
5. MCWP 3-16.4 Tactics, Techniques and Procedures for the Field Artillery
   Manual Cannon Gunnery

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:

0802-BTRY-1003  0802-FDC-1005  0811-GUNS-1007
0811-GUNS-1008  0811-GUNS-2111  FDC-OPS-4002
FDC-OPS-4004  GUNS-OPS-4004  GUNS-OPS-4005
GUNS-OPS-4006  GUNS-OPS-4007  GUNS-OPS-4008

SUPPORT REQUIREMENTS:

ORDNANCE:

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<th>DODIC</th>
<th>QUANTITY</th>
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<tr>
<td>D529</td>
<td>Projectile, 155mm High Explosive M795</td>
</tr>
<tr>
<td>DA12</td>
<td>Charge, Propellant 155mm MACS M231</td>
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<tr>
<td>DA13</td>
<td>Charge, Propellant 155mm MACS M232</td>
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<tr>
<td>N340</td>
<td>Fuze, Point Detonating M739/M739A1</td>
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<tr>
<td>N523</td>
<td>Primer, Percussion M82</td>
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</table>

RANGE/TRAINING AREA:

Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

CANN-OPS-5006: Conduct a hasty displacement

SUPPORTED MET(S):

MCT 1.1.2.3       MCT 3.2.1       MCT 3.2.4

EVALUATION-CODED: NO    SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: The tactical situation requires the platoon to conduct a displacement due to an imminent attack by the threat. The platoon conducts all actions necessary to displace according to the tactical situation.

CONDITION: Given a platoon in position and providing fires.

STANDARD: To ensure the movement is conducted within 8 minutes in daylight or 12 minutes in darkness, displacing all gear except ammunition and dunnage.

EVENT COMPONENTS:

1. Conduct planning.
2. Task organize forces.
3. Issue the order.
4. Displace the battery.
5. Conduct tactical march.
REFERENCES:
1. MCWP 3-16.1 Artillery Operations
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery
3. UNIT SOP (Unit’s Standing Operating Procedures)

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0811-GUNS-2308

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Time Starts: Displacement order given to battery. Time Stops when the last vehicle starts to move.

CANN-OPS-5007: Conduct vertical lift operations

SUPPORTED MET(S):
MCT 1.12   MCT 1.12.2   MCT 3.2.4.2

EVALUATION-CODED: NO   SUSTAINMENT INTERVAL: 6 months

CONDITION: Given an order, a platoon, and mission essential gear.

STANDARD: To arrive at the designated location within the order and establish a firing capability.

EVENT COMPONENTS:
1. Conduct planning.
2. Prepare mission essential gear for lift.
3. Prepare ammunition for lift.
4. Board aircraft with mission essential gear and personnel.
5. Occupy firing position.

REFERENCES: MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

ORDNANCE:

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<thead>
<tr>
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<tbody>
<tr>
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<tr>
<td>DA12</td>
<td>Charge, Propellant 155mm MACS M231</td>
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<td>N523</td>
<td>Primer, Percussion M82</td>
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RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range
Facility Code 17911 Air Transport Mockup

CANN-OPS-5008: Conduct emergency fire mission

SUPPORTED MET(S):
MCT 1.12.2    MCT 3.2.1    MCT 3.2.4

EVALUATION-CODED: NO    SUSTAINMENT INTERVAL: 2 months

DESCRIPTION: The platoon receives a call for fire during a tactical march. Lead vehicle is between 500 and 700 meters from a suitable firing position. Battery expeditiously occupies a position and conducts an adjust fire (fuze quick) fire mission.

CONDITION: Given a call for fire during a tactical march, without prior reconnaissance or preparation of a position.

STANDARD: To execute the call for fire within a time limit of 13 minutes and a maximum of 3 rounds for adjustment.

EVENT COMPONENTS:
1. Acknowledge receipt of fire mission at FDC.
2. Halt convoy.
3. Establish local security.
4. Process fire mission through the FDC.
5. Determine (convoy leader) best method of lay (when degraded).
7. Maintain security during the emergency fire mission.
8. Execute the mission.
9. Reassemble convoy.
10. Continue tactical movement.

REFERENCES:
1. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery
2. Unit SOP Unit’s Standing Operating Procedures

CHAIN EVENTS:

INTERNAL SUPPORTING EVENTS:
0811-GUNS-2310    0811-GUNS-2311

SUPPORT REQUIREMENTS:

ORDNANCE:

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<td>DA13 Charge, Propellant 155mm MACS M232</td>
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<td>N340 Fuze, Point Detonating M739/M739A1</td>
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<td>N523 Primer, Percussion M82</td>
<td>8 per Section</td>
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RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Time Starts: When battery receives the target location in the CFF.
2. Time Stops: Last round fired in FFE.

CANN-OPS-5009: Conduct an emergency displacement

SUPPORTED MET(S):
MCT 1.12.2 MCT 3.2.1 MCT 3.2.4

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: A tactical situation is presented which requires the platoon to conduct an emergency displacement.

CONDITION: Given a platoon in position, conducting operations, which comes under attack.

STANDARD: To displace the platoon within 4 minutes in daylight, 6 minutes in darkness, ensuring mission essential gear has been transported to maintain a firing capability and sustain the platoon in follow on operations.

EVENT COMPONENTS:
1. Platoon issues emergency displacement order.
2. Displace mission essential gear.
3. Consolidate the platoon at the rally point.

REFERENCES:
1. MCWP 3-16.1 Artillery Operations
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Emergency Displacement.
   a. Time Starts: Displacement order given to platoon.
   b. Time Stops: When the last mission essential vehicle starts to move toward the rally point. The travel time from the primary position to the rally point is not timed.
RCKT-CSS-5001: Sustain the platoon

SUPPORTED MET(S):
MCT 1.1.2     MCT 1.12.2     MCT 3.2.1
MCT 3.2.4

EVALUATION-CODED: NO       SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: The platoon is conducting tactical operations. Platoon personnel will conduct all actions necessary to maintain equipment and conduct resupply.

CONDITION: Given a HIMARS platoon and an order.

STANDARD: To ensure the platoon is able to conduct 24-hour operations.

EVENT COMPONENTS:
1. Identify personnel requirements.
2. Allocate personnel.
3. Conduct preventative maintenance.
4. Maintain all required classes of supply.
5. Coordinate logistics movement.
6. Provide medical services.
7. Conduct corrective maintenance.

REFERENCES:
1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCTP 3-10E Artillery Operations

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

RCKT-OPS-5001: Conduct tactical march

SUPPORTED MET(S):
MCT 1.1.2     MCT 1.12.2     MCT 3.2.1
MCT 3.2.4

EVALUATION-CODED: NO       SUSTAINMENT INTERVAL: 3 months

CONDITION: Given a displaced platoon and a movement order.

STANDARD: To move the platoon to a specified position in accordance with the convoy brief.

EVENT COMPONENTS:
1. Issue the convoy order.
2. Conduct reconnaissance, selection, and preparation of position, as required.
3. On order, execute the convoy order.
4. Coordinate with higher and adjacent units.
5. Submit required reports.
6. Occupy the position.
REFERENCES: MCTP 3-01C Machine Guns and Machine Gun Gunnery

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0814-LAUN-2301 RCKT-OPS-3003

RCKT-OPS-5002: Conduct reconnaissance, selection, and preparation of a position

SUPPORTED MET(S):
MCT 1.12.2 MCT 3.2.1 MCT 3.2.4

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: Platoon has received an order that will require its displacement. Battery has designated a position area to be occupied. An advance party has been designated. The advance party conducts all actions necessary for the platoon to efficiently occupy the position.

CONDITION: Given an order and a prospective firing position.

STANDARD: To ensure the position supports the emplacement of the platoon.

EVENT COMPONENTS:
1. Conduct planning.
2. Task organize personnel and equipment.
3. Select position that enhances the accomplishment of the mission.
4. Secure the position.
5. Select hide, reload, and firing points.
6. Select POC and logistics locations.
7. Brief pickup points, track plan, entrance and exit points, as required.
8. Communicate pertinent data to battery, as required.
9. Continue position improvement until the main body arrives.

REFERENCES: MCIP 3-10E5i Marine Rocket Battery Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0814-LAUN-2301 RCKT-OPS-3002 RCKT-OPS-3003

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

RCKT-OPS-5003: Occupy a position

SUPPORTED MET(S):
MCT 3.2.4 MCT 3.2.4.2
CONDITION: Given an operations order, a platoon executing a tactical march, a position reconnoitered, selected, and prepared, and the main body located at the pickup point.

STANDARD: To achieve firing capability in accordance with the timeline set in the order.

EVENT COMPONENTS:
1. Communicate arrival at pickup point to the advance party.
2. Occupy operations area(s).
3. Establish Platoon Operations Center(s).
4. Establish positions (hide points, firing points, and reload points).
5. Occupy initial hide points.
7. Establish support sections.
8. Send reports to higher headquarters.

REFERENCES: MCIP 3-10E5i Marine Rocket Battery Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS: RCKT-OPS-3002

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces

EQUIPMENT: Units are considered fire capable when the POC is established and at least one launcher is operational.

RCKT-OPS-5004: Conduct local security

SUPPORTED MET(S):
MCT 1.1.2   MCT 3.2.4.2

EVALUATION-CODED: YES      SUSTAINMENT INTERVAL: 3 months

CONDITION: Given an occupied position area with vehicles, equipment, and Marines organic to a HIMARS platoon, in the execution of an assigned mission.

STANDARD: To defend the position allowing continuous battery operations.

EVENT COMPONENTS:
1. Conduct planning.
2. Task organize personnel and equipment.
3. Prepare fighting positions.
4. Integrate fires.
5. Occupy defensive positions.
6. Execute the security plan.
7. Maintain coordination with higher headquarters.
REFERENCES:
1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCTP 3-01C Machine Guns and Machine Gun Gunnery

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS: RCKT-OPS-3003

SUPPORT REQUIREMENTS:

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<td>A131</td>
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<td>Cartridge, Caliber .50 Ball M33 Linked (M2 Links) 1000 per Platoon</td>
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RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: This task applies to the HQ’s and Firing Platoons. Local Security Diagrams must be completed and submitted within three hours of position occupation.

RCKT-OPS-5005: Execute fire mission

SUPPORTED MET(S):

- MCT 1.12.2
- MCT 3.2.1
- MCT 3.2.4

EVALUATION-CODED: YES SUSTAINMENT INTERVAL: 3 months

CONDITION: Given a call for fire.

STANDARD: To deliver fires as directed.

EVENT COMPONENTS:

1. Receive fire mission.
2. Conduct tactical fire direction.
3. Issue fire order.

REFERENCES:

1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
2. MCIP 3-10E5i Marine Rocket Battery Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
SUPPORT REQUIREMENTS:

**ORDNANCE:**

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**RANGE/TRAINING AREA:**

- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

**ADMINISTRATIVE INSTRUCTIONS:**

1. Time starts when the fire mission is received in the platoon operation center. Time stops when the launcher reports shot
   a. Digital transmission - 6 minutes in daylight and 7 minutes in darkness/CBRN environment
   b. Voice transmission - 8 minutes in daylight and 10 minutes in darkness/CBRN environment.

**RCKT-OPS-5006:** Execute an emergency fire mission

**SUPPORTED MET(S):**

- MCT 1.1.2
- MCT 1.12.2
- MCT 3.2.4

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**DESCRIPTION:** This event describes the procedures a platoon takes to execute a received fire mission when the platoon is not emplaced, typically when the platoon is executing a tactical march.

**CONDITION:** Given a platoon executing a tactical march and a fire mission, without prior reconnaissance or preparation of a position.

**STANDARD:** To process targets within a time limit of 6 minutes in daylight and 8 minutes in darkness/CBRN environment.

**EVENT COMPONENTS:**

1. Acknowledge receipt of fire mission at FDC.
2. Halt convoy.
3. Establish local security.
4. Process fire mission through the FDC.
5. Move launchers to hasty operations area within 750 meters of the convoy.
6. Ensure firing launchers have security.
7. Acknowledge receipt of fire mission at launcher.
8. Execute fire mission at launcher.
9. Reassemble convoy.
10. Continue tactical movement.

**REFERENCES:**

1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCTP 3-10E Artillery Operations

**CHAINED EVENTS:**

**INTERNAL SUPPORTING EVENTS:**
- RCKT-OPS-3001
- RCKT-OPS-3004
- RCKT-OPS-3005

**SUPPORT REQUIREMENTS:**

**ORDNANCE:**

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<td>6 per Team</td>
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</table>

**RANGE/TRAINING AREA:**
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. Time starts: When a fire mission is received in the battery operation center.
2. Time Stops: When the launcher reports shot.

**RCKT-OPS-5007:** Conduct a hasty displacement

**SUPPORTED MET(S):**
- MCT 1.12.2
- MCT 3.2.1
- MCT 3.2.4

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**DESCRIPTION:** The tactical situation requires the platoon to conduct a displacement due to an imminent attack by the threat. The platoon conducts all actions necessary to displace according to the tactical situation.

**CONDITION:** Given a platoon in position and providing fires.

**STANDARD:** To ensure the movement is conducted within 8 minutes in daylight or 12 minutes in darkness, displacing all gear except ammunition and dunnage.

**EVENT COMPONENTS:**
1. Conduct planning.
2. Task organize forces.
3. Issue the order.
4. Displace the battery.
5. Conduct tactical march.

**REFERENCES:**
1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCTP 3-10E Artillery Operations

**CHAINED EVENTS:**

**INTERNAL SUPPORTING EVENTS:**
- 0814-LAUN-2301
- RCKT-OPS-3003
SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17650 Field Artillery Direct Fire Range
- Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
- Time Starts: Displacement order given to battery. Time Stops when the last vehicle starts to move.

RCKT-OPS-5008: Conduct an emergency displacement

SUPPORTED MET(S):
- MCT 1.12.2
- MCT 3.2.1
- MCT 3.2.4

EVALUATION-CODED: NO    SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: A tactical situation is presented which requires the platoon to conduct an emergency displacement.

CONDITION: Given a platoon in position, conducting operations, which comes under attack.

STANDARD: To displace the platoon within 4 minutes in daylight, 6 minutes in darkness, ensuring mission essential gear has been transported to maintain a firing capability and sustain the platoon in follow on operations.

EVENT COMPONENTS:
1. Platoon issues emergency displacement order.
2. Displace mission essential gear.
3. Consolidate the platoon at the rally point.

REFERENCES:
- MCTP 3-10E Artillery Operations
- MCIP 3-10E5i Marine Rocket Battery Operations

CHAINED EVENTS:

PREREQUISITE EVENTS:
- 0814-LAUN-2301
- RCKT-OPS-3003

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17650 Field Artillery Direct Fire Range
- Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Emergency Displacement.
   a. Time Starts: Displacement order given to platoon.
b. Time Stops: When the last mission essential vehicle starts to move toward the rally point. The travel time from the primary position to the rally point is not timed.

TAP-OPS-5001: Provide field artillery RADAR support to the ground combat element

SUPPORTED MET(S):
MCT 3.2.1
MCT 3.2.4.3

EVALUATION-CODED: YES
SUSTAINMENT INTERVAL: 3 months

CONDITION: Given an operations order and the references.

STANDARD: IAW the operations order.

EVENT COMPONENTS:
1. Perform RADAR team operations.
2. Perform TPC operations.

REFERENCES:
1. MCWP 3-16.1 Artillery Operations
2. TM 11-5840-380-10 OPERATOR'S MANUAL FOR RADAR SET AN/TPQ-36(V)8
4. TM 750-244-2 Procedures for Destruction of Electronic Material to Prevent Enemy Use (Electronic Command)

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
RADR-OPS-3001  RADR-OPS-3002  RADR-OPS-3003
RADR-OPS-3004  RADR-OPS-3005  RADR-OPS-3006
RADR-OPS-3007  RADR-OPS-3008  RADR-OPS-3009

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces

TAP-OPS-5002: Provide field artillery sensor support to the ground combat element

SUPPORTED MET(S):
MCT 3.2.1
MCT 3.2.4.5

EVALUATION-CODED: YES
SUSTAINMENT INTERVAL: 3 months

CONDITION: Given an operations order.

STANDARD: IAW the Operations Order.

EVENT COMPONENTS:
1. Perform sensor team operations.
2. Perform GIC operations.
REFERENCES:
1. DMA TM 8358.1 (EDITION 1) DATUMS, ELLIPSOIDS, GRIDS, AND GRID REFERENCES SYSTEM
2. DMA TR 8350.2 DoD World Geodetic System 1984
3. MCRP 3-10E.6 Marine Artillery Survey Operations
4. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
5. MCWP 3-16.1 Artillery Operations
6. TM 11138A-OR Operators Manual Ground Counter Fire Sensor

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
SENS-OPS-3002   SENS-OPS-3003   SENS-OPS-3004
SENS-OPS-3005   SENS-OPS-3006   SENS-OPS-3008
SENS-OPS-3009

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces

TAP-OPS-5003: Provide field artillery target acquisition platoon (TAP) support to the MAGTF

SUPPORTED MET(S):
MCT 3.2.1   MCT 3.2.4.3   MCT 3.2.4.5

EVALUATION-CODED: YES   SUSTAINMENT INTERVAL: 3 months

CONDITION: Given an operations order.

STANDARD: IAW the operations order.

EVENT COMPONENTS:
1. Provide a TAP in support of MEF.
2. Provide a target acquisition detachment in support of a MEB.
3. Provide a target acquisition section in support of a MEU.

REFERENCES: MCRP 3-10E.6 Marine Artillery Survey Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
RADR-OPS-3001   RADR-OPS-3002   RADR-OPS-3003
RADR-OPS-3004   RADR-OPS-3005   RADR-OPS-3006
RADR-OPS-3007   RADR-OPS-3008   RADR-OPS-3009
SENS-OPS-3002   SENS-OPS-3003   SENS-OPS-3004
SENS-OPS-3005   SENS-OPS-3006   SENS-OPS-3008
SENS-OPS-3009

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces
6004. 5000-LEVEL ROCKET PLATOON COLLECTIVE EVENTS

RCKT-CSS-5001: Sustain the platoon

SUPPORTED MET(S):
MCT 1.1.2   MCT 1.12.2   MCT 3.2.1
MCT 3.2.4

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: The platoon is conducting tactical operations. Platoon personnel will conduct all actions necessary to maintain equipment and conduct resupply.

CONDITION: Given a HIMARS platoon and an order.

STANDARD: To ensure the platoon is able to conduct 24-hour operations.

EVENT COMPONENTS:
1. Identify personnel requirements.
2. Allocate personnel.
3. Conduct preventative maintenance.
4. Maintain all required classes of supply.
5. Coordinate logistics movement.
6. Provide medical services.
7. Conduct corrective maintenance.

REFERENCES:
1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCTP 3-10E Artillery Operations

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

RCKT-OPS-5001: Conduct tactical march

SUPPORTED MET(S):
MCT 1.1.2   MCT 1.12.2   MCT 3.2.1
MCT 3.2.4

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

CONDITION: Given a displaced platoon and a movement order.

STANDARD: To move the platoon to a specified position in accordance with the convoy brief.

EVENT COMPONENTS:
1. Issue the convoy order.
2. Conduct reconnaissance, selection, and preparation of position, as required.
3. On order, execute the convoy order.
4. Coordinate with higher and adjacent units.
5. Submit required reports.
6. Occupy the position.

REFERENCES: MCTP 3-01C Machine Guns and Machine Gun Gunnery

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0814-LAUN-2301 RCKT-OPS-3003

RCKT-OPS-5002: Conduct reconnaissance, selection, and preparation of a position

SUPPORTED MET(S):
MCT 1.12.2 MCT 3.2.1 MCT 3.2.4

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: Platoon has received an order that will require its displacement. Battery has designated a position area to be occupied. An advance party has been designated. The advance party conducts all actions necessary for the platoon to efficiently occupy the position.

CONDITION: Given an order and a prospective firing position.

STANDARD: To ensure the position supports the emplacement of the platoon.

EVENT COMPONENTS:
1. Conduct planning.
2. Task organize personnel and equipment.
3. Select position that enhances the accomplishment of the mission.
4. Secure the position.
5. Select hide, reload, and firing points.
6. Select POC and logistics locations.
7. Brief pickup points, track plan, entrance and exit points, as required.
8. Communicate pertinent data to battery, as required.
9. Continue position improvement until the main body arrives.

REFERENCES: MCIP 3-10E5i Marine Rocket Battery Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0814-LAUN-2301 RCKT-OPS-3002 RCKT-OPS-3003

SUPPORT REQUIREMENTS:
RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range
RCKT-OPS-5003: Occupy a position

SUPPORTED MET(S):
MCT 3.2.4  MCT 3.2.4.2

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

CONDITION: Given an operations order, a platoon executing a tactical march, a position reconnoitered, selected, and prepared, and the main body located at the pickup point.

STANDARD: To achieve firing capability in accordance with the timeline set in the order.

EVENT COMPONENTS:
1. Communicate arrival at pickup point to the advance party.
2. Occupy operations area(s).
3. Establish Platoon Operations Center(s).
4. Establish positions (hide points, firing points, and reload points).
5. Occupy initial hide points.
7. Establish support sections.
8. Send reports to higher headquarters.

REFERENCES: MCIP 3-10E5i Marine Rocket Battery Operations

CHAINED EVENTS:

   INTERNAL SUPPORTING EVENTS: RCKT-OPS-3002

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces

EQUIPMENT: Units are considered fire capable when the POC is established and at least one launcher is operational.

RCKT-OPS-5004: Conduct local security

SUPPORTED MET(S):
MCT 1.1.2  MCT 3.2.4.2

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 3 months

CONDITION: Given an occupied position area with vehicles, equipment, and Marines organic to a HIMARS platoon, in the execution of an assigned mission.

STANDARD: To defend the position allowing continuous battery operations.

EVENT COMPONENTS:
1. Conduct planning.
2. Task organize personnel and equipment.
3. Prepare fighting positions.
4. Integrate fires.
5. Occupy defensive positions.
6. Execute the security plan.
7. Maintain coordination with higher headquarters.

REFERENCES:
1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCTP 3-01C Machine Guns and Machine Gun Gunnery

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS: RCKT-OPS-3003

SUPPORT REQUIREMENTS:

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<tr>
<td>A131 Cartridge, 7.62mm 4 Ball M80/1 Tracer M62 Linked (M2 Links)</td>
<td>800 per Platoon</td>
</tr>
<tr>
<td>A555 Cartridge, Caliber .50 Ball M33 Linked (M2 Linked)</td>
<td>1000 per Platoon</td>
</tr>
<tr>
<td>B542 Cartridge, 40mm HEEDP M430/M430A1 Linked</td>
<td>768 per Platoon</td>
</tr>
</tbody>
</table>

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: This task applies to the HQ’s and Firing Platoons. Local Security Diagrams must be completed and submitted within three hours of position occupation.

RCKT-OPS-5005: Execute fire mission

SUPPORTED MET(S):

| MCT 1.12.2 | MCT 3.2.1 | MCT 3.2.4 |

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 3 months

CONDITION: Given a call for fire.

STANDARD: To deliver fires as directed.

EVENT COMPONENTS:
1. Receive fire mission.
2. Conduct tactical fire direction.
3. Issue fire order.

REFERENCES:
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
2. MCIP 3-10E5i Marine Rocket Battery Operations
CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
FDC-RCKT-4001  RCKT-OPS-3003  RCKT-OPS-3004
RCKT-OPS-3005

SUPPORT REQUIREMENTS:

ORDNANCE:

<table>
<thead>
<tr>
<th>DODIC</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>H185 Rocket, 298mm Practice Red Range M28A1/A2 (MLRS)</td>
<td>2 per Team</td>
</tr>
</tbody>
</table>

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Time starts when the fire mission is received in the platoon operation center. Time stops when the launcher reports shot
   a. Digital transmission - 6 minutes in daylight and 7 minutes in darkness/CBRN environment
   b. Voice transmission - 8 minutes in daylight and 10 minutes in darkness/CBRN environment.

RCKT-OPS-5006: Execute an emergency fire mission

SUPPORTED MET(S):
MCT 1.1.2  MCT 1.12.2  MCT 3.2.4

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: This event describes the procedures a platoon takes to execute a received fire mission when the platoon is not emplaced, typically when the platoon is executing a tactical march.

CONDITION: Given a platoon executing a tactical march and a fire mission, without prior reconnaissance or preparation of a position.

STANDARD: To process targets within a time limit of 6 minutes in daylight and 8 minutes in darkness/CBRN environment.

EVENT COMPONENTS:
1. Acknowledge receipt of fire mission at FDC.
2. Halt convoy.
3. Establish local security.
4. Process fire mission through the FDC.
5. Move launchers to hasty operations area within 750 meters of the convoy.
6. Ensure firing launchers have security.
7. Acknowledge receipt of fire mission at launcher.
8. Execute fire mission at launcher.
9. Reassemble convoy.
10. Continue tactical movement.
REFERENCES:
1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCTP 3-10E Artillery Operations

CHAINED EVENTS:

REFERENCES:
1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCTP 3-10E Artillery Operations

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
- RCKT-OPS-3001
- RCKT-OPS-3004
- RCKT-OPS-3005

SUPPORT REQUIREMENTS:

ORDNANCE:

DODIC QUANTITY
H185 Rocket, 298mm Practice Red Range M28A1/A2 (MLRS) 6 per Team

RANGE/TRAINING AREA:
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Time starts: When a fire mission is received in the battery operation center.
2. Time Stops: When the launcher reports shot.

RCKT-OPS-5007: Conduct a hasty displacement

SUPPORTED MET(S):
- MCT 1.12.2
- MCT 3.2.1
- MCT 3.2.4

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: The tactical situation requires the platoon to conduct a displacement due to an imminent attack by the threat. The platoon conducts all actions necessary to displace according to the tactical situation.

CONDITION: Given a platoon in position and providing fires.

STANDARD: To ensure the movement is conducted within 8 minutes in daylight or 12 minutes in darkness, displacing all gear except ammunition and dunnage.

EVENT COMPONENTS:
1. Conduct planning.
2. Task organize forces.
3. Issue the order.
4. Displace the battery.
5. Conduct tactical march.

REFERENCES:
1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCTP 3-10E Artillery Operations

CHAINED EVENTS:
**INTERNAL SUPPORTING EVENTS:**
0814-LAUN-2301   RCKT-OPS-3003

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Time Starts: Displacement order given to battery. Time Stops when the last vehicle starts to move.

---

**RCKT-OPS-5008:** Conduct an emergency displacement

**SUPPORTED MET(S):**
MCT 1.12.2   MCT 3.2.1   MCT 3.2.4

**EVALUATION-CODED:** NO   **SUSTAINMENT INTERVAL:** 3 months

**DESCRIPTION:** A tactical situation is presented which requires the platoon to conduct an emergency displacement.

**CONDITION:** Given a platoon in position, conducting operations, which comes under attack.

**STANDARD:** To displace the platoon within 4 minutes in daylight, 6 minutes in darkness, ensuring mission essential gear has been transported to maintain a firing capability and sustain the platoon in follow on operations.

**EVENT COMPONENTS:**
1. Platoon issues emergency displacement order.
2. Displace mission essential gear.
3. Consolidate the platoon at the rally point.

**REFERENCES:**
1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCTP 3-10E Artillery Operations

**CHAINED EVENTS:**

**PREREQUISITE EVENTS:**
0814-LAUN-2301   RCKT-OPS-3003

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**
ADMINISTRATIVE INSTRUCTIONS:
1. Emergency Displacement.
   a. Time Starts: Displacement order given to platoon.
   b. Time Stops: When the last mission essential vehicle starts to move toward the rally point. The travel time from the primary position to the rally point is not timed.
ARTILLERY T& R MANUAL

CHAPTER 7

4000 LEVEL COLLECTIVE EVENTS

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<tr>
<th>PARAGRAPH</th>
<th>PAGE</th>
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</thead>
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<tr>
<td>PURPOSE</td>
<td>7000</td>
</tr>
<tr>
<td>EVENT CODING</td>
<td>7001</td>
</tr>
<tr>
<td>INDEX OF 4000-LEVEL COLLECTIVE EVENTS</td>
<td>7002</td>
</tr>
<tr>
<td>4000-LEVEL COLLECTIVE EVENTS</td>
<td>7003</td>
</tr>
<tr>
<td>TECHNICAL FDC FIRE MISSION TIME STANDARDS</td>
<td>7004</td>
</tr>
</tbody>
</table>
ARTILLERY T&R MANUAL

CHAPTER 7

4000 LEVEL COLLECTIVE EVENTS

7000. PURPOSE. Chapter 7 contains 4000 level collective training and readiness (T&R) events for the artillery community.

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-XXXX. This chapter utilizes the following methodology:

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFST</td>
<td>Company Fire Support Team</td>
</tr>
<tr>
<td>FDC</td>
<td>Fire Direction Center</td>
</tr>
<tr>
<td>FST</td>
<td>Fire Support Team</td>
</tr>
<tr>
<td>GUNS</td>
<td>Cannon crew</td>
</tr>
<tr>
<td>RCKT</td>
<td>Rocket</td>
</tr>
<tr>
<td>TAP</td>
<td>Target Acquisition Platoon</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSPT</td>
<td>Fire Support</td>
</tr>
<tr>
<td>OPS</td>
<td>Operations</td>
</tr>
<tr>
<td>RCKT</td>
<td>Rocket</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>4000</td>
<td>Section</td>
</tr>
</tbody>
</table>

7002. INDEX OF 4000-LEVEL COLLECTIVE EVENTS

<table>
<thead>
<tr>
<th>Event Code</th>
<th>E-Coded</th>
<th>Event Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFST-FSPT-4001</td>
<td>YES</td>
<td>Conduct fire support planning at company level (L/S)</td>
<td>7-3</td>
</tr>
<tr>
<td>CFST-FSPT-4002</td>
<td>YES</td>
<td>Conduct fire support coordination at company level (L/S)</td>
<td>7-4</td>
</tr>
<tr>
<td>FDC-OPS-4001</td>
<td>NO</td>
<td>Establish the fire direction center</td>
<td>7-5</td>
</tr>
<tr>
<td>FDC-OPS-4002</td>
<td>YES</td>
<td>Conduct technical fire direction</td>
<td>7-6</td>
</tr>
<tr>
<td>FDC-OPS-4003</td>
<td>YES</td>
<td>Conduct technical fire direction in a digitally denied or degraded environment</td>
<td>7-7</td>
</tr>
<tr>
<td>FDC-OPS-4004</td>
<td>YES</td>
<td>Conduct tactical fire direction</td>
<td>7-8</td>
</tr>
<tr>
<td>FDC-RCKT-4001</td>
<td>YES</td>
<td>Conduct tactical fire direction</td>
<td>7-9</td>
</tr>
<tr>
<td>---------------</td>
<td>-----</td>
<td>---------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>FST-FSPT-4001</td>
<td>YES</td>
<td>Establish a fire support coordination center (FSCC)/fires and effects coordination center (FECC) (L/S)</td>
<td>7-10</td>
</tr>
<tr>
<td>FST-FSPT-4002</td>
<td>YES</td>
<td>Conduct fire support planning</td>
<td>7-11</td>
</tr>
<tr>
<td>FST-FSPT-4003</td>
<td>YES</td>
<td>Conduct dynamic targeting (L/S)</td>
<td>7-11</td>
</tr>
<tr>
<td>FST-FSPT-4004</td>
<td>YES</td>
<td>Conduct deliberate (D3A/Joint) targeting (L/S)</td>
<td>7-13</td>
</tr>
<tr>
<td>FST-FSPT-4005</td>
<td>NO</td>
<td>Develop a quick fire plan</td>
<td>7-14</td>
</tr>
<tr>
<td>FST-FSPT-4006</td>
<td>NO</td>
<td>Develop a schedule of fires</td>
<td>7-15</td>
</tr>
<tr>
<td>FST-FSPT-4007</td>
<td>NO</td>
<td>Execute counter-fire plan (L/S)</td>
<td>7-16</td>
</tr>
<tr>
<td>GUNS-OPS-4001</td>
<td>NO</td>
<td>Lay the howitzer (OFC)</td>
<td>7-17</td>
</tr>
<tr>
<td>GUNS-OPS-4002</td>
<td>NO</td>
<td>Lay the howitzer (DFCS)</td>
<td>7-18</td>
</tr>
<tr>
<td>GUNS-OPS-4003</td>
<td>NO</td>
<td>Determine site to crest</td>
<td>7-19</td>
</tr>
<tr>
<td>GUNS-OPS-4004</td>
<td>NO</td>
<td>Conduct indirect fire missions</td>
<td>7-19</td>
</tr>
<tr>
<td>GUNS-OPS-4005</td>
<td>NO</td>
<td>Conduct a sweep and zone mission</td>
<td>7-20</td>
</tr>
<tr>
<td>GUNS-OPS-4006</td>
<td>NO</td>
<td>Fire on a target out of traverse limits (OFC)</td>
<td>7-21</td>
</tr>
<tr>
<td>GUNS-OPS-4007</td>
<td>NO</td>
<td>Fire on a target out of traverse limits (DFCS)</td>
<td>7-22</td>
</tr>
<tr>
<td>GUNS-OPS-4008</td>
<td>NO</td>
<td>Fire priority target</td>
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</tr>
<tr>
<td>GUNS-OPS-4009</td>
<td>NO</td>
<td>Displace the howitzer</td>
<td>7-24</td>
</tr>
<tr>
<td>GUNS-OPS-4010</td>
<td>NO</td>
<td>Occupy supplementary position</td>
<td>7-24</td>
</tr>
<tr>
<td>GUNS-OPS-4011</td>
<td>NO</td>
<td>Engage targets in a direct fire role</td>
<td>7-25</td>
</tr>
<tr>
<td>GUNS-OPS-4012</td>
<td>NO</td>
<td>Conduct misfire procedures</td>
<td>7-26</td>
</tr>
<tr>
<td>GUNS-OPS-4013</td>
<td>NO</td>
<td>Prepare the howitzer for external lift</td>
<td>7-27</td>
</tr>
<tr>
<td>RCKT-OPS-4001</td>
<td>YES</td>
<td>Establish a reload point</td>
<td>7-28</td>
</tr>
<tr>
<td>RCKT-OPS-4002</td>
<td>NO</td>
<td>Conduct passage of control</td>
<td>7-29</td>
</tr>
<tr>
<td>RCKT-OPS-4003</td>
<td>NO</td>
<td>Destroy launcher and ammunition</td>
<td>7-29</td>
</tr>
<tr>
<td>RCKT-OPS-4004</td>
<td>YES</td>
<td>Establish platoon operations center (POC)</td>
<td>7-30</td>
</tr>
</tbody>
</table>

7003. 4000-LEVEL COLLECTIVE EVENTS

CFST-FSPT-4001: Conduct fire support planning at company level (L/S)

SUPPORTED MET(S): MCT 3.2.1.3

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: The company fire support team members support the development of the fire support plan to effectively integrate kinetic and non-kinetic fires into the commander's CONOPS. The company fire support team members assist the fire support team leader in the performance of his duties. The company fire support officer must organize the efforts of his assets to meet all these requirements in a time-constrained environment.

CONDITION: Given a higher headquarters order (warning/operations) or directive (mission/task), commander's guidance, references and appropriate fires C2 systems as a member of an infantry company operating across the range of military operations (ROMO).

STANDARD: To integrate effective fires to support the scheme of maneuver utilizing appropriate fire C2 programs of record.
EVENT COMPONENTS:
1. Identify required fires C2 and additional equipment in support of the company concept of operations.
2. Understand the company scheme of maneuver.
3. Determine assets available.
4. Identify targets in support of the scheme of maneuver.
5. Submit list of targets to HHQ.
6. Submit recommended fire support coordination measures (FSCM) to HHQ.
7. Plan the integration of fire support assets to support the scheme of maneuver.
8. Request fire support assets from HHQ.
9. Request collection assets from HHQ.

REFERENCES:
1. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller
2. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0802-FSC-2001 0802-FSO-1016 0802-FSO-1017
0861-OBS-1001

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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<tr>
<th>SIMULATED</th>
<th>SUITABILITY</th>
<th>SIMULATOR</th>
<th>UNIT OF MEASURE</th>
<th>HOURS</th>
<th>PM</th>
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<tbody>
<tr>
<td>Yes</td>
<td>L/S</td>
<td>SAVT</td>
<td>Team Hours</td>
<td>7</td>
<td>N</td>
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<tr>
<td>Yes</td>
<td>L/S</td>
<td>CACCTUS</td>
<td>Unit Hours</td>
<td>9</td>
<td>Y</td>
</tr>
</tbody>
</table>

CFST-FSPT-4002: Conduct fire support coordination at company level (L/S)

SUPPORTED MET(S): MCT 3.2.1.3

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: Fire support coordination is the planning and executing of fires so that targets are adequately covered by a fire support system(s).

CONDITION: Given a higher headquarters order (warning/operations) or directive (mission/task), commander's guidance, references and appropriate fires C2 systems as a member of an infantry company operating within a joint/combined/interagency environment across the range of military operations (ROMO).

STANDARD: To support the scheme of maneuver achieving effective combined arms effects utilizing appropriate fires C2 systems programs of record.

EVENT COMPONENTS:
1. Assume responsibility for the control of fires within assigned AO.
2. Maintain the fires portion of the common tactical picture (CTP).
3. Disseminate all FSCMs throughout the company.
4. Integrate air and surface delivered fires.
5. Conduct cross boundary coordination of fires with adjacent units or HHQ.
6. Employ ISR in support of the fire support plan.
7. Manage the flow of information in the CFST.
8. Adjust the schedule of fires based on the advance of maneuver units, changes in priorities (priorities of fire and priority targets), and any changes to the scheme of maneuver.
9. Maintain status of fire support assets.
10. Maintain a record of targets fired on, battle damage assessment (BDA), and targets not engaged.
11. Anticipate fire support requirements.
13. Integrate company assets into the fire support plan.

REFERENCES:
1. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller
2. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:

0802-FSO-1016  0802-FSO-1017  0802-FSO-2001
0861-NSFS-1002  0861-OBS-1001  0861-OBS-1004
0861-OBS-1005  0861-OBS-1006  0861-OBS-1007
0861-OBS-1008  0861-OBS-1009  0861-OBS-1010
0861-OBS-1015  0861-OBS-1017  0861-OBS-1018
0861-OBS-2005  0861-OBS-2009

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

<table>
<thead>
<tr>
<th>SIMULATED</th>
<th>SUITABILITY</th>
<th>SIMULATOR</th>
<th>UNIT OF MEASURE</th>
<th>HOURS</th>
<th>PM</th>
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</thead>
<tbody>
<tr>
<td>L/S</td>
<td></td>
<td>MTWS</td>
<td>Unit Hours</td>
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<tr>
<td>L/S</td>
<td></td>
<td>CACCTUS</td>
<td>Unit Hours</td>
<td>3.50</td>
<td>N</td>
</tr>
<tr>
<td>L/S</td>
<td></td>
<td>SAVT</td>
<td>Team Hours</td>
<td>3.50</td>
<td>N</td>
</tr>
</tbody>
</table>

FDC-OPS-4001: Establish the fire direction center

SUPPORTED MET(S):
MCT 3.2.1  MCT 3.2.4

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: The section performs actions necessary to establish an FDC.

CONDITION: Given an order and personnel with mission essential equipment.

STANDARD: To receive and process calls for fire.

EVENT COMPONENTS:
1. Conduct planning.
2. Conduct rehearsals.
3. Occupy position.
4. Establish communications with higher, adjacent, and supporting units.
5. Account for the five requirements for accurate predicted fires.
6. Transmit all required reports to appropriate HQ.
7. Standby to process fire mission(s).

REFERENCES:
1. AFATDS BC 11.x AFATDS USMC Job Aids (current version)
2. MCTP 3-10E Artillery Operations
3. MCWP 3-16.4 Tactics, Techniques and Procedures for the Field Artillery
   Manual Cannon Gunnery

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:

| 0802-FDC-1001 | 0802-FDC-1003 | 0802-FDC-1004 |
| 0844-FDC-1001 | 0844-FDC-1007 | 0844-FDC-1008 |
| 0848-FDC-2016 |

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
- Facility Code 17330 Covered Training Area
- Facility Code 17413 Field Training Area

EQUIPMENT: Mission essential FDC equipment IAW the references.

FDC-OPS-4002: Conduct technical fire direction

SUPPORTED MET(S): MCT 3.2.4

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 2 months

DESCRIPTION: The section performs actions necessary to accurately process fire missions by automated means.

CONDITION: Given a call for fire, a Fire Direction Center (FDC) with mission essential equipment.

STANDARD: To accurately process calls for fire and transmit fire commands/orders to the gun line.

EVENT COMPONENTS:
1. Meet the five requirements for accurate predicted fire.
2. Conduct fire mission processing.
3. Perform the five steps to improve firing data, as required.

REFERENCES:
1. AFATDS BC 11.x AFATDS USMC Job Aids (current version)
2. MCWP 3-16.4 Tactics, Techniques and Procedures for the Field Artillery
   Manual Cannon Gunnery

**CHAINED EVENTS:**

**INTERNAL SUPPORTING EVENTS:**

<table>
<thead>
<tr>
<th>Event Code</th>
<th>Event Code</th>
<th>Event Code</th>
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<td>0802-FDC-1004</td>
<td>0844-FDC-1007</td>
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<tr>
<td>0844-FDC-1008</td>
<td>0844-FDC-2001</td>
<td>0844-FDC-2002</td>
</tr>
<tr>
<td>0848-FDC-2010</td>
<td>0848-FDC-2011</td>
<td>0848-FDC-2012</td>
</tr>
<tr>
<td>0848-FDC-2016</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
- Facility Code 17330 Covered Training Area
- Facility Code 17413 Field Training Area

**EQUIPMENT:** Mission essential FDC equipment IAW the references.

---

**FDC-OPS-4003**: Conduct technical fire direction in a digitally denied or degraded environment

**SUPPORTED MET(S):** MCT 3.2.4

**EVALUATION-CODED:** YES  **SUSTAINMENT INTERVAL:** 2 months

**DESCRIPTION:** The section performs actions necessary to transition to manual means for determining firing data.

**CONDITION:** Given a call for fire, a fire direction center (FDC), with mission essential equipment.

**STANDARD:** To accurately process calls for fire and transmit fire commands to the gun line.

**EVENT COMPONENTS:**
1. Meet the five requirements for accurate predicted fire.
2. Conduct fire mission processing.
3. Perform the five steps to improve firing data as required.
4. Maintain a tactical situation map.

**REFERENCES:**
1. FM 6-40 Tactics, Techniques, and Procedures for Field Artillery Manual Cannon Gunnery
2. MCTP 3-10E Artillery Operations
**FDC-OPS-4004**: Conduct tactical fire direction

**SUPPORTED MET(S)**: MCT 3.2.4

**EVALUATION-CODED**: YES  
**SUSTAINMENT INTERVAL**: 3 months

**DESCRIPTION**: Tactical fire direction includes processing calls for fire and determining appropriate method of fire, ammunition expenditure, units to fire, and time of attack.

**CONDITION**: Given a supported units scheme of maneuver and fire support plan, an established fire direction center with mission essential equipment, and a firing unit(s).

**STANDARD**: To determine if, how, and when to engage targets.

**EVENT COMPONENTS**:
1. Receive a request for fires.
2. Determine appropriate method of attack.
3. Determine appropriate ammunition expenditure (weaponeering).
4. Determine units to fire.
5. Determine time of attack, as required.
6. Transmit request for additional support, as required.
7. Issue a fire order, if applicable.
8. Receive approval, either passive or active.

**REFERENCES**:
1. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
2. MCWP 3-16.1 Artillery Operations
3. MCWP 3-16.2 Procedures for the Marine Corps Fire Support
4. MCWP 3-42.1 Fire Support in MAGTF Operations
MISCELLANEOUS:

**ADMINISTRATIVE INSTRUCTIONS:** Tactical fire direction consists of but is not limited to, the coordination of TOT missions, executing schedules of fires, coordinating mass fires, conducting simultaneous missions, segmenting missions for irregularly shaped target, maintaining a tactical situation map, and integrating available fire support assets.

---

**FDC-RCKT-4001:** Conduct tactical fire direction

**SUPPORTED MET(S):** MCT 3.2.4.2

**EVALUATION-CODED:** YES **SUSTAINMENT INTERVAL:** 3 months

**DESCRIPTION:** Tactical fire direction includes processing calls for fire and determining appropriate method of fire, ammunition expenditure, units to fire, and time of attack.

**CONDITION:** Given a supported units scheme of maneuver and fire support plan, an established fire direction center with mission essential equipment, and a firing unit(s).

**STANDARD:** To determine if, how, and when to engage targets.

**EVENT COMPONENTS:**
1. Receive a request for fires.
2. Determine appropriate method of attack.
3. Determine appropriate ammunition expenditure (weaponering).
4. Determine units to fire.
5. Determine time of attack, as required.
6. Transmit request for additional support, as required.
7. Issue a fire order, if applicable.
8. Receive approval, either passive or active.

**REFERENCES:**
1. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
2. MCWP 3-16.1 Artillery Operations
3. MCWP 3-16.2 Procedures for the Marine Corps Fire Support
4. MCWP 3-42.1 Fire Support in MAGTF Operations

**CHAINED EVENTS:**

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FST-FSPT-4001: Establish a fire support coordination center (FSCC)/fires and effects coordination center (FECC) (L/S)

SUPPORTED MET(S): MCT 3.2.1.3

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: An area within the COC is designated for the FST to conduct fire support planning, coordination and execution in support of the concept of operations/scheme of maneuver. The FSCC/FECC is established when the capability to coordinate all fire support is achieved. This task will be conducted at the MAGTF, division, regiment, battalion, and company levels.

CONDITION: Given a higher headquarters order (warning/operations) or directive (mission/task), commander's guidance, references and appropriate fires C2 systems as a member of a FSCC/FECC across the Range of military operations (ROMO).

STANDARD: To plan, coordinate and execute fires in support of the mission and commander's intent during 24 hour operation utilizing fires C2 systems programs of record and collaborative tool.

EVENT COMPONENTS:
1. Establish communication with section, agencies and command to facilitate planning, coordination and execution of fires.
2. Establish required actions and reports with higher, adjacent and supporting units.
3. Establish fires internal battle rhythm within the overall battle rhythm.
4. Identify and occupy physical space with personnel and equipment available.
5. Identify systems and systems architecture requirements.
6. Load, initialize and activate appropriate communication and C2 systems.

REFERENCES:
1. AFATDS Regt/Bn FDC Job Aids
2. JADOCS version BC 10.x.x Joint Automated Deep Operations Coordination System USMC Job Aids
3. JTCW Users Manual
4. MCRP 3-16E Fire Support Systems for MAGTF Operations
5. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

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SUPPORT REQUIREMENTS:

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Yes L/S CACCTUS Unit Hours 14 Y
**FST-FSPT-4002:** Conduct fire support planning

**SUPPORTED MET(S):** MCT 3.2.1.3

**EVALUATION-CODED:** YES  **SUSTAINMENT INTERVAL:** 6 months

**DESCRIPTION:** The fire support section supports the development of the fire support plan to effectively integrate lethal and nonlethal fires into the commander's CONOPS. This section will assist in the preparations of the operation order, branch and sequel plans as well as fragmentary orders. This section publishes/distributes products produced during planning. This task will be conducted at the MAGTF, division, regiment, and battalion levels.

**CONDITION:** Given a higher headquarters order (warning/operations) or directive (mission/task), commander's guidance, references and appropriate fires C2 systems as a member of a fire support section operating across the range of military operations (ROMO).

**STANDARD:** To support the accomplishment of the mission and commander's intent utilizing appropriate fires C2 and collaborative tools.

**EVENT COMPONENTS:**
1. Support course of action development step of MCPP.
2. Support war-game step of MCPP.
3. Support course of action comparison and decision step of MCPP.
4. Support orders development step of MCPP.
5. Support transition step of MCPP.
6. Support operational planning team (OPT)/joint planning group (JPG) daily planning requirements to develop branch plans, sequels and FRAGOs.
7. Support preparation for OPT/JPG.
8. Support problem framing step of MCPP.
9. Support the targeting process.

**REFERENCES:**
1. MCRP 3-16E Fire Support Systems for MAGTF Operations
2. MCWP 3-31 Marine Air-Ground Task Force Fires
3. MCWP 5-10 Marine Corps Planning Process

**CHAINED EVENTS:**

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**FST-FSPT-4003:** Conduct dynamic targeting (L/S)

**SUPPORTED MET(S):** MCT 3.2.1.3

**EVALUATION-CODED:** YES  **SUSTAINMENT INTERVAL:** 6 months
DESCRIPTION: Dynamic targeting (D3A) is normally employed in current operations planning due to the nature and time frame associated with current operations typically requires more immediate responsiveness than is achieved in deliberate targeting. Targets may be planned targets or targets of opportunity. This task will be conducted at the MAGTF, division, regiment, and battalion levels.

CONDITION: Given an operations order, commander's guidance, references and appropriate fires C2 systems as a member of a fire support section operating across the range of military operations (ROMO).

STANDARD: To support the scheme of maneuver/concept of operations achieving effective combined arms effects IAW the commander's intent utilizing appropriate fire C2 programs of record.

EVENT COMPONENTS:
1. Locate targets.
2. Validate targets with the intelligence section.
3. Receive time sensitive target (TST) from HHQ, as directed.
4. Refer to AGM on weapon to target match and priority.
5. Gain appropriate approval authority.
6. Transmit mission to appropriate fire support agency.
7. Complete coordination of mission with appropriate units.
8. Execute target attack.
9. Assess for desired effects.

REFERENCES:
1. AFATDS BC 11.x AFATDS USMC Job Aids (current version)
2. JADOCS version BC 10.x.x Joint Automated Deep Operations Coordination System USMC Job Aids
3. JTCW Users Manual
4. MCRP 3-16E Fire Support Systems for MAGTF Operations
5. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0802-FSO-1017 0861-FSC2-2010 0861-FSC2-2015
0861-FSC2-2020 0861-FSC2-2035 0861-MGTF-2002

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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<td>CACCTUS</td>
<td>Unit Hours</td>
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FST-FSPT-4004: Conduct deliberate (D3A/Joint) targeting (L/S)

SUPPORTED MET(S): MCT 3.2.1.3

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 6 months
DESCRIPTION: Targeting is a continual, decision-making process. Commanders and designated key personnel must understand the functions associated with the process, be knowledgeable of the capabilities and limitations of acquisition, target intelligence development, and attack systems, and be able to integrate them. The entire targeting process must be fully integrated into the decision-making process. This task will be conducted at the MAGTF, division, regiment, and battalion levels.

CONDITION: Given an operations order commander's guidance, references and appropriate fires C2 systems as a member of a Fire Support Section operating across the range of military operations (ROMO).

STANDARD: To produce targeting products that effectively facilitate shaping efforts, set conditions that support the concept of operations and achieve targeting objectives IAW commander's intent utilizing appropriate fire C2 programs of record.

EVENT COMPONENTS:
1. Review daily MAGTF targeting guidance, objectives and battlespace shaping matrix (BSM).
2. Produce target nomination with appropriate staff section that supports the concept of operations.
3. Submit DD Form 1972 to the appropriate agency.
4. Submit collections requirements to appropriate agencies.
5. Submit prioritized list of targets to appropriate agencies.
6. Participate in the targeting working groups as required.
7. Submit targeting briefing products for targeting board.
8. Participate in targeting and collections board.
9. Monitor the execution and assessment of the ATO/deliberate targets.

REFERENCES:
1. JADOCS version BC 10.x.x Joint Automated Deep Operations Coordination System USMC Job Aids
2. JP 3-60 Joint Targeting
4. MCRP 3-16E Fire Support Systems for MAGTF Operations
5. MCWP 3-31 Marine Air-Ground Task Force Fires

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:

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SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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FST-FSPT-4005: Develop a quick fire plan
SUPPORTED MET(S): MCT 3.2.1.3

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: Quick fire support planning responds to immediate problems using available fire support assets. Authority has already been given for supported unit to plan fires of one or more supporting arms. Normally, time does not permit detailed evaluation of targets and fire planning by fire support agencies. This task will be conducted at the MAGTF, division, regiment, battalion, and company levels.

CONDITION: Given an operation order, commander's guidance, fires C2 systems and one or more supporting fires agencies, as a member of a fire support section operating across the range of military operations (ROMO).

STANDARD: To plan, coordinate and execute fires to accomplish the mission in support of commander's intent.

EVENT COMPONENTS:
1. Determine the CONOPs.
2. Determine targets to be engaged.
3. Determine desired effects on targets.
4. Determine order and timing of target engagement.
5. Determine the duration of fires.
6. Determine the time on target.
7. Determine estimated rate of movement (friendly/enemy).
8. Determine the available assets.
10. Schedule targets IAW scheme of maneuver, commander's guidance, and allocated assets.
11. Disseminate to appropriate agencies.

REFERENCES:
1. AFATDS BC 11.x AFATDS USMC Job Aids (current version)
2. JADOCS version BC 10.x.x Joint Automated Deep Operations Coordination System USMC Job Aids
3. JTCW Users Manual
4. MCRP 3-16E Fire Support Systems for MAGTF Operations
5. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
6. MCWP 3-31 Marine Air-Ground Task Force Fires

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0861-MGTF-2002 0861-OBS-1001

FST-FSPT-4006: Develop a schedule of fires.

SUPPORTED MET(S): MCT 3.2.1.3

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months
DESCRIPTION: Schedule of fires is planned for a later time to be attacked as part of preparation or program IAW with scheme of maneuver. They can include individual target, groups, and series and include both kinetic and non-kinetic effect on targets. This task will be conducted at the MAGTF, division, regiment, battalion, and company levels.

CONDITION: Given an operation order, commander's guidance, fires C2 systems and one or more supporting fires agencies, as a member of a fire support section operating across the range of military operations (ROMO).

STANDARD: To plan, coordinate and execute fires to accomplish the mission in support of commander's intent.

EVENT COMPONENTS:
1. Determine the CONOPs.
2. Determine targets to be engaged.
3. Determine desired effects on targets.
4. Determine order and timing of target engagement.
5. Determine the duration of fires.
6. Determine the time on target.
7. Determine estimated rate of movement (friendly/enemy).
8. Determine the available assets.
9. Request additional assets from HHQ as required.
10. Issue warning orders.
11. Schedule targets IAW scheme of maneuver, commanders guidance, and allocated assets.
12. Disseminate schedule of fires to appropriate agencies.
13. Report schedule of fires to HHQ.

REFERENCES:
1. AFATDS BC 11.x AFATDS USMC Job Aids (current version)
2. JADOCS version BC 10.x.x Joint Automated Deep Operations Coordination System USMC Job Aids
3. JTCW Users Manual
4. MCRP 3-16E Fire Support Systems for MAGTF Operations
5. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
6. MCWP 3-31 Marine Air-Ground Task Force Fires

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FST-FSPT-4007: Execute counter-fire plan (L/S)

SUPPORTED MET(S): MCT 3.2.1.3

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 12 months
DESCRIPTION: Counter-fire intends to destroy or neutralize adversary weapons and includes counter-battery, counter-preparation, counter-mortar, counter-rocket, and counter-missile fires. Counter-fire also includes the fires executed throughout the battlespace that attack the adversary's total fire support system. The MAGTF uses all available assets in the conduct of counter-fire. This task will be conducted at the MAGTF, division, and regiment levels.

CONDITION: Given an operation order, commander's guidance, fires C2 systems and one or more supporting fires agencies, as a member of fire support section operating across the range of military operations (ROMO).

STANDARD: To execute counter-fire to accomplish the mission in support of commander's intent.

EVENT COMPONENTS:
1. Receive counter-fire mission from target processing center.
2. Refer to AGM/HPTL/TSS IOT determine weapons to target match and priorities.
3. Send mission to desired fire support agency/asset.
4. Coordinate with airspace control agencies, as required.
5. Prosecute target.
6. Assess to ensure desired effects are met.
7. Report battle damage assessment to HHQs.

REFERENCES:
1. AFATDS BC 11.x AFATDS USMC Job Aids (current version)
2. JADOCS version BC 10.x.x Joint Automated Deep Operations Coordination System USMC Job Aids
3. JTCW Users Manual
4. MCRP 3-16E Fire Support Systems for MAGTF Operations
5. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
6. MCWP 3-31 Marine Air-Ground Task Force Fires

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0802-MGTF-2007 0861-FSC2-2034 0861-MGTF-2002
0861-OBS-1001

SUPPORT REQUIREMENTS:

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<td>L/S</td>
<td>CACCTUS</td>
<td>Unit Hours</td>
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GUNS-OPS-4001: Lay the howitzer (OFC)
SUPPORTED MET(S):  MCT 3.2.4

EVALUATION-CODED:  NO  
SUSTAINMENT INTERVAL:  3 months

DESCRIPTION:  The section will conduct all tasks necessary to prepare the howitzer for indirect or direct fire.

CONDITION:  Given a scenario in which the section has occupied a position and the prime mover has stopped.

STANDARD:  To ensure emplacement within the time standards of 3 minutes in daylight and 7 minutes in darkness.

EVENT COMPONENTS:
1. Howitzer stops in the designated position.
2. Section chief commands "dismount, prepare for action."
3. Aiming point is identified.
4. Announced deflection is applied to the panoramic telescope.
5. Howitzer is laid on the azimuth of fire to an accuracy of 0 mils.

REFERENCES:
1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
2. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
3. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
4. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0802-BTRY-1001  0811-GUNS-2002  0811-GUNS-2003
0811-GUNS-2004  0811-GUNS-2005  0811-GUNS-2006
0811-GUNS-2007  0811-GUNS-2107  0811-GUNS-2109

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Time starts when the Section Chief commands "Dismount, Prepare for Action."
2. Time stops when the section has announced "0" mils and the gun is laid.

GUNS-OPS-4002:  Lay the howitzer (DFCS)

SUPPORTED MET(S):
MCT 3.2.4  MCT 3.2.4.2
EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: The section will conduct all tasks necessary to prepare the howitzer for indirect fire.

CONDITION: Given an initialized howitzer and a scenario in which the section has occupied a position and the prime mover has stopped.

STANDARD: To ensure within the time standards of 3 minutes in daylight and 7 minutes in darkness.

EVENT COMPONENTS:
1. Section chief determines the firing point within the operation area from the chief of section display (CSD).
2. Section chief announces "dismount, prepare for action"
3. Howitzer is laid on the azimuth of fire to an accuracy of 0 mils.

REFERENCES:
1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
2. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
3. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
4. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:

0802-BTRY-1001  0811-GUNS-2001  0811-GUNS-2003
0811-GUNS-2004  0811-GUNS-2005  0811-GUNS-2006
0811-GUNS-2007  0811-GUNS-2105  0811-GUNS-2106
0811-GUNS-2108  0811-GUNS-2109

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Time starts when the section chief commands "dismount, prepare for action."
2. Time stops when the gun is laid to an accuracy of 0 mils.

GUNS-OPS-4003: Determine site to crest

SUPPORTED MET(S):
MCT 1.12.2  MCT 3.2.4  MCT 3.2.4.2

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months
CONDITION: Given an emplaced howitzer and a measurable crest.

STANDARD: To the nearest mil and piece to crest range within 100 meters of the actual location.

EVENT COMPONENTS:
1. Measure the angle of site-to-crest.
2. Measure piece-to-crest range by, sub-tense, tape (measure), map, pacing, or estimation by observing.
3. Report angle of site to crest and piece to crest range to the XO.

REFERENCES:
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
2. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
3. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
4. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0802-FDC-1002 0811-GUNS-2008 0811-GUNS-2009

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

GUNS-OPS-4004: Conduct indirect fire missions

SUPPORTED MET(S):
MCT 1.12.2  MCT 3.2.1  MCT 3.2.4
MCT 3.2.4.2

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

CONDITION: Given a howitzer section, separate loading ammunition, and fire commands/fire order.

STANDARD: To ensure the howitzer is ready to fire after receipt of QE for the initial and subsequent rounds within 30 seconds for low angle and 45 seconds for high angle.

EVENT COMPONENTS:
1. Section chief announces fire commands displayed on the chief of section display (CSD).
2. Verifies fire commands from DA Form 4513 properly selecting and loading of announced ammunition.
3. Executes fire mission per the fire commands.
REFERENCES:
1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
2. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
3. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:

0802-BTRY-1003 0811-GUNS-2009 0811-GUNS-2010
0811-GUNS-2110 0811-GUNS-2111 0811-GUNS-2116

SUPPORT REQUIREMENTS:

ORDNANCE:

DODIC QUANTITY
D529 Projectile, 155mm High Explosive M795 8 per Section
D544 Proj, 155mm HE M107 8 per Section

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Degraded operations fire mission is conducted utilizing optical fire control. Exception to time limits for precision guided munitions.
2. Excalibur can be trained using simulation.

GUNS-OPS-4005: Conduct a sweep and zone mission

SUPPORTED MET(S):

MCT 3.2.4 MCT 3.2.4.2

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

CONDITION: Given a howitzer section, ammunition and fire commands.

STANDARD: To compute firing matrix, fire initial deflection and quadrant and subsequent matrix data.

EVENT COMPONENTS:
1. Section chief computes data/matrix.
2. Section executes fire missions in accordance with matrix.
3. Reports "rounds complete."

REFERENCES:
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery
CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0802-BTRY-1003 0811-GUNS-2009 0811-GUNS-2010
0811-GUNS-2110 0811-GUNS-2111 0811-GUNS-2113

SUPPORT REQUIREMENTS:

ORDNANCE:

DODIC QUANTITY
D529 Projectile, 155mm High Explosive M795 8 per Section
D544 Proj, 155mm HE M107 8 per Section

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: This can be evaluated as a dry-fire event.

GUNS-OPS-4006: Fire on a target out of traverse limits (OPC)

SUPPORTED MET(S):
MCT 3.2.4  MCT 3.2.4.2

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

CONDITION: Given a howitzer section, ammunition and upon receipt of special instructions "Do Not Load, Azimuth."

STANDARD: To ensure the howitzer is ready to fire within 3 minutes in daylight and 6 minutes in darkness.

EVENT COMPONENTS:
1. Section chief directs use of alternate aiming point as necessary.
2. Howitzer is laid onto deflection per fire commands.

REFERENCES:
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0802-BTRY-1003 0811-GUNS-2009 0811-GUNS-2010
0811-GUNS-2110 0811-GUNS-2111 0811-GUNS-2112

SUPPORT REQUIREMENTS:

ORDNANCE:
MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Time starts when section receives Quadrant Elevation.
2. Time ends when section reports "Laid."

GUNS-OPS-4007: Fire on a target out of traverse limits (DFCS)

SUPPORTED MET(S):
MCT 3.2.4  MCT 3.2.4.2

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

CONDITION: Given a howitzer section, ammunition and upon receipt of deflection outside of traversing limits.

STANDARD: To ensure the howitzer is ready to fire within 3 minutes in daylight and 6 minutes in darkness.

EVENT COMPONENTS:
1. Section chief announces fire commands from chief of section display (CSD).
2. Howitzer is laid onto deflection per fire commands.

REFERENCES:
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

CHAINED EVENTS:
INTERNAL SUPPORTING EVENTS:
0802-BTRY-1003  0811-GUNS-2110  0811-GUNS-2111
0811-GUNS-2112

SUPPORT REQUIREMENTS:

ORDNANCE:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range
MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Time starts when section receives digital mission.
2. Time ends when howitzer is laid.

GUNS-OPS-4008: Fire priority target

SUPPORTED MET(S):
MCT 3.2.4
MCT 3.2.4.2

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

CONDITION: Given a howitzer section with ammunition and priority target data.

STANDARD: To ensure first round is fired within 20 seconds.

EVENT COMPONENTS:
1. Weapon laid on priority target.
2. Execute mission.

REFERENCES:
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0802-BTRY-1003  0811-GUNS-2006  0811-GUNS-2110
0811-GUNS-2111  0811-GUNS-2112  0811-GUNS-2114

SUPPORT REQUIREMENTS:

ORDNANCE:

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<tr>
<th>DODIC</th>
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<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>D529 Proj.</td>
<td>8</td>
<td>155mm High Explosive M795 per Section</td>
</tr>
<tr>
<td>D544 Proj.</td>
<td>9</td>
<td>155mm HE M107 per Section</td>
</tr>
</tbody>
</table>

RANGE/TRAINING AREA:

Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

GUNS-OPS-4009: Displace the howitzer

SUPPORTED MET(S):
MCT 1.12.2
MCT 3.2.4
MCT 3.2.4.2
EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

CONDITION: Given an emplaced howitzer, howitzer section, ammunition and a movement order.

STANDARD: To ensure all section equipment, personnel and ammunition prepared for movement within 3 minutes during daylight hours and 6 minutes during hours of darkness.

EVENT COMPONENTS:
1. Receives the command march order.
2. Section displaces howitzer.

REFERENCES:
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0811-GUNS-2119
0811-GUNS-2206

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Time starts when march order is announced.
2. Time stops when prime mover and howitzer move.

GUNS-OPS-4010: Occupy supplementary position

SUPPORTED MET(S):
MCT 3.2.4
MCT 3.2.4.2

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

CONDITION: Given a howitzer emplaced in a primary position, section, known supplementary position.

STANDARD: To emplace the howitzer within 6 minutes in daylight, 10 minutes in darkness to continue providing indirect and direct fires.

EVENT COMPONENTS:
1. Receive movement order.
2. Displace howitzer from primary position.
3. Move to supplementary position.
4. Emplace howitzer in supplementary position.

REFERENCES:
1. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery
3. ST 6-50-20 Battery Executive Officer's/Platoon Leader's Handbook
CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:

0811-GUNS-2002   0811-GUNS-2003   0811-GUNS-2004
0811-GUNS-2005   0811-GUNS-2006   0811-GUNS-2007
0811-GUNS-2107   0811-GUNS-2109   0811-GUNS-2119

SUPPORT REQUIREMENTS:

ORDNANCE:

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<tbody>
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<td>D529 Projectile, 155mm High Explosive M795</td>
<td>8 per Section</td>
</tr>
<tr>
<td>D544 Proj, 155mm HE M107</td>
<td>8 per Section</td>
</tr>
</tbody>
</table>

RANGE/TRAINING AREA:

Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Time Starts: When the section has been notified to displace.
2. Time Stops: When the howitzer starts to move.
3. Time Continues: When section dismounts at supplementary position.
4. Time Stops: When the howitzer is laid.

GUNS-OPS-4011: Engage targets in a direct fire role

SUPPORTED MET(S): MCT 3.2.4

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

CONDITION: Given an emplaced howitzer section and ammunition.

STANDARD: To ensure the section effectively suppresses or neutralizes armored targets with 3 rounds within 2 minutes in daylight and 3 minutes in darkness or 2 rounds for personnel targets within 1 minute in daylight and 1:30 in darkness.

EVENT COMPONENTS:
1. Section chief issues fire commands.
2. Execute fire commands.

REFERENCES:
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
2. MCTM 10407C-OR/1 Operator’s Manual for Howitzer, Medium, Towed: 155mm, M777A2
3. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:

0802-BTRY-1003   0811-GUNS-2012   0811-GUNS-2110
SUPPORT REQUIREMENTS:

ORDNANCE:

<table>
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<tr>
<td>D529 Projectile, 155mm High Explosive M795</td>
<td>8 per Section</td>
</tr>
<tr>
<td>D544 Proj, 155mm HE M107</td>
<td>8 per Section</td>
</tr>
</tbody>
</table>

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Time Starts: When the section has initiated the fire commands.
2. Time Stops: When the final round is fired.

GUNS-OPS-4012: Conduct misfire procedures

SUPPORTED MET(S):
MCT 3.2.4  MCT 3.2.4.2

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

CONDITION: Given a howitzer that has failed to fire.

STANDARD: To ensure the howitzer is placed back in action IAW cold, warm, hot tube or warm tube hot weather procedures.

EVENT COMPONENTS:
1. Section attempts to fire two more times.
2. Section determines/perform procedures for a cold, warm or hot tube as per the TM.

REFERENCES:
1. JREGTO 3570.1  Standing Operating Procedures for Field Artillery Safety
2. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
3. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0802-BTRY-1003  0811-GUNS-2115

SUPPORT REQUIREMENTS:

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<td>D529 Projectile, 155mm High Explosive M795</td>
<td>8 per Section</td>
</tr>
<tr>
<td>D544 Proj, 155mm HE M107</td>
<td>8 per Section</td>
</tr>
</tbody>
</table>
RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

**ADMINISTRATIVE INSTRUCTIONS:** Excalibur can be trained using simulation.

---

**GUNS-OPS-4013:** Prepare the howitzer for external lift

**SUPPORTED MET(S):**
MCT 1.12  
MCT 1.12.2  
MCT 3.2.4

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 6 months

**CONDITION:** Given a howitzer, section, basic issued items (BII), and receipt of an operations order.

**STANDARD:** To ensure the howitzer and equipment are prepared for lift.

**EVENT COMPONENTS:**
1. Inspect all lift points.
2. Orient and configure the howitzer.
3. Create sling deflectors.
4. Transfer to HST.

**REFERENCES:**
1. MCRP 4-11.3E Multi-service Helicopter Sling Load: Vols I,II and III
2. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
3. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

**CHAINED EVENTS:**

**INTERNAL SUPPORTING EVENTS:** 0811-GUNS-2120

**SUPPORT REQUIREMENTS:**

**ORDNANCE:**

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<tr>
<td>D529 Projectile, 155mm High Explosive M795</td>
<td>8 per Section</td>
</tr>
<tr>
<td>D544 Proj, 155mm HE M107</td>
<td>8 per Section</td>
</tr>
</tbody>
</table>

---

**RCKT-OPS-4001:** Establish a reload point

**SUPPORTED MET(S):**
MCT 1.12  
MCT 3.2.4  
MCT 3.2.4.2

**EVALUATION-CODED:** YES  
**SUSTAINMENT INTERVAL:** 3 months
**CONDITION:** Given a position area, ammunition, and equipment.

**STANDARD:** To stage ammunition for launcher operations.

**EVENT COMPONENTS:**
1. Conduct a tactical march.
2. Establish security.
3. Determine suitability of reload point.
4. Offload ammunition as directed.
5. Provide over watch security on ammunition.

**REFERENCES:**
1. MCIP 3-16.02 HIMARS Operations
2. MCRP 4-11.3F Convoy Operations Handbook

**CHAINED EVENTS:**

**INTERNAL SUPPORTING EVENTS:**
RCKT-OPS-3002  RCKT-OPS-3003

**SUPPORT REQUIREMENTS:**

**ORDNANCE:**

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<tr>
<td>H185 Rocket, 298mm Practice Red Range M28A1/A2 (MLRS)</td>
<td>6 per Section</td>
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</table>

**RCKT-OPS-4002:** Conduct passage of control

**SUPPORTED MET(S):**

<table>
<thead>
<tr>
<th>MCT 1.12.2</th>
<th>MCT 3.2.4</th>
<th>MCT 3.2.4.2</th>
<th>MCT 5</th>
</tr>
</thead>
</table>

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**CONDITION:** Given a movement order requiring an operation center to displace.

**STANDARD:** To transfer control from one headquarters to another without inhibiting operations.

**EVENT COMPONENTS:**
1. Establish voice and data communications with subordinate elements, launchers, and appropriate higher headquarters.
2. Coordinate movement within the limits of the battery position area.
3. Collect and disseminate tactical information to and from subordinate elements and higher headquarters.

**REFERENCES:**
1. MCIP 3-16.02 HIMARS Operations
2. MCWP 3-16.1 Artillery Operations
3. USMC HIMARS AFATDS Job Aids (AFATDS Version 6.4.0.0) USMC HIMARS AFATDS Job Aids (AFATDS Version 6.4.0.0)
**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17420 Maneuver/Training Area, Heavy Forces

---

**RCKT-OPS-4003:** Destroy launcher and ammunition

**SUPPORTED MET(S):**
MCT 1.12.2  MCT 3.2.4  MCT 3.2.4.2

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**CONDITION:** Given a tactical situation in which the equipment is unable to be moved, the unit must displace in the face of enemy threats, and no means of transport are available.

**STANDARD:** To render launcher, equipment, and ammunition inoperable/unserviceable.

**EVENT COMPONENTS:**
1. Destroy launcher and ammunition by the demolition method.
2. Destroy launcher and ammunition by the mechanical method.
3. Destroy launcher and ammunition by the gunfire method.

**REFERENCES:**
1. FM 5-250 Explosives and Demolitions
2. MCIP 3-16.02 HIMARS Operations

**CHAINED EVENTS:**

**INTERNAL SUPPORTING EVENTS:** RCKT-OPS-3003

**SUPPORT REQUIREMENTS:**

**ORDNANCE:**

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<td>A131 Cartridge, 7.62mm 4 Ball M80/1 Tracer M62 Linked</td>
<td>400 per Team</td>
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<tr>
<td>G900 Grenade, Hand Incendiary Thermite AN-M14</td>
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**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**

**EVALUATOR INSTRUCTIONS:**
1. Destruction may be simulated.
2. Units shall be evaluated in day and night conditions.
RCKT-OPS-4004: Establish platoon operations center (POC)

SUPPORTED MET(S):
MCT 1.12.2  MCT 3.2.4  MCT 3.2.4.2  MCT 5

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 3 months

CONDITION: Given organic equipment, personnel, and a position area.

STANDARD: To ensure the platoon is prepared to conduct fire mission processing and command and control.

EVENT COMPONENTS:
1. Occupy position area.
2. Establish voice and data communications with appropriate higher headquarters, launchers, and subordinate sections of the platoon.
3. Establish fire direction center.
4. Establish security integration with the local security plan.
5. Conduct position improvement.

REFERENCES:
1. MCIP 3-16.02 HIMARS Operations
2. MCWP 3-16.1 Artillery Operations
3. TM 11-5820-890-10-8 SINCgars Ground Combat Net Radio, ICOM

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0802-RCKT-1001 0844-FDC-1007 0844-FDC-2001
0848-FDC-2008 0848-FDC-2016

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces

7004. TECHNICAL FDC FIRE MISSION TIME STANDARDS

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<tr>
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<th>SUBS RD</th>
<th>FFE RD</th>
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# Chapter 8

## 3000 Level Collective Events

<table>
<thead>
<tr>
<th>Paragraph</th>
<th>Page</th>
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<tbody>
<tr>
<td>PURPOSE</td>
<td>8000</td>
</tr>
<tr>
<td>EVENT CODING</td>
<td>8001</td>
</tr>
<tr>
<td>INDEX OF 3000-LEVEL COLLECTIVE EVENTS</td>
<td>8002</td>
</tr>
<tr>
<td>3000-LEVEL COLLECTIVE EVENTS</td>
<td>8003</td>
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</table>
ARTILLERY T&R MANUAL

CHAPTER 8

3000 LEVEL COLLECTIVE EVENTS

8000. PURPOSE. Chapter 8 contains 3000 level collective training and readiness (T&R) events for the artillery community.

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-XXXX. This chapter utilizes the following methodology:

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>RADR</td>
<td>Radar</td>
</tr>
<tr>
<td>RCKT</td>
<td>Rocket</td>
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<tr>
<td>SENS</td>
<td>Sensor</td>
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</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPS</td>
<td>Operations</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
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8002. INDEX OF 3000-LEVEL COLLECTIVE EVENTS

<table>
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<th>E-Coded</th>
<th>Event</th>
<th>Page</th>
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<tbody>
<tr>
<td>RADR-OPS-3001</td>
<td>NO</td>
<td>Perform site selection for the AN/TPQ46 Radar</td>
<td>8-3</td>
</tr>
<tr>
<td>RADR-OPS-3002</td>
<td>YES</td>
<td>Emplace the AN/TPQ-46 Radar</td>
<td>8-4</td>
</tr>
<tr>
<td>RADR-OPS-3003</td>
<td>YES</td>
<td>Operate the AN/TPQ 46 Radar</td>
<td>8-5</td>
</tr>
<tr>
<td>RADR-OPS-3004</td>
<td>YES</td>
<td>Displace AN/TPQ-46 Radar</td>
<td>8-6</td>
</tr>
<tr>
<td>RADR-OPS-3005</td>
<td>NO</td>
<td>Conduct Target Processing Center (TPC) Operations</td>
<td>8-6</td>
</tr>
<tr>
<td>RADR-OPS-3006</td>
<td>NO</td>
<td>Perform site selection for the AN/TPQ-54 Counterfire Target Acquisition Radar System (CTARS)</td>
<td>8-7</td>
</tr>
<tr>
<td>RADR-OPS-3007</td>
<td>YES</td>
<td>Emplace the AN/TPQ-54 Counterfire Target Acquisition Radar System</td>
<td>8-8</td>
</tr>
<tr>
<td>RADR-OPS-3008</td>
<td>YES</td>
<td>Operate the AN/TPQ-54 Counterfire Target Acquisition Radar System (CTARS)</td>
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<td>29 Oct 2018</td>
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**Enclosure (1)**

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<th>Event Code</th>
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<th>Example</th>
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<tbody>
<tr>
<td>RCKT-CSS-3001</td>
<td>NO</td>
<td>Transfer rocket pod</td>
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<tr>
<td>RCKT-CSS-3002</td>
<td>NO</td>
<td>Conduct embarkation for Re-Supply Vehicle (RSV)</td>
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</tr>
<tr>
<td>RCKT-OPS-3001</td>
<td>YES</td>
<td>Establish communication</td>
<td>8-12</td>
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<tr>
<td>RCKT-OPS-3002</td>
<td>NO</td>
<td>Occupy Operations Area</td>
<td>8-13</td>
</tr>
<tr>
<td>RCKT-OPS-3003</td>
<td>NO</td>
<td>Maintain security</td>
<td>8-14</td>
</tr>
<tr>
<td>RCKT-OPS-3004</td>
<td>YES</td>
<td>Conduct fire mission (digital)</td>
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</tr>
<tr>
<td>RCKT-OPS-3005</td>
<td>YES</td>
<td>Conduct fire mission (voice)</td>
<td>8-15</td>
</tr>
<tr>
<td>RCKT-OPS-3006</td>
<td>YES</td>
<td>Conduct reload operations</td>
<td>8-17</td>
</tr>
<tr>
<td>RCKT-OPS-3007</td>
<td>NO</td>
<td>Prepare for embarkation</td>
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<td>SENS-OPS-3001</td>
<td>NO</td>
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<td>NO</td>
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<td>YES</td>
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<td>SENS-OPS-3005</td>
<td>NO</td>
<td>Conduct Modeled Meteorological Operations</td>
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<td>Conduct Visual Meteorological Operations</td>
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### 8003. 3000-LEVEL COLLECTIVE EVENTS

**RCKT-OPS-3001**: Perform site selection for the AN/TPQ-54 Counterfire Target Acquisition Radar System (CTARS)

**SUPPORTED MET(S)**: MCT 3.2.1

**EVALUATION-CODED**: NO  
**SUSTAINMENT INTERVAL**: 6 months

**CONDITION**: Given a RADAR Plan, a RADAR Deployment Order (RDO), map of operational area, and the references.

**STANDARD**: To within 500 meters of the RDO in a position that maximizes the capabilities of the RADAR.

**EVENT COMPONENTS**:
1. Perform route reconnaissance.
2. Select suitable site.
3. Issue movement order to RADAR team.
4. Develop security plan.
5. Conduct hasty survey.
6. Perform manual terrain following.

**REFERENCES**:
1. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
2. TM 11-5840-380-10 OPERATOR'S MANUAL FOR RADAR SET AN/TPQ-36(V)8
CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:

0842-RADR-1001   0847-SENS-2003   0848-RADR-2001
0848-RADR-2002   0848-SENS-2005

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:

EVALUATOR INSTRUCTIONS:
1. If a suitable site cannot be located within 500 meters of RDO, RADAR team must request new site from the TPC.
2. If higher echelon survey is available, hasty survey event component is not required.
3. If available, a sub-mil kit can be used for hasty survey.

RADR-OPS-3002: Emplace the AN/TPQ-46 Radar

SUPPORTED MET(S): MCT 3.2.4.3

EVALUATION-CODED: YES          SUSTAINMENT INTERVAL: 6 months

CONDITION: Given a RADAR, RADAR Plan, RDO, map of operational area, and a suitable site.

STANDARD: To within a time limit of 10 minutes.

EVENT COMPONENTS:
1. Emplace Antenna Trailer Group.
2. Emplace Generator Trailer Group.
4. Conduct RADAR initialization.
5. Establish communications.

REFERENCES:
1. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
2. TM 11-5840-380-10 OPERATOR'S MANUAL FOR RADAR SET AN/TPQ-36(V)8

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:

0803-RADR-2001   0803-RADR-2002   0842-RADR-1001
0848-RADR-2002   0848-SENS-2005

SUPPORT REQUIREMENTS:
**RANGE/TRAINING AREA:**
Facility Code 17410 Maneuver/Training Area, Light Forces

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**

**EVALUATOR INSTRUCTIONS:**
1. Time does not include netting or enhanced communication antennas.
2. Time standard only applies when the internal navigation system is operational.
3. Time Starts: When ATG stops in planned location.
4. Time Stops: When RADAR team transmits the RADAR location message.
5. Security posture is maintained during emplacement.

---

**RADR-OPS-3003:**  Operate the AN/TPQ 46 Radar

**SUPPORTED MET(S):**
MCT 3.2.1  MCT 3.2.4.3

**EVALUATION-CODED:**  YES  **SUSTAINMENT INTERVAL:**  6 months

**CONDITION:**  Given an emplaced radar, and a TPC.

**STANDARD:**  To track and report acquisitions to the TPC.

**EVENT COMPONENTS:**
1. Perform hostile fire operations.
2. Perform friendly fire operations.

**REFERENCES:**
1. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
2. TM 11-5840-380-10 OPERATOR'S MANUAL FOR RADAR SET AN/TPQ-36(V)8

**CHAINED EVENTS:**

**INTERNAL SUPPORTING EVENTS:**
- 0803-RADR-2001  0803-RADR-2002  0842-RADR-1001
- 0848-RADR-2002  RADR-OPS-3001

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17410 Maneuver/Training Area, Light Forces
Facility Code 17670 Mortar Range
Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**

**EVALUATOR INSTRUCTIONS:**
1. Embedded trainer can be used if firing units are not available.
2. Friendly fire buffer information has to be provided for friendly mode.

**RADR-OPS-3004**: Displace AN/TPQ-46 Radar

**SUPPORTED MET(S):**
MCT 3.2.1  MCT 3.2.4.3

**EVALUATION-CODED**: YES  **SUSTAINMENT INTERVAL**: 6 months

**CONDITION**: Given an emplaced RADAR, RADAR Plan, RDO, and map of AO.

**STANDARD**: To within a time limit of 6 minutes.

**EVENT COMPONENTS**:
1. Displace Operations Control Group.
2. Displace Antenna Transceiver Group.
3. Displace Generator Trailer Group.

**REFERENCES**:
1. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
2. TM 11-5840-380-10 OPERATOR'S MANUAL FOR RADAR SET AN/TPQ-36(V)8

**SUPPORT REQUIREMENTS**:

**RANGE/TRAINING AREA**:
Facility Code 17410 Maneuver/Training Area, Light Forces

**MISCELLANEOUS**:

**ADMINISTRATIVE INSTRUCTIONS**:

**EVALUATOR INSTRUCTIONS**:
1. Time does not include netting or enhanced communication antennas.
2. Time Starts: When team chief issues movement order.
3. Time Stops: When all trailers are attached to vehicles and prepared for movement.
4. Security posture is maintained during displacement.

**RADR-OPS-3005**: Conduct Target Processing Center (TFC) Operations

**SUPPORTED MET(S):**
MCT 3.2.1  MCT 3.2.4.3

**EVALUATION-CODED**: NO  **SUSTAINMENT INTERVAL**: 6 months

**CONDITION**: Given a RADAR Plan and equipment organic to the Target Acquisition Platoon.

**STANDARD**: IAW the operations order RADAR.
EVENT COMPONENTS:
1. Emplace TPC.
2. Manage RADAR operations.
3. Establish communications.
4. Displace TPC.

REFERENCES:
1. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
2. MCTP 3-10E Artillery Operations
3. TM 11-5840-380-10 OPERATOR'S MANUAL FOR RADAR SET AN/TPQ-36(V)8

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces

RADR-OPS-3006: Perform site selection for the AN/TPQ-54 Counterfire Target Acquisition Radar System (CTARS)

SUPPORTED MET(S): MCT 3.2.1

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

CONDITION: Within 500 meters of the RDO in a position that maximizes the capabilities of the RADAR.

STANDARD: To ensure the RADAR site is within 500 meters of the RDO, and maximizes the capabilities of the RADAR.

EVENT COMPONENTS:
1. Perform the route reconnaissance.
2. Select a suitable site.
3. Issue movement order to CTARS team.
4. Develop a security plan.
5. Conduct hasty survey.

REFERENCES: MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0803-RADR-2002 0842-RADR-1001 0842-RADR-1003
0848-RADR-2001
SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
EVALUATOR INSTRUCTIONS:
1. If suitable site cannot be located within 500 meters of RDO, LCMR team must request new site from the TPC.
2. If higher echelon survey is available, hasty survey event component is not required.
3. If available, a sub-mil kit can be used for hasty survey.

RADR-OPS-3007: Emplace the AN/TPQ-54 Counterfire Target Acquisition Radar System

SUPPORTED MET(S): MCT 3.2.1

EVALUATION-CODED: YES SUSTAINMENT INTERVAL: 6 months

CONDITION: Given RADAR, RADAR Plan, RDO, map of AO, and a suitable site.

STANDARD: To within a time limit of 20 minutes.

EVENT COMPONENTS:
1. Assemble RADAR.
2. Set up the computer system.
3. Establish power.
4. Conduct RADAR initialization.
5. Establish communications.

REFERENCES: MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0803-RADR-2002 0842-RADR-1001 0842-RADR-1003
0848-RADR-2001 RADR-OPS-3006

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
EVALUATOR INSTRUCTIONS:
1. Time does not include netting or enhanced communication antennas.
2. Time Starts: When the tripod is placed over the hub.
3. Time Stops: When LCMR is up in operations.

**RADR-OPS-3008**: Operate the AN/TPQ-54 Counterfire Target Acquisition Radar System (CTARS)

**SUPPORTED MET(S):**
MCT 3.2.1  
MCT 3.2.4.3

**EVALUATION-CODED:** YES  
**SUSTAINMENT INTERVAL:** 6 months

**CONDITION:** Given emplaced RADAR and a TPC.

**STANDARD:** To track and report valid acquisitions to appropriate agencies.

**EVENT COMPONENTS:**
1. Track indirect fire.
2. Evaluate tracks.

**REFERENCES:** MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition

**CHAINED EVENTS:**

**INTERNAL SUPPORTING EVENTS:**
0803-RADR-2002  
0842-RADR-1001  
0842-RADR-1003  
0848-RADR-2001  
RADR-OPS-3007

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17410 Maneuver/Training Area, Light Forces  
Facility Code 17670 Mortar Range  
Facility Code 17671 Field Artillery Indirect Fire Range

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**RADR-OPS-3009**: Displace the AN/TPQ-54 Counterfire Target Acquisition Radar System (CTARS)

**SUPPORTED MET(S):**
MCT 3.2.1  
MCT 3.2.4.3

**EVALUATION-CODED:** YES  
**SUSTAINMENT INTERVAL:** 6 months

**CONDITION:** Given emplaced RADAR, RADAR Plan, RDO, map of operational area, and a suitable site.

**STANDARD:** To within a time limit of 10 minutes.

**EVENT COMPONENTS:**
1. Disassemble RADAR.
2. Stow RADAR.
3. Stow computer system.
REFERENCES: MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:

0803-RADR-2002 0842-RADR-1001 0842-RADR-1001
0848-RADR-2001

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:

EVALUATOR INSTRUCTIONS:
1. Time does not include netting or enhanced communication antennas.
2. Time Starts: When team chief issues movement order.
3. Time Stops: When all transit cases are ready for movement.

RCKT-CSS-3001: Transfer rocket pod

SUPPORTED MET(S): MCT 3.2.4

EVALUATION-CODED: YES SUSTAINMENT INTERVAL: 3 months

CONDITION: Given a Re-Supply System (RSS) prepared for reload operations, ammunition, and equipment.

STANDARD: To transfer ammunition between any combination of the RSV, RST, and the ground within 4 minutes in daylight and 6 minutes in darkness.

EVENT COMPONENTS:
1. Establish and maintain security.
2. Prepare rocket pod.
3. Transfer rocket pod.
4. Repeat step 2 for truck to ground, ground to truck, truck to truck/trailer, trailer to ground, ground to trailer.
5. Update ammunition document register and accountability files.

REFERENCES:
1. DA Pam 75-5 US Army Utilization, Storage, and Out-loading Drawings for Ammunition and Components
2. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
3. TM 10920A-10 System Operation Manual with components list for HIMARS Re-Supply Vehicle

CHAINED EVENTS:
INTERNAL SUPPORTING EVENTS:
0814-LAUN-1018  0814-LAUN-1018  0814-LAUN-2008
0814-LAUN-2008  0814-LAUN-2020  0814-LAUN-2020

SUPPORT REQUIREMENTS:

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<td>H185</td>
<td>Rocket, 298mm Practice Red Range M28A1/A2 (MLRS)</td>
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<tr>
<td>HA51-</td>
<td>Rocket, 298mm Tactical Unitary M31A1 (MLRS)</td>
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RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Time starts when crane is attached to pod lifting bar; time stops when crane is disconnected from rocket pod lifting bar.
2. Units shall be evaluated in day and night conditions.

RCKT-CSS-3002: Conduct embarkation for Re-Supply Vehicle (RSV)

SUPPORTED MET(S): MCT 3.2.4

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

CONDITION: Given a movement order requiring air lift and C-5 or C-17 support.

STANDARD: To load the RSV onto a naval vessel, C-5 or C-17.

EVENT COMPONENTS:
1. Prepare RSS for air transport.
2. Following loadmasters guidance, load RSS onto aircraft.
3. Prepare RSS for sea transport.
4. Following loadmasters guidance, load RSS onto vessel.

REFERENCES:
1. TM 10629-CD Interactive Electronic Technical Manual (IETM) for Re-Supply Vehicle
2. TM 10921A-13&P System Operation Maintenance Manual and repair parts and special tools list for HIMARS Re-Supply Trailer

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:

SUPPORT REQUIREMENTS:
RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range
Facility Code 17911 Air Transport Mockup

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Units shall be evaluated in day and night conditions.
2. Units shall be evaluated in CBRN environment.

RCKT-OPS-3001: Establish communication

SUPPORTED MET(S): MCT 3.2.4

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 1 month

CONDITION: Given an operational M142 HIMARS launcher.

STANDARD: Ensuring the launcher consistently transmits and receives voice and digital communications with battery/platoon operation center.

EVENT COMPONENTS:
1. Configure VIC III system.
2. Install and configure communications and crypto equipment.
3. Troubleshoot communications as required.

REFERENCES:
1. TM 10254A-10/1 Operator's Manual for Data Transfer Device, AN/CYZ-10(V)3
2. TM 11-5820-890-10-8 SINCGARS Ground Combat Net Radio, ICOM
3. TM 11-5830-263-10 Operator's Manual for Vehicular Intercommunication Set, AN/VIC-3(V)

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0814-LAUN-1001 0814-LAUN-1002
0814-LAUN-1003
0814-LAUN-1006 0814-LAUN-1016
0814-LAUN-1017 0814-LAUN-2006

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Units shall be evaluated in day and night conditions.
2. Units shall be evaluated in CBRN environment.

RCKT-OPS-3002: Occupy Operations Area
SUPPORTED MET(S): MCT 3.2.4

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 1 month

CONDITION: Given a movement order and the advance party has completed reconnaissance of the operations (position) area.

STANDARD: To achieve firing capability in accordance with the timeline set in the movement order.

EVENT COMPONENTS:
1. Maintain proper dispersion and security when entering the area.
2. Select suitable hide points and firing points and build location database.
3. Transmit location database to controlling FDC.
4. Receive and input reload points.
5. Perform position improvement as time and situation permits.

REFERENCES:
1. MCRP 4-11.3F Convoy Operations Handbook

CHAINED EVENTS:

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SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

RCKT-OPS-3003: Maintain security

SUPPORTED MET(S): MCT 3.2.4

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 1 month

CONDITION: Given a position area.

STANDARD: To ensure safe accomplishment of operations.

EVENT COMPONENTS:
1. Launcher crew briefed on local security plan.
2. Integrate internal launcher security with local security plan.
3. Adjust security posture as tactical situation develops.

**REFERENCES:** MCTP 3-10E Artillery Operations

**CHAINED EVENTS:**

**INTERNAL SUPPORTING EVENTS:**

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**SUPPORT REQUIREMENTS:**

**ORDNANCE:**

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<tr>
<td>A059 Cartridge, 5.56mm Ball M855 10/Clip</td>
<td>630 cartridges per Team</td>
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<tr>
<td>A131 Cartridge, 7.62mm 4 Ball M80/1 Tracer M62 Linked</td>
<td>400 cartridges per Team</td>
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**RANGE/TRAINING AREA:**

- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17671 Field Artillery Indirect Fire Range

**RCKT-OPS-3004:** Conduct fire mission (digital)

**SUPPORTED MET(S):** MCT 3.2.4

**EVALUATION-CODED:** YES  **SUSTAINMENT INTERVAL:** 1 month

**CONDITION:** Given a fire mission received via digital fire control system.

**STANDARD:** To execute fire mission within 2 minutes in daylight and 3 minutes in darkness.

**EVENT COMPONENTS:**

1. Acknowledge receipt of digital fire mission.
2. Move to firing point.
3. Execute fire mission.
4. Return to hide point.

**REFERENCES:**

1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety

**CHAINED EVENTS:**

**INTERNAL SUPPORTING EVENTS:**
SUPPORT REQUIREMENTS:

ORDNANCE:

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<tr>
<td>H185 Rocket, 298mm Practice Red Range M28A1/A2 (MLRS)</td>
<td>12 rockets per Team</td>
</tr>
<tr>
<td>HA51- Rocket, 298mm Tactical Unitary M31A1 (MLRS)</td>
<td>12 rockets per Team</td>
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RANGE/TRAINING AREA:

Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:

1. Time starts when launcher acknowledges receipt of fire mission and begins movement from hide location. Time stops when first rocket is fired for a fire when ready mission, or is laid for all other fire missions.
2. The collective will be accomplished using DODIC H185 Reduced Range Practice Rocket (RRPR).

RCKT-OPS-3005: Conduct fire mission (voice)

SUPPORTED MET(S): MCT 3.2.4

EVALUATION-CODED: YES SUSTAINMENT INTERVAL: 1 month

CONDITION: Given a fire mission received via voice communications.

STANDARD: To execute fire mission within 4 minutes in daylight and 6 minutes in darkness.

EVENT COMPONENTS:

1. Manually input fire mission data received from FDC into the fire mission database.
2. Move to firing point.
3. Execute fire mission.
4. Return to hide point.

REFERENCES:

1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety

**CHAINED EVENTS:**

**INTERNAL SUPPORTING EVENTS:**
- 0814-LAUN-1003 0814-LAUN-1003 0814-LAUN-1004
- 0814-LAUN-1004 0814-LAUN-1006 0814-LAUN-1006
- 0814-LAUN-1008 0814-LAUN-1008 0814-LAUN-1010
- 0814-LAUN-1011 0814-LAUN-1011 0814-LAUN-1017
- 0814-LAUN-2019 0814-LAUN-2019

**SUPPORT REQUIREMENTS:**

**ORDNANCE:**
- DODIC
  - H185 Rocket, 298mm Practice Red Range M28A1/A2 (MLRS)
    - QUANTITY: 12 rockets per Team
  - HA51– Rocket, 298mm Tactical Unitary M31A1 (MLRS)
    - QUANTITY: 6 rockets per Team

**RANGE/TRAINING AREA:**
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. Time starts when launcher acknowledges receipt of fire mission and begins movement from hide location. Time stops when first rocket is fired for a fire when ready mission, or is laid for all other fire missions.
2. The collective will be accomplished using DODIC H185 Reduced Range Practice Rocket (RRPR).

**RCKT-OPS-3006:** Conduct reload operations

**SUPPORTED MET(S):** MCT 3.2.4

**EVALUATION-CODED:** YES

**SUSTAINMENT INTERVAL:** 1 month

**CONDITION:** Given an expended pod in the launcher.

**STANDARD:** To achieve firing capability within 8 minutes in daylight, 12 minutes in darkness, 10 minutes in a daylight CBRN environment, and 14 minutes in a darkness CBRN environment.

**EVENT COMPONENTS:**
1. Inspect pod, to include verification of lot number on pod.
2. Correctly position launchers for reload.
3. Download expended ammunition pod.
4. Upload ammunition pod.
5. Stow launcher module.
6. Move to the next location.

REFERENCES:
1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
2. TM 9-1055-1646-13&P Operator’s Organizational, and Direct Support
   Maintenance Manual Including Repair Parts and Special Tools List for
   High Mobility Artillery Rocket System

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:

<table>
<thead>
<tr>
<th>Event Code</th>
<th>Event Code</th>
<th>Event Code</th>
</tr>
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<tbody>
<tr>
<td>0814-LAUN-1004</td>
<td>0814-LAUN-1004</td>
<td>0814-LAUN-1006</td>
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<tr>
<td>0814-LAUN-1006</td>
<td>0814-LAUN-1008</td>
<td>0814-LAUN-1008</td>
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<tr>
<td>0814-LAUN-1014</td>
<td>0814-LAUN-1016</td>
<td>0814-LAUN-1016</td>
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<td>0814-LAUN-1018</td>
<td>0814-LAUN-1018</td>
<td>0814-LAUN-1019</td>
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<td>0814-LAUN-2001</td>
<td>0814-LAUN-2005</td>
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<td>0814-LAUN-2008</td>
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<td>0814-LAUN-2020</td>
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<td>0814-LAUN-2020</td>
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SUPPORT REQUIREMENTS:

ORDNANCE:

<table>
<thead>
<tr>
<th>DODIC</th>
<th>QUANTITY</th>
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</thead>
<tbody>
<tr>
<td>H185 Rocket, 298mm Practice Red Range M28A1/A2 (MLRS)</td>
<td>6 rockets per Team</td>
</tr>
<tr>
<td>HA51 Rocket, 298mm Tactical Unitary M31A1 (MLRS)</td>
<td>6 rockets per Team</td>
</tr>
</tbody>
</table>

RANGE/TRAINING AREA:

Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Time starts when the launcher pulls up to and stops at the rocket pod to be loaded. Time stops when the launcher pulls away from the reload point.

RCKT-OPS-3007: Prepare for embarkation

SUPPORTED MET(S): MCT 3.2.4

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 1 month

CONDITION: Given a movement order.

STANDARD: To load the launcher onto a Naval vessel, C-5 or C-17.

EVENT COMPONENTS:
1. Prepare launcher for air embarkation.
2. Follow loadmaster's instructions.
REFERENCES:
1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:

<table>
<thead>
<tr>
<th>Event Code</th>
<th>Event Code</th>
<th>Event Code</th>
</tr>
</thead>
</table>

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range
Facility Code 17911 Air Transport Mockup

SENS-OPS-3001: Conduct Route Reconnaissance

SUPPORTED MET(S): MCT 3.2.1

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

CONDITION: Given an Operations Order, a Sensor Plan, map of the AO.

STANDARD: To ensure determined routes are suitable for assets required to traverse.

EVENT COMPONENTS:
1. Plan the reconnaissance.
2. Coordinate with battle space owners.
3. Perform reconnaissance of primary/alternate routes.
5. Report supplementary positions as time permits.
6. Report significant observations of the operational environment.

REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCTP 3-10E Artillery Operations
3. TC 3-25.26 Map Reading and Land Navigation

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces

SENS-OPS-3002: Perform Position Area Survey
SUPPORTED MET(S): MCT 3.2.1

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

CONDITION: Given an Operations Order, a Sensor Plan, map of the operational area, equipment organic to a sensor section, and the references.

STANDARD: To provide common grid and common direction within the AO.

EVENT COMPONENTS:
1. Establish artillery/mortar firing position(s).
2. Establish declination station(s).
3. Establish meteorological position(s).
4. Establish RADAR position(s).

REFERENCES:
1. DMA TM 8358.1 Datums, Ellipsoids, Grids and Grid Reference Systems
2. DMA TR 8350.2 DoD World Geodetic System 1984
3. MCRP 3-10E.6 Marine Artillery Survey Operations
4. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
5. MCTP 3-10E Artillery Operations

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
EVALUATOR INSTRUCTIONS:
1. All position area requirements may not be listed in the Sensor Plan.
2. Survey must be completed with a combination of conventional, INS, and GPSS means.
3. Security posture is maintained.

SENS-OPS-3003: Perform Target Area Survey

SUPPORTED MET(S): MCT 3.2.1

EVALUATION-CODED: YES  SUSTAINMENT INTERVAL: 3 months

CONDITION: Given an Operations Order, a Sensor Plan, map of the operational area, equipment organic to a sensor section, and the references.

STANDARD: To provide 10 digit accuracy location of targets.

EVENT COMPONENTS:
1. Establish surveyed observation post(s).
2. Establish surveyed coordinates for points in the engagement area.

REFERENCES:
1. DMA TM 8358.1 Datums, Ellipsoids, Grids and Grid Reference Systems
2. DMA TR 8350.2 DoD World Geodetic System 1984
3. MCRP 3-10E.6 Marine Artillery Survey Operations
4. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
5. MCTP 3-10E Artillery Operations

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17410 Maneuver/Training Area, Light Forces

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**

**EVALUATOR INSTRUCTIONS:**
1. All target area requirements may not be listed in the Sensor Plan.
2. Survey must be completed with a combination of conventional, INS, and GPSS means.
3. Security posture is maintained.

---

**SENS-OPS-3004:** Perform Connection Area Survey

**SUPPORTED MET(S):** MCT 3.2.1

**EVALUATION-CODED:** No  
**SUSTAINMENT INTERVAL:** 6 months

**CONDITION:** Given an Operations Order, a Sensor Plan, map of the operational area, equipment organic to a sensor section, and the references.

**STANDARD:** To ensure the target area and position area are tied into a common network.

**EVENT COMPONENTS:**
1. Maintain common control.
2. Establish control for non-organic assets.

**REFERENCES:**
1. DMA TM 8358.1 Datums, Ellipsoids, Grids and Grid Reference Systems
2. DMA TR 8350.2 DoD World Geodetic System 1984
3. MCRP 3-10E.6 Marine Artillery Survey Operations
4. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
5. MCTP 3-10E Artillery Operations

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17410 Maneuver/Training Area, Light Forces

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. All connection area requirements may not be listed in the Sensor Plan.
2. Survey must be completed with a combination of conventional, INS, and GPSS means.
3. Security posture is maintained.

**SENS-OPS-3005**: Conduct Modeled Meteorological Operations

**SUPPORTED MET(S)**: MCT 3.2.1

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 6 months

**CONDITION**: Given a Sensor Plan, map of AO, and an initialized Modeled Meteorological Information Manager (MMIM).

**STANDARD**: To produce a valid NATO STANAG Meteorological messages IAW MCWP 3-16.7.

**EVENT COMPONENTS**:
1. Initialize the system.
2. Obtain modeled data.
3. Publish the MET messages.

**REFERENCES**:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCTP 3-10E Artillery Operations

**SUPPORT REQUIREMENTS**:

**RANGE/TRAINING AREA**:
Facility Code 17410 Maneuver/Training Area, Light Forces

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**SENS-OPS-3006**: Conduct Visual Meteorological Operations

**SUPPORTED MET(S)**: MCT 3.2.1

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 6 months

**CONDITION**: Given a Sensor Plan, map of AO, and equipment organic to a sensor section.

**STANDARD**: To produce a valid Computer and Ballistic type 3 MET message.

**EVENT COMPONENTS**:
1. Perform site selection.
2. Emplace equipment.
3. Perform PiBal observations.
4. Perform computations.
5. Disseminate MET message(s).
6. Displace equipment.
REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCTP 3-10E Artillery Operations

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces

SENS-OPS-3007: Emplace Acoustic Command Post

SUPPORTED MET(S): MCT 3.2.1

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

CONDITION: Given a Sensor Plan, map of operational area, equipment organic to the Sensor Section, and the references.

STANDARD: In a time limit of 30 minutes.

EVENT COMPONENTS:
1. Emplace RAMM antenna.
2. Emplace Command Post Computer.
3. Establish communications.

REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
3. TM 11138A-OR Operators Manual Ground Counter Fire Sensor

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0803-SENS-2006 0847-SENS-2006 0848-SENS-2003
0848-SENS-2004

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Sensor Post authentication does not count against time.
2. Time Starts: When emplacement order is issued.
3. Time Stops: When the Data Fusion Processor is ready to authenticate Sensor Posts.
4. Security posture is maintained.
SENS-OPS-3008: Perform Acoustic Command Post Operations

SUPPORTED MET(S): MCT 3.2.1

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

CONDITION: Given a Sensor Plan, acoustic events, map of AO, equipment organic to the Sensor Section, and an emplaced acoustic system.

STANDARD: Ensuring system maintains operational capability.

EVENT COMPONENTS:
1. Process acoustic events.
2. Monitor sensor posts.
3. Perform power management.

REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
3. TM 11138A-OR Operators Manual Ground Counter Fire Sensor

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0803-SENS-2006   0847-SENS-2006   0848-SENS-2003
0848-SENS-2004

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces

SENS-OPS-3009: Displace Acoustic Command Post

SUPPORTED MET(S): MCT 3.2.1

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

CONDITION: Given a Sensor Plan, map of AO, equipment organic to the Sensor Section, and an emplaced acoustic system.

STANDARD: In a time limit of 20 minutes.

EVENT COMPONENTS:
1. Displace RAMM antenna.
2. Displace Command Post Computer.
3. Displace Communications Processor Group.

REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
3. TM 11138A-OR Operators Manual Ground Counter Fire Sensor
CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0803-SENS-2006 0847-SENS-2006 0848-SENS-2003
0848-SENS-2004

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Time Starts: When team chief issues movement order.
2. Time Stops: When vehicles are staged in convoy order.
3. Security posture is maintained.

SENS-OPS-3010: Emplace Acoustic Sensor Post

SUPPORTED MET(S): MCT 3.2.1

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 6 months

CONDITION: Given a Sensor Plan, map of AO, and equipment organic to the Sensor Section.

STANDARD: In a time limit of 20 minutes.

EVENT COMPONENTS:
1. Perform Site Selection.
2. Emplace Microphones.
3. Conduct survey.
4. Erect Meteorological Mast.
5. Perform Cluster Processor operations.

REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
3. TM 11138A-OR Operators Manual Ground Counter Fire Sensor

CHAINED EVENTS:

INTERNAL SUPPORTING EVENTS:
0803-SENS-2006 0847-SENS-2006 0848-SENS-2003
0848-SENS-2004

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces
**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. Time Starts: When microphone 1 position is determined.
2. Time Stops: When Sensor Post Acoustic Test is performed.

---

**SENS-OPS-3011:** Displace Acoustic Sensor Post

**SUPPORTED MET(S):** MCT 3.2.1

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 6 months

**CONDITION:** Given a Sensor Plan, map of AO, and an emplaced Sensor Post.

**STANDARD:** In a time limit of 10 minutes.

**EVENT COMPONENTS:**
1. Displace Cluster Processor.
2. Displace Meteorological Mast.
3. Displace Microphones.

**REFERENCES:**
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
3. TM 11138A-OR Operators Manual Ground Counter Fire Sensor

**CHAINED EVENTS:**

**INTERNAL SUPPORTING EVENTS:**

0803-SENS-2006 0847-SENS-2006 0848-SENS-2003
0848-SENS-2004

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17410 Maneuver/Training Area, Light Forces

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**

**EVALUATOR INSTRUCTIONS:**
1. Time Starts: Upon arrival at position.
2. Time Stops: Upon departure of position.

---

**SENS-OPS-3012:** Conduct Geospatial Information Center (GIC) Operations
**SUPPORTED MET(S):** MCT 3.2.1

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**CONDITION:** Given a Sensor Plan, Combat Operations Center, and equipment organic to the Target Acquisition Platoon.

**STANDARD:** IAW the Sensor Plan.

**EVENT COMPONENTS:**
1. Emplace GIC.
2. Manage Sensor operations.
3. Establish communications.
4. Displace GIC.

**REFERENCES:**
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
3. MCTP 3-10E Artillery Operations

**CHAINED EVENTS:**

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<th>INTERNAL SUPPORTING EVENTS:</th>
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<th>0803-SENS-2003</th>
<th>0847-SENS-1001</th>
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<tr>
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<td>0847-SENS-1002</td>
<td>0847-SENS-1009</td>
<td>0848-SENS-2004</td>
</tr>
</tbody>
</table>

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17410 Maneuver/Training Area, Light Forces
### CHAPTER 9

**MOS 0802 INDIVIDUAL EVENTS**

<table>
<thead>
<tr>
<th>PARAGRAPH</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURPOSE</td>
<td>9000</td>
</tr>
<tr>
<td>EVENT CODING</td>
<td>9001</td>
</tr>
<tr>
<td>INDEX OF 0802 2000-LEVEL INDIVIDUAL EVENTS.</td>
<td>9002</td>
</tr>
<tr>
<td>0802 2000-LEVEL EVENTS.</td>
<td>9003</td>
</tr>
<tr>
<td>INDEX OF 0802 1000-LEVEL INDIVIDUAL EVENTS.</td>
<td>9004</td>
</tr>
<tr>
<td>0802 1000-LEVEL EVENTS.</td>
<td>9005</td>
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</tbody>
</table>
9000. PURPOSE. This chapter details the individual events that pertain to artillery officers. 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-XXXX. This chapter utilizes the following methodology:

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>0802</td>
<td>Artillery Officer</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTRY</td>
<td>Battery</td>
</tr>
<tr>
<td>FDC</td>
<td>Fire Direction Center</td>
</tr>
<tr>
<td>FSO</td>
<td>Fire Support Officer</td>
</tr>
<tr>
<td>FSC</td>
<td>Fire Support Coordinator</td>
</tr>
<tr>
<td>MGTF</td>
<td>MAGTF Fires</td>
</tr>
<tr>
<td>PLAN</td>
<td>Fires Planner</td>
</tr>
<tr>
<td>RCKT</td>
<td>Rocket Artillery</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>2000</td>
<td>Core Plus Skills</td>
</tr>
<tr>
<td>1000</td>
<td>Core Skill</td>
</tr>
</tbody>
</table>

9002. INDEX OF 0802 2000-LEVEL INDIVIDUAL EVENTS

<table>
<thead>
<tr>
<th>Event Code</th>
<th>E-Coded</th>
<th>Event</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>0802-BTRY-2001</td>
<td>NO</td>
<td>Coordinate logistics</td>
<td>9-3</td>
</tr>
<tr>
<td>0802-BTRY-2002</td>
<td>NO</td>
<td>Direct the defense</td>
<td>9-4</td>
</tr>
<tr>
<td>0802-BTRY-2003</td>
<td>NO</td>
<td>Lead a tactical march</td>
<td>9-4</td>
</tr>
<tr>
<td>0802-FSC-2001</td>
<td>NO</td>
<td>Perform the duties of a company fire support officer (L/S)</td>
<td>9-5</td>
</tr>
<tr>
<td>MOS Code</td>
<td>Description</td>
<td>Level</td>
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<td>-------------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>0802-FSC-2002</td>
<td>NO Perform the duties of a battalion fire support officer (L/S)</td>
<td>9-6</td>
<td></td>
</tr>
<tr>
<td>0802-FSC-2003</td>
<td>NO Perform the duties of a regimental fire support officer</td>
<td>9-7</td>
<td></td>
</tr>
<tr>
<td>0802-FSC-2004</td>
<td>NO Perform the duties of the division fire support officer</td>
<td>9-9</td>
<td></td>
</tr>
<tr>
<td>0802-FSO-2001</td>
<td>NO Conduct a FASCAM mission</td>
<td>9-10</td>
<td></td>
</tr>
<tr>
<td>0802-FSO-2002</td>
<td>NO Conduct an ICM mission</td>
<td>9-11</td>
<td></td>
</tr>
<tr>
<td>0802-MGTF-2001</td>
<td>NO Perform the duties of Force Fires/Effects Coordinator (L/S)</td>
<td>9-11</td>
<td></td>
</tr>
<tr>
<td>0802-MGTF-2002</td>
<td>NO Perform the duties of Force Fires/Effects Plans Officer</td>
<td>9-13</td>
<td></td>
</tr>
<tr>
<td>0802-MGTF-2003</td>
<td>NO Perform the duties of Force Fires/Effects Targeting Officer</td>
<td>9-14</td>
<td></td>
</tr>
<tr>
<td>0802-MGTF-2004</td>
<td>NO Perform the duties of Force Fires/Effects Current Fires Officer</td>
<td>9-15</td>
<td></td>
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<tr>
<td>0802-MGTF-2005</td>
<td>NO Perform the duties of a MAGTF fires LNO (L/S)</td>
<td>9-16</td>
<td></td>
</tr>
<tr>
<td>0802-MGTF-2006</td>
<td>NO Conduct dynamic targeting</td>
<td>9-17</td>
<td></td>
</tr>
<tr>
<td>0802-MGTF-2007</td>
<td>NO Conduct counterfire (L/S)</td>
<td>9-18</td>
<td></td>
</tr>
<tr>
<td>0802-MGTF-2008</td>
<td>NO Conduct MAGTF fire support planning (L/S)</td>
<td>9-19</td>
<td></td>
</tr>
<tr>
<td>0802-PLAN-2001</td>
<td>NO Develop field artillery support plan (L/S)</td>
<td>9-20</td>
<td></td>
</tr>
<tr>
<td>0802-PLAN-2002</td>
<td>NO Integrate fires into ground combat operations (L/S)</td>
<td>9-21</td>
<td></td>
</tr>
<tr>
<td>0802-RADR-2001</td>
<td>NO Coordinate the employment of target acquisition assets (L/S)</td>
<td>9-23</td>
<td></td>
</tr>
</tbody>
</table>

9003. 0802 2000-LEVEL EVENTS

0802-BTRY-2001: Coordinate logistics

**Evaluation-Coded:** NO  **Sustainment Interval:** 6 months

**MOS Performing:** 0802

**Billets:** Btry XO, Plt Cmdr, S-4A

**Grades:** 2NDLT, 1STLT, CAPT

**Initial Training Setting:** MOJT

**Condition:** Given references, materials, equipment, and while conducting tactical operations.

**Standard:** To ensure the artillery unit has logistical support to accomplish the mission.

**Performance Steps:**
1. Coordinate with the appropriate level Ground Combat Element (GCE)/Logistics Combat Element (LCE).
2. Coordinate with appropriate level S-4 Section for maintenance and re-supply
3. Supervise the pick-up and delivery of various classes of supply.
4. Supervise the conduct Preventative Maintenance and Corrective Maintenance in the field.
5. Submit logistics reports.

REFERENCES:
1. MCTP 3-10E Artillery Operations
2. MCWP 4-12 Operational-Level Logistics

0802-BTRY-2002: Direct the defense

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0802

BILLETS: Btry AXO, Btry CO, Btry XO, Fire Direction Officer, Plt Cmdr, S-4

GRADES: 2NDLT, 1STLT, CAPT, MAJ

INITIAL TRAINING SETTING: MOJT

CONDITION: Given an artillery unit in the field.

STANDARD: Ensuring the application of METT-TSL.

PERFORMANCE STEPS:
1. Select the appropriate course of action based upon the tactical scenario.
2. Establish the plan for the defense.
3. Supervise the execution of the defensive plan.
4. Establish procedures for destruction of equipment and material.

REFERENCES:
1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces

0802-BTRY-2003: Lead a tactical march

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 1 month

MOS PERFORMING: 0802

BILLETS: Btry CO, Btry XO, Fire Direction Officer, Plt Cmdr
GRADES: 2NDLT, 1STLT, CAPT, MAJ

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a unit with movement orders and a tactical situation.

STANDARD: To the designated location within the movement order time constraint and in compliance with the convoy brief.

PERFORMANCE STEPS:
1. Select the appropriate type of displacement, methods of movement, march column interval, and march column configuration.
2. Plan for alternate firing position(s) en route.
3. Issue convoy brief.
5. Ensure reports are submitted to higher headquarters.
6. Direct immediate action drills.

REFERENCES:
1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCRP 4-11.3F Convoy Operations Handbook
3. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces

0802-FSC-2001: Perform the duties of a company fire support officer (L/S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The fire support officer is responsible for the efficient functioning of the Fires section to ensure that fires are planned, coordinated and executed to support the commander’s intent and guidance.

MOS PERFORMING: 0802

BILLETs: Fire Support Officer

GRADES: 2NDLT, 1STLT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a higher headquarters order (warning/operations) or directive (mission/task), commander's guidance, references and equipment organic to a Fire Support Marine as a member of a Company fire support team operating within a Joint, Interagency, Intergovernmental, and Multinational Organization across the Range of Military Operations (ROMO).
STANDARD: To ensure Fires Support Team effectively plans and integrates kinetic and non-kinetic fires to accomplishment of the mission and commanders intent.

PERFORMANCE STEPS:
1. Supervise the training and use of communication equipment and fires C2 systems/collaborative tools.
2. Recommend employment of the Fire Support Team.
3. Conduct OP site selection and occupation.
4. Develop, review, brief and distribute plans to support the Company scheme of maneuver.
5. Conduct target acquisition and execution to support the company scheme of maneuver, the Bn fire support plan and concept of operations.
6. Support execution of preplanned targets and fire plans/schedule of fires of fires as a primary or alternate executer.
7. Conduct battlefield reporting.
8. Advise/brief the commander/FST on current capabilities, limitations and employment of fires assets.

REFERENCES:
1. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller
2. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
3. TM 10938B-OR TLDHS Technical Manual

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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0802-FSC-2002: Perform the duties of a battalion fire support officer (L/S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The Battalion Fires Support Officer responsible for the efficient functioning of the Fires section to ensure that fires are planned coordinated and executed to support the commander's intent and guidance. The Fire Support Officer assists the Fires Support Officer in the performance of his duties.

MOS PERFORMING: 0802

BILLETs: Fire Support Officer

GRADES: 2NDLT, 1STLT

INITIAL TRAINING SETTING: MOJT
CONDITION: Given a higher headquarters order (warning/operations) or directive (mission/task), commander's guidance, references, appropriate communication equipment and fires C2 systems as a member of a GCE COC operating within a Joint, Interagency, Intergovernmental, and Multinational organization across the Range of Military Operations (ROMO).

STANDARD: To ensure Fires Support Team is effectively planning and integrating kinetic and non-kinetic fires to accomplish the mission and commander's intent.

PERFORMANCE STEPS:
1. Supervise the actions of all personnel within the FSCC and the establishment of the fires sections watch rotation.
2. Supervise, develop, review, brief and distribute plans to support the BN scheme of maneuver.
3. Support JTAR/ASR processing using communication equipment and fires C2 systems.
4. Supervise/Perform fire support coordination to closely integrate multiple supporting arms with the scheme of maneuver.
5. Supervise/Monitor, receives and process all fire support requests within the battalion AOR (dynamic targeting/mission processing).
6. Supervise coordination of missions outside the battalion's zone of action.
7. Support the integration of FSCC operations of with other related staff sections.
8. Advise/brief the commander/staff on current capabilities, limitations and employment of fires assets.
9. Supervise dissemination/posting appropriate products, briefs, reports and materials to fires web page, with fires C2 systems and status references (i.e. boards, displays, electronic journals, etc.).

REFERENCES:
1. CPOF BC 10.x.x CPOF User Guide
2. JTCW Users Manual
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
5. TM 11-7025-279-10-1 APATDS Users Manual

SUPPORT REQUIREMENTS:

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0802-FSC-2003: Perform the duties of a regimental fire support officer

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The Regimental Fires Support Officer is responsible for the efficient functioning of the Fires section to ensure that fires are planned, coordinated and executed to support the commander's intent and guidance.
MOS PERFORMING: 0802

BILLETS: Fire Support Officer

GRADES: CAPT, MAJ

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a higher headquarters order (warning/operations) or directive (mission/task), commander's guidance, references, appropriate communication equipment, and fires C2 systems as a member of a GCE COC operating within a Joint, Interagency, Intergovernmental, and Multinational organization across the Range of Military Operations (ROMO).

STANDARD: To ensure fire support team is effectively planning and integrating kinetic and non-kinetic fires, to accomplish the mission and commander's intent.

PERFORMANCE STEPS:
1. Supervise the actions of all personnel within the FSCC and the establishment of the fires sections watch rotation.
2. Supervise the training and use of communication equipment and fires C2 systems and collaborative tools.
3. Plan fires to support the regimental scheme of maneuver.
4. Coordinates and integrates supporting arms to support the regiment’s scheme of maneuver for current and future operations.
5. Supervise targeting and develop targets with the regiment’s target acquisition (TA) assets.
6. Supervise the allocation of assets (i.e., DS Arty BN, NSFS and air) to subordinate BNs for the attack of targets in the regiment’s area of operations.
7. Support air support request processing using communication equipment and fires C2 systems.
8. Coordinate ingress and egress routes for all aviation missions to support subordinate battalions’ and the regiment’s scheme of maneuver.
9. Supervise the execution of dynamic targeting and mission processing.
10. Review subordinate elements fire support plans to ensure they support the concept of fires.
11. Support the integration of FSCC operations with other related staff sections.
12. Brief the supported unit on current capabilities, limitations and employment of fires assets.
13. Supervise dissemination of appropriate products, briefs, and reports.

REFERENCES:
1. CPOF BC 10.x.x CPOF User Guide
2. JADOCS version BC 10.x.x Joint Automated Deep Operations Coordination System USMC Job Aids
3. JTCW Users Manual
4. MCRP 3-16E Fire Support Systems for MAGTF Operations
5. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
0802-FSC-2004: Perform the duties of the division fire support officer

EVALUATION-CODED: NO
SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The Division Fire Support Officer is responsible for the smooth and efficient functioning of the Fires section to ensure that fires are planned, coordinated and executed to support the commander's intent and guidance.

MOS PERFORMING: 0802

BILLETS: Fire Support Officer

GRADES: MAJ, LTCOL

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a higher headquarters order (warning/operations) or directive (mission/task), commander's guidance, references and appropriate communication equipment and fires C2 systems as a member of a GCE COC operating within a Joint, Interagency, Intergovernmental, and Multinational organization across the Range of Military Operations (ROMO).

STANDARD: To ensure the fires support section effectively plans and integrates kinetic and non-kinetic fires to accomplish the mission and commanders intent.

PERFORMANCE STEPS:
1. Supervise the actions of all personnel within the FSCC and the establishment of the fires sections watch rotation.
2. Supervise the training and use of communication equipment and fires C2 systems/collaborative tools.
3. Supervise the identification requirements and make recommendations to the division commander for allocating fire support assets.
4. Supervise coordination of all supporting arms to support the concept of operations.
5. Develop the fire support plan, fire plans, schedule of fires, targeting products, related materials, reports, and messages.
6. Review subordinate elements fire support plans to ensure they support the concept of fires.
7. Supervise/Support Target Information Section operations (i.e. target acquisition, target dissemination, and attack recommendations and assessment).
8. Supervise/Support Air Section operations (i.e. address TACP issues, prepare, forward, and coordinate JTAR/ASRs and other air matters).
9. Supervise/Support Naval Gunfire Fire Section operations (i.e. employment, requests, and control of NFSP).
10. Support the integration of FSCC operations w/other related staff sections.
11. Brief the supported unit on current capabilities, limitations and employment of fires assets.
12. Supervise dissemination of appropriate products, briefs, and reports.

REFERENCES:
1. CPOF BC 10.x.x CPOF User Guide
2. JADOCS version BC 10.x.x Joint Automated Deep Operations Coordination System USMC Job Aids
0802-FSO-2001: Conduct a FASCAM mission

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 0802

BILLETS: Fire Support Officer

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given equipment organic to a Fire Support Officer and the FASCAM template.

STANDARD: To properly emplace a FASCAM minefield to support the scheme of maneuver.

PERFORMANCE STEPS:
1. Obtain permission from the commander to fire FASCAM.
2. Transmit the Call For Fire (CFF) to initiate a FASCAM minefield.
3. Conduct an adjust fire mission to refine the target location, if possible.
4. Request FASCAM in the fire for effect portion of the call for fire, once the 200 meter bracket has been broken.
5. Transmit refinement data (if any), Record as Target (if desired), End of Mission (required), and surveillance (required).
6. Ensure the FASCAM safety zone is sent to higher headquarters.

REFERENCES:
1. FM 6-20-5 Family of Scatterable Mines (FASCAM)
2. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery
3. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17430 Impact Area Dudded

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. This event will be conducted using appropriate fire C2 and manual methods.
2. SIMULATION SUPPORT: This event may be conducted with the use of a Category I or II simulation devices and a simulation device operator.
**0802-FSO-2002**: Conduct an ICM mission

**EVALUATION-CODED**: NO  
**SUSTAINMENT INTERVAL**: 3 months

**MOS PERFORMING**: 0802

**BILLET**: Fire Support Officer

**GRADES**: 2NDLT, 1STLT

**INITIAL TRAINING SETTING**: MOJT

**CONDITION**: Given equipment organic to a Fire Support Officer.

**STANDARD**: To obtain the desired effects in order to support the scheme of maneuver.

**PERFORMANCE STEPS**:
1. Transmit the Call For Fire (CFF) to initiate a ICM mission.
2. Conduct an adjust fire mission to refine the target location, if possible.
3. Request fire for effect, once the 200 meter bracket has been broken.
4. Transmit refinement data (if any), Record as Target (if desired), End of Mission (required), and surveillance (required).

**REFERENCES**: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

**SUPPORT REQUIREMENTS**:

**RANGE/TRAINING AREA**: Facility Code 17430 Impact Area Dudded

**MISCELLANEOUS**:

**ADMINISTRATIVE INSTRUCTIONS**:
1. This event will be conducted using appropriate fire C2 and manual methods.
2. SIMULATION SUPPORT: This event may be conducted with the use of a Category I or II simulation devices and a simulation device operator.

**0802-MGTF-2001**: Perform the duties of Force Fires/Effects Coordinator (L/S)

**EVALUATION-CODED**: NO  
**SUSTAINMENT INTERVAL**: 6 months

**MOS PERFORMING**: 0802

**BILLET**: Current Fires/Effects Officer

**GRADES**: MAJ, LTCOL, COL

**INITIAL TRAINING SETTING**: MOJT
CONDITION: Given a higher headquarters order (warning/operations) or directive (mission/task), commander's guidance, references and appropriate fires C2 systems as a member of a MAGTF CE operating within a Joint, Interagency, Intergovernmental, and Multinational organization across the Range of Military Operations (ROMO). Joint, Interagency, Intergovernmental, and Multinational organization.

STANDARD: To ensure Force Fires/Effects section is effectively planning and integrating kinetic and non-kinetic fires to accomplishment of the mission and commanders intent.

PERFORMANCE STEPS:
1. Supervise the Force Fires Coordination Center.
2. Supervise Current fires section operations.
4. Supervise Targeting section operations.
5. Supervise Information Operation section.
6. Supervise additional attached elements as required.
7. Supervise the integration FFCC/FECC operations of with other related staff section (G2 Targeting, G3 Air, and G5).
8. Supervise the conduct of the targeting process.
9. Advise/Brief the MEF commander/G-3/MAGTF staff on current capabilities, limitations and employment of fires assets.
10. Review MSC and Field Artillery Headquarters fire support plans to ensure they support the MEFs concept of fires.
11. Ensure MSCs have adequate support to successfully conduct operations.
12. Redirect resources as required.
13. Monitor and coordinate counterfire.
14. Supervise coordination of cross boundary fires with higher and adjacent headquarters.
15. Resolve fire support conflicts.

REFERENCES:
1. JADOCS version BC 10.x.x Joint Automated Deep Operations Coordination System USMC Job Aids
2. JP 3-09 Joint Fire Support
3. JP 3-60 Joint Targeting
4. JTCW Users Manual
5. MCRP 3-16E Fire Support Systems for MAGTF Operations
6. MCWP 3-31 Marine Air-Ground Task Force Fires
7. MSTP PAM 3-0.3 MAGTF Fires Reference Guide
8. TM 11-7025-279-10-1 AFATDS Users Manual

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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ROOMS/BUILDINGS:
1. Combined Arms Staff Trainer (CAST)
2. Combat Operations Center Battle Lab
0802-MGTF-2002: Perform the duties of Force Fires/Effects Plans Officer

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The Fires Plans Officer supports the development of the Fire Support Plan to effectively integrate kinetic and non-kinetic fires into the commander's CONOPS. The Fires Plans Officer will assist in the preparations of the Operation Order, Branch and Sequel plans as well as Fragmentary Orders. Assist G-3 sections in the performance of their duties.

MOS.Performing: 0802  
BILLET: Fire Plans Officer  
GRADES: MAJ, LTCOL

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a higher headquarters order (warning/operations) or directive (mission/task), commander's guidance, references and appropriate fires C2 systems as a member of a MAGTF CE operating within a Joint, Interagency, Intergovernmental, and Multinational organization across the Range of Military Operations (ROMO).

STANDARD: To produce plans and orders which support the accomplishment of the mission and commander's intent.

PERFORMANCE STEPS:
1. Support the MCPP/APEX as a member of the OPT/JPG.
2. Develop appropriate staff products for each step of the planning process, operations plans, orders, annexes, appendices and tabs.
3. Support and participate in appropriate daily boards, cells and working groups (Targeting WG/board, IO WG/board, Collection WG/board, G3 Air WG/board, etc.).
4. Advise/Brief the MEF commander/G-3/MAGTF staff on capabilities, limitations and employment of fires assets.
5. Supervise/produce and post appropriate products, briefs, reports and materials to fires plan web page and status references (Boards, Displays/electronic journals).

REFERENCES:
1. JADOCs version BC 10.x.x Joint Automated Deep Operations Coordination System USMC Job Aids
2. JTCW Users Manual
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCWP 3-31 Marine Air-Ground Task Force Fires
5. MCWP 5-10 Marine Corps Planning Process
6. MSTP PAM 3-0.3 MAGTF Fires Reference Guide
7. MSTP Pamphlet 5-0.2 OPT Leader's Guide
8. TM 11-7025-279-10-1 AFATDS Users Manual

MISCELLANEOUS:
ADMINISTRATIVE INSTRUCTIONS: Utilize appropriate fire C2 Marine Corps and Joint programs of record.
**0802-MGTF-2003**: Perform the duties of Force Fires/Effects Targeting Officer

**EVALUATION-CODED**: NO  
**SUSTAINMENT INTERVAL**: 6 months

**DESCRIPTION**: The Targeting Officer supports MAGTF targeting board and related events and activities, translates deliberate planning for fires into detailed targeting products that enable subordinate and supporting units to develop fires plans and the ATO. They supervise the sponsoring and hosting of the targeting board and chairing of the targeting guidance working group (TGWG). The Targeting Officer assists the G-3 in the performance of his duties.

**MOS PERFORMING**: 0802

**BILLETS**: Targeting Officer

**GRADES**: MAJ, LTCOL

**INITIAL TRAINING SETTING**: MOJT

**CONDITION**: Given a higher headquarters order (warning/operations) or directive (mission/task), commander's guidance, MAGTF Appendix 19, references and appropriate fires C2 systems as a member of a MAGTF Headquarters G3 operating within a Joint, Interagency, Intergovernmental, and Multinational organization across the Range of Military Operations (ROMO).

**STANDARD**: To produce targeting products that effectively facilitate shaping efforts, set conditions that support the concept of operations and achieve targeting objectives IAW commander's intent.

**PERFORMANCE STEPS**:
1. Supervise the development and disseminate the target cycle summary to ensure timelines for product development/delivery, working groups and boards are synchronized with overall battle rhythms.
2. Identify physical space, personnel, and equipment requirements to support targeting efforts.
3. Assist fires planners with writing targeting portion of the order, updating the BSM, DCM and other targeting execution tools.
4. Supervise the development of targeting guidance and objectives.
5. Based on operational requirements support MAGTF (D3A), Joint, TST, and HVI targeting processes.
6. Supervise, support and participate in appropriate daily boards, cells and working groups (i.e., Targeting WG/board, OPT/JPG, IO WG/board, Collection WG/board, G3 Air WG/board, etc.).
7. Communicate appropriate products, briefs, reports and materials.

**REFERENCES**:
1. JADOCS version BC 10.x.x Joint Automated Deep Operations Coordination System USMC Job Aids
2. JP 3-60 Joint Targeting
4. MCRP 3-16E Fire Support Systems for MAGTF Operations
5. MCWP 3-31 Marine Air-Ground Task Force Fires
6. MSTP PAM 3-0.3 MAGTF Fires Reference Guide
0802-MGTF-2004: Perform the duties of Force Fires/Effects Current Fires Officer

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The Current Fires/Effects Officer primary responsibility is to assist the current fires OIC in supervising the current fire section. The current fires section (CFS) operates in the MAGTF combat operations center (COC) in direct support of current operations. CFS duties are to track and assess fires related changes in the battlespace, make or recommend decisions to exploit opportunities arising from change, and conduct MAGTF-level coordination to render decisions into timely action.

MOS PERFORMING: 0802

BILLETS: Current Fires/Effects Officer

GRADES: MAJ, LTCOL

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a higher headquarters order (warning/operations) or directive (mission/task), commander’s guidance, MAGTF Appendix 19, references and appropriate fires C2 systems as a member of a MAGTF Headquarters G3 operating within a Joint, Interagency, Intergovernmental, and Multinational organization across the Range of Military Operations (ROMO).

STANDARD: To ensure the timely and effective execution of organic and joint fires and the coordination with MSCs, adjacent commands, and Joint commands and agencies.

PERFORMANCE STEPS:
1. Supervise training of all appropriate staff sections, LNOs, fires personnel in current fires battle rhythm, fires C2 systems, products and processes.
2. Identify and supervise the loading, initialization and activation of appropriate C2 systems to support CFS operations, ensuring that all fires C2 systems databases are maintained and updated w/ latest versions of software/patches as required.
3. Supervise all Current Fire Section (CFS) administrative requirements.
4. Supervise the flow of information within the fires section.
5. Ensure the MAGTFs fire support situation is displayed on all appropriate C2 systems employed in the COC.
6. Ensure the execution of the fire support plan consulting the attack guidance matrix and the MAGTF commander’s guidance.
7. Make decisions to exploit opportunities arising from change, and conduct MAGTF-level coordination to render decisions into timely action in the deep, close, and rear battlespace.
8. Advise the MAGTF commander/G-3/MAGTF staff on current capabilities, limitations and employment of fires assets.
9. Communicate appropriate products, briefs, reports and materials.

REFERENCES:
1. CPOF BC 10.x.x CPOF - Admin Desktop Command Post of the Future (CPOF) Guide
2. JADOCS version BC 10.x.x Joint Automated Deep Operations Coordination System USMC Job Aids
3. JTCW Users Manual
4. MCWP 3-31 Marine Air-Ground Task Force Fires
5. MSTP PAM 3-0.3 MAGTF Fires Reference Guide

**0802-MGTF-2005**: Perform the duties of a MAGTF fires LNO (L/S)

**EVALUATION-CODED**: NO  **SUSTAINMENT INTERVAL**: 6 months

**DESCRIPTION**: A MAGTF Fires LNO represents his command and provides specific knowledge and expertise on the planning, coordination and employment of fires support assets, deliberate and dynamic targeting to an external headquarters.

**MOS PERFORMING**: 0802

**BILLETs**: Fire Support Officer

**GRADES**: MAJ, LTCOL

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: As a member of a (parent) MAGTF or GCE Headquarters, while operating within a Joint, Component, Interagency, Intergovernmental, and Multinational (supported) headquarters across the Range of Military Operations (ROMO); given a higher headquarters order (warning/operations) or directive (mission/task), commander's guidance, MAGTF Appendix 19, references, and appropriate fires C2 systems.

**STANDARD**: To ensure Fires are effectively planned, coordinated and executed in support of parent command to accomplish the mission and commander's intent.

**PERFORMANCE STEPS**:

1. Support the training and use of communication equipment and fires C2 systems/collaborative tools that support the coordination of functions between supported and supporting commands.
2. Support the identification requirements and make recommendations to coordinate functions between supported and parent commands for allocating fire support assets.
3. Support coordination between supported and parent commands to support the concept of operations and the commander's intent.
4. Support the Development/Review/Briefing and distribution of fire support plans, fire plans, targeting products, related materials, reports and messages between support and supporting commands.
5. Support various sections within the FFCC/FECC/FSCC, as required.
6. Advise the parent Commander/staff on current capabilities, limitations and employment of supported unit fires assets.
7. Advise the supported Commander/staff on current capabilities, limitations and employment of parent command fires assets.
8. Support and participate in appropriate daily boards, cells and working groups.
9. Support dissemination/posting of appropriate products, briefs, reports and materials to fires web page and status references (Boards, Displays/electronic journals).

REFERENCES:
1. MCWP 3-31 Marine Air-Ground Task Force Fires
2. MSTP PAM 3-0.3 MAGTF Fires Reference Guide

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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0802-MGTF-2006: Conduct dynamic targeting

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: Dynamic targeting is the reactive engagement of emerging targets (targets which fall inside the normal ATO/ITO planning cycle) with kinetic and non-kinetic fires IAW the MAGTF Commanders priorities.

MOS PERFORMING: 0802

BILLETS: Assistant Force Fires Coordinator, Current Fires/Effects Officer, Force Fires Coordinator

GRADES: MAJ, LTCOL, COL

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a higher headquarters order (warning/operations) or directive (mission/task), commander's guidance, MAGTF Appendix 19, references and appropriate fires C2 systems as a member of a MAGTF/GCE Headquarters operating within a Joint, Interagency, Intergovernmental, and Multinational organization across the Range of Military Operations (ROMO).

STANDARD: To support the timely and effective execution of organic and joint fires and the coordination with MSCs, adjacent commands, and Joint commands and agencies.

PERFORMANCE STEPS:
1. Conduct training of all appropriate staff sections, LNOs, fires personnel in fires C2 systems that support dynamic targeting processes and products.
2. Support Identifying Target Data
5. Identify/Select appropriate asset.
6. Sending Fire Order/Request and perform additional deconfliction/integration.
7. Conduct following-up with confirmation of attack/BDA.
8. Ensure the completion of Combat Assessment.
9. Assess re-attack requirement.
10. Make re-attack decision.
11. Execute fires under special situations, when required.

REFERENCES:
1. JP 3-60 Joint Targeting
2. MCRP 3-16E Fire Support Systems for MAGTF Operations
3. MCWP 3-31 Marine Air-Ground Task Force Fires
4. MSTP PAM 3-0.3 MAGTF Fires Reference Guide

0802-MGTF-2007: Conduct counterfire (L/S)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0802

BILLETS: Assistant Force Fires Coordinator, Force Fires Coordinator, Target Information Officer

GRADES: MAJ, LTCOL, COL

INITIAL TRAINING SETTING: MOJT

CONDITION: Given supporting attachments operating in a Joint, Combined, and/or Inter agency environment, a higher headquarters order, and commander's guidance.

STANDARD: To support the concept of operations and allow the MAGTF the freedom to conduct uninterrupted operations in the assigned battlespace IAW commander's intent.

PERFORMANCE STEPS:
1. Develop Counter fire Concept.
2. Assign Force Artillery HQ, if required.
3. Conduct Counter fire analysis of enemy FS capability.
4. Establish Counter fire collection plan.
5. Develop Counter fire Matrix.
7. Develop Counter fire Plan.
8. Establish quick fire Nets.
10. Conduct reactive counter fire.
11. Pass targets to subordinate and adjacent units.

REFERENCES:
1. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. MCRP 3-10F.1 Fire Support Systems for MAGTF Operations
3. MCTP 3-10E Artillery Operations
4. MCWP 3-31 Marine Air-Ground Task Force Fires
5. MSTP PAM 3-0.3 MAGTF Fires Reference Guide
SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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<td>Y</td>
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</tbody>
</table>

0802-MGTF-2008: Conduct MAGTF fire support planning (L/S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0802

BILLETS: Assistant Force Fires Coordinator, Force Fires Coordinator, Target Information Officer

GRADES: MAJ, LTCOL, COL

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a higher headquarters order (warning/operations) or directive (mission/task), commander's guidance, references, and appropriate fires C2 systems as a member of a MAGTF Headquarters G3 operating within a Joint, Interagency, Intergovernmental, and Multinational organization across the Range of Military Operations (ROMO).

STANDARD: To rapidly and effectively deliver fires to support the scheme of maneuver/concept of operations.

PERFORMANCE STEPS:
1. Review available intelligence and assess current situation.
2. Identify available fire support assets.
3. Identify Rules of Engagement (ROE) restrictions.
5. Employ ISR to support fire support planning.
6. Develop concept of fires in concert with the scheme of maneuver.
7. Identify ammunition and target restrictions.
8. Determine desired fires tasks.
9. Determine priorities of fires, allocation of assets, positioning of units/agencies.
10. Establish fire support coordinating measures (FSCMs).
11. Coordinate the establishment of Airspace Coordinating Measures (ACMs).
12. Develop Essential Fires Support Tasks (EFSTs).
13. Submit overall fire support requirements for NSFS and artillery to appropriate agencies in a timely manner.
14. Coordinate terminal control and target acquisition requirements/assets with higher headquarters.
15. Plan for the employment and sustainment of indirect fire assets.
16. Plan for the displacement of the FSC.
17. Plan for the transition of fires control.
18. Conduct Targeting Board.
20. Coordinate and integrate subordinate elements fire support plans.
21. Communicate a fire support overlay.

REFERENCES:
1. MCRP 3-10F.1 Fire Support Systems for MAGTF Operations
2. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
3. MCRP 3-16.2 Techniques and Procedures for Fire Support Coordination
4. MCRP 3-16A Tactics, Techniques, and Procedures for the Targeting Process
5. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
6. MCTP 3-20F Control of Aircraft and Missiles
7. MCWP 3-23.1 Close Air Support
8. MCWP 3-31 Marine Air-Ground Task Force Fires
9. MCWP 3-32 MAGTF Information Operations
10. MSTP PAM 3-0.3 MAGTF Fires Reference Guide

SUPPORT REQUIREMENTS:

<table>
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<tr>
<th>SIMULATION EVALUATION:</th>
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<tbody>
<tr>
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<tr>
<td>Yes</td>
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</table>

0802-PLAN-2001: Develop field artillery support plan (L/S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0802

BILLETs: Assistant Operations Officer, Operations Officer

GRADES: CAPT, MAJ, LTCOL

INITIAL TRAINING SETTING: MOJT

CONDITION: While supporting a maneuver unit, given an artillery battalion or regiment operating within a MAGTF/Joint, Interagency, Intergovernmental, and Multinational organization, higher headquarters order to include appropriate annexes and appendixes, commander’s guidance and references, while implementing the orders process.

STANDARD: To produce Tab B to Appendix 19 to Annex C of an operations order.

PERFORMANCE STEPS:
1. Give warning order to staff and initiate MCPP.
2. Integrate commander's intent.
3. Develop unit mission statement.
4. Develop concept of operations.
5. Develop the Essential Field Artillery Tasks.
6. Develop Artillery Synchronization Matrix.
7. Develop Survey and Meteorological Plan.
8. Supervise the development of radar employment plan.
10. Integrate communications plan.
11. Develop a positioning overlay.
12. Issue required orders.
13. Conduct confirmation briefs.
14. Coordinate and conduct required rehearsals.
15. Supervise unit preparation for mission execution.

REFERENCES:
1. MCTP 3-10E Artillery Operations
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
3. MCWP 5-10 Marine Corps Planning Process

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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<td>Unit Hours</td>
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0802-PLAN-2002: Integrate fires into ground combat operations (L/S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0802

BILLETS: Assistant Operations Officer

GRADES: CAPT, MAJ, LTCOL, COL

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a maneuver battalion or regiment operating within a MAGTF/Joint, Interagency, Intergovernmental, and Multinational organization, higher headquarters order, commander's guidance and references.

STANDARD: To plan and coordinate the employment of fires in support of the scheme of maneuver.

PERFORMANCE STEPS:
1. Identify and assess threat fire support capabilities.
2. Identify the kinetic and non-kinetic fires capabilities of available joint, subordinate and supporting units.
3. Integrate kinetic and non-kinetic fires into fire plans.
4. Integrate the kinetic and non-kinetic fires capabilities of available joint, subordinate and supporting units.
5. Implement deliberate and reactive targeting processes.
6. Coordinate artillery battalion movement within infantry regimental battlespace.
7. Coordinate the allocation of aviation requirements within the infantry zone of responsibility.
8. Identify unsupported fires requirements and forward requests for additional support as required.

REFERENCES:
1. ATP 4 (E) CH 7 Allied Naval Gunfire Support
2. MCRP 3-15.2A Mortars
3. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
4. MCRP 3-31.6 MTTP For the Joint Application of Firepower (JFIRE)
5. MCRP 3-32D.1 Electronic Warfare
6. MCTP 3-10E Artillery Operations
7. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
8. MCWP 3-23.1 Close Air Support
9. MCWP 3-25.3 Marine Air Command and Control System Handbook (Superseded, July 2012; do not use.)
10. MCWP 3-32 MAGTF Information Operations
11. MCWP 3-40.6 Military Information Support Operations

**SUPPORT REQUIREMENTS:**

**SIMULATION EVALUATION:**

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**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. Performance steps are derived from tasks 0302-FSPT-1301, 0302-FSPT-2301, 0302-FSPT-2302, 0302-OPS-2101, and Core Capability from Weapons Company Commander, Infantry Battalion.

**0802-RADR-2001:** Coordinate the employment of target acquisition assets (L/S)

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0802

**BILLETS:** Fire Support Officer, Operations Officer

**GRADES:** CAPT, MAJ, LTCOL

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an operations order, list of available Target Acquisition assets, and the commander's scheme of maneuver.

**STANDARD:** To ensure the recommendation includes the capabilities and limitations to meet mission requirements.

**PERFORMANCE STEPS:**
1. Supervise the planning of radar locations and zones based on enemy courses of action, air plans, and friendly artillery capabilities.
2. Direct the employment of RADAR assets.
3. Direct the employment of sensor assets.
REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCRP 3-16A Tactics, Techniques, and Procedures for the Targeting Process
3. MCTP 3-10E Artillery Operations

SUPPORT REQUIREMENTS:

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9004. INDEX OF 0802 1000-LEVEL INDIVIDUAL EVENTS

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<th>E-Coded</th>
<th>Event</th>
<th>Page</th>
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<td>Lay a cannon battery using the optical firing control method</td>
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</tr>
<tr>
<td>0802-BTRY-1002</td>
<td>NO</td>
<td>Determine the cause of inaccurate fires</td>
<td>9-25</td>
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<tr>
<td>0802-BTRY-1003</td>
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<td>Supervise the firing of a gunline</td>
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<tr>
<td>0802-BTRY-1004</td>
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<tr>
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<td>Supervise a displacement</td>
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<tr>
<td>0802-BTRY-1006</td>
<td>NO</td>
<td>Conduct maintenance management</td>
<td>9-29</td>
</tr>
<tr>
<td>0802-BTRY-1007</td>
<td>NO</td>
<td>Perform crater analysis</td>
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<tr>
<td>0802-FDC-1001</td>
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<td>Supervise the preparation of the Fire Direction Center</td>
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<tr>
<td>0802-FDC-1002</td>
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<td>Compute safety data</td>
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<tr>
<td>0802-FDC-1003</td>
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<td>Maintain situation map</td>
<td>9-32</td>
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<tr>
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<td>NO</td>
<td>Supervise technical fire direction</td>
<td>9-32</td>
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<tr>
<td>0802-FDC-1005</td>
<td>NO</td>
<td>Conduct battalion level tactical fire direction</td>
<td>9-33</td>
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<td>NO</td>
<td>Conduct battalion level tactical fire direction</td>
<td>9-34</td>
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<tr>
<td>0802-FSO-1001</td>
<td>NO</td>
<td>Direct the operations of the Company Fire Support Team (FiST) (L/S)</td>
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</tr>
<tr>
<td>0802-FSO-1002</td>
<td>NO</td>
<td>Locate a target (L/S)</td>
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<tr>
<td>0802-FSO-1003</td>
<td>NO</td>
<td>Conduct an adjust fire mission (L/S)</td>
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<tr>
<td>0802-FSO-1004</td>
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<td>Adjust fire with the laser range finder</td>
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<td>0802-FSO-1005</td>
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<td>Conduct an illumination mission</td>
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<td>0802-FSO-1007</td>
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<td>9-41</td>
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<tr>
<td>0802-FSO-1008</td>
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<tr>
<td>0802-FSO-1009</td>
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<td>Conduct a danger close fire mission (S)</td>
<td>9-43</td>
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<tr>
<td>0802-FSO-1010</td>
<td>NO</td>
<td>Conduct fire mission on irregularly shaped targets (L/S)</td>
<td>9-44</td>
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<tr>
<td>0802-FSO-1011</td>
<td>NO</td>
<td>Adjust final protective fires (L/S)</td>
<td>9-46</td>
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<tr>
<td>0802-FSO-1012</td>
<td>NO</td>
<td>Conduct a mission on a moving target (S)</td>
<td>9-47</td>
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<tr>
<td>0802-FSO-1013</td>
<td>NO</td>
<td>Conduct a precision registration, quick and time (S/L)</td>
<td>9-48</td>
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<tr>
<td>0802-FSO-1014</td>
<td>NO</td>
<td>Conduct a Suppression of Enemy Air Defense (SEAD) fire mission (S/L)</td>
<td>9-49</td>
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</table>
9005. 0802 1000-LEVEL EVENTS

**0802-BTRY-1001**: Lay a cannon battery using the optical firing control method

**EVALUATION-CODED**: NO  **SUSTAINMENT INTERVAL**: 1 month

**MOS PERFORMING**: 0802

**BILlets**: Btry AXO, Btry CO, Btry XO, Plt Cmdr

**GRADES**: 2NDLT, 1STLT, CAPT

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given an M2A2 aiming circle, survey-capable Centaurs or survey control point, an M2 compass, and a battery T/O of appropriate weapon system.

**STANDARD**: To orient the battery within 0 mils of lay circle, and +/- 2 mils of safety circle.

**PERFORMANCE STEPS**:  
1. Set-Up the M2A2 Aiming Circle.  
2. Declinate the m2 Compass and M2A2 Aiming Circle  
3. Conduct hasty survey.  
4. Determine subtense and vertical angle.  
5. Lay the firing battery via appropriate method.  
6. Safe the firing battery via alternate method.

**REFERENCES**: 
1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety  
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery  
3. ST 6-50-20 Battery Executive Officer's/ Platoon Leader's Handbook

**SUPPORT REQUIREMENTS**: 

**RANGE/TRAINING AREA**: 
Facility Code 17410 Maneuver/Training Area, Light Forces

**MISCELLANEOUS**: 

**ADMINISTRATIVE INSTRUCTIONS**: 
Perform lay of a cannon battery using the following methods:
1. Lay by Orienting Angle Method.
2. Lay by Grid Azimuth Method.
3. Lay by M2 Compass Method.
4. Lay by Aiming Point-Defection Method.

0802-BTRY-1002: Determine the cause of inaccurate fires

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 1 month

**MOS PERFORMING:** 0802

**BILLETS:** Btry CO, Btry XO, Fire Direction Officer, Fire Support Officer, Plt Cmdr

**GRADES:** 2NDLT, 1STLT, CAPT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a reported error, known data, fire control information (manual or automated), and records of fire.

**STANDARD:** To ensure all errors have been identified and are corrected.

**PERFORMANCE STEPS:**
1. Determine magnitude of total error.
2. Isolate the error(s) by determining if the error is gun specific or it affects the entire battery.
3. Isolate the error(s) by determining if the error in deflection, range, or height of burst.
4. Once the error is isolated, ensure that the determined error is of the correct magnitude and correct direction.
5. Ensure there are no other errors.
6. Verify the AFATDS or BUCS database to identify the source of the error.
7. Verify gunline data to identify the source of the error.
8. Determine appropriate corrective actions.
9. Apply appropriate corrective actions.

**REFERENCES:**
1. Job Aid Current automated system job aides
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller
3. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
4. MCWP 3-16.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17410 Maneuver/Training Area, Light Forces
Facility Code 17430 Impact Area Dudded
Facility Code 17671 Field Artillery Indirect Fire Range
0802-BTRY-1003: Supervise the firing of a gunline

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 2 months

MOS PERFORMING: 0802

BILLETS: Btry CO, Btry XO, Plt Cmdr

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a battery.

STANDARD: To verify proper procedures are followed.

PERFORMANCE STEPS:
1. Ensure all personnel have the appropriate safety certification.
2. Ensure Aiming circles are properly declinated by safety certified personnel.
3. Supervise TLABSPAP.
4. Supervise ammunition management on the gun line.
5. Determine whether a weapon system is safe to fire.
6. Ensure adherence to safety regulations.
8. Prepare XOs report.

REFERENCES:
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
2. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
3. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
4. ST 6-50-20 Battery Executive Officer's/ Platoon Leader's Handbook

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
- Facility Code 17410 Maneuver/Training Area, Light Forces
- Facility Code 17430 Impact Area Dudded
- Facility Code 17671 Field Artillery Indirect Fire Range

0802-BTRY-1004: Conduct a reconnaissance, selection, and occupation of position (RSOP)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 2 months

MOS PERFORMING: 0802

BILLETS: Btry CO, Btry XO, Plt Cmdr

GRADES: 2NDLT, 1STLT, CAPT

9-26 Encryption (1)
INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a movement order, battery, and tactical scenario.

STANDARD: To ensure the position is prepared for the arrival of the main body.

PERFORMANCE STEPS:
1. Determine the method of reconnaissance.
2. Plan for the reconnaissance.
3. Assemble Reconnaissance and Advance Party.
4. Perform reconnaissance, using appropriate method(s).
5. Select position(s).
6. Ensure security sweep is conducted.
7. Occupy position(s) with the advance party.
8. Organize and Prepare position(s) for main body occupation.

REFERENCES:
1. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
2. ST 6-50-20 Battery Executive Officer's/ Platoon Leader's Handbook

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces

0802-BTRY-1005: Supervise a displacement

EVALUATION-CODED: NO                SUSTAINMENT INTERVAL: 2 months

MOS PERFORMING: 0802

BILLETs: Btry CO, Btry XO, Fire Direction Officer, Plt Cmdr

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an emplaced unit and a movement order.

STANDARD: To ensure the unit is prepared to conduct a tactical march and subsequent occupation.

PERFORMANCE STEPS:
1. Issue the command, "PREPARE TO MARCH ORDER."
2. Prepare for displacement.
3. Organize and dispatch the advance party.
4. Plan for march column contingencies during displacement.
5. Select the method of march (open column, close column, infiltration, or terrain march).
6. Issue convoy brief.
7. Supervise sections’ displacement actions.
8. Issue the command, ‘MARCH ORDER.’
9. Displace in accordance with the movement order.

REFERENCES:
1. MCTP 3-10E Artillery Operations
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
3. ST 6-50-20 Battery Executive Officer's/ Platoon Leader's Handbook

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Notifying higher headquarters of the method of displacement, completion of displacement, and new position location. ‘MCWP 3-16.1 Artillery Operations pg. 3-5 and additional considerations of page 3-6’
2. When conducting an emergency displacement, performance steps may be omitted as required.

0802-BTRY-1006: Conduct maintenance management

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 2 months

MOS PERFORMING: 0802

BILLETS: Btry CO, Btry XO, Plt Cmdr

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given maintenance management directives, GCSS-MC output reports and service requests, current unit TO&E, publications listings (PL), and the references.

STANDARD: To ensure the combat effectiveness supports the mission.

PERFORMANCE STEPS:
1. Ensure preventative, scheduled and corrective maintenance is performed at each echelon.
2. Maintain current maintenance records.
3. Requisition repair parts.
4. Review and update publication listings in coordination with the S-1.
5. Inspect maintenance management program ensuring adherence to applicable directives.
6. Conduct inspections to determine effectiveness of maintenance program.
7. Reconcile GCSS-MC output reports and service requests with the MMO.
8. Reconcile GCSS-MC output reports and service requests with the MMO.
9. Review status of parts on order.
REFERENCES:
1. MCO P4790.1_ Marine Corps Integrated Maintenance Management System
   Introduction
2. MCO P4790.2_ MIMMS Field Procedures Manual
3. MCTP 3-10E Artillery Operations
4. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery
   Cannon Battery
5. NAVMC 2761 Catalog of Publications
6. ST 6-50-20 Battery Executive Officer's/ Platoon Leader's Handbook
7. TM 4700-15-1/F Marine Corps Equipment Forms and Records

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Evaluated individuals are expected to
conduct all performance steps regardless of local GCSS-MC access. In an
expeditionary environment, appropriate reporting is required to HHQ that
will maintain access to global systems.

0802-BTRY-1007: Perform crater analysis
EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months
MOS PERFORMING: 0802
BILLETS: Btry CO, Btry XO, Fire Support Officer, Plt Cmdr
GRADES: 2NDLT, 1STLT, CAPT
INITIAL TRAINING SETTING: MOJT
CONDITION: Given a crater, shell fragments, equipment organic to your
section, and map of operational area.
STANDARD: Determine the location of the crater and direction to the firing
platform within the specifications for the equipment used.

PERFORMANCE STEPS:
1. Determine crater position.
2. Determine crater type.
3. Determine the direction.
4. Collect usable shell fragments.
5. Develop shell report.

REFERENCES:
1. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller
2. ST 6-50-20 Battery Executive Officer's/ Platoon Leader's Handbook
**0802-FDC-1001**: Supervise the preparation of the Fire Direction Center

**EVALUATION-CODED**: NO  
**SUSTAINMENT INTERVAL**: 2 months

**MOS PERFORMING**: 0802

**BILLETS**: AFDO, Fire Direction Officer, S-3A

**GRADES**: 2NDLT, 1STLT, CAPT, MAJ

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given a Fire Direction Center (FDC), operations order, and situation map.

**STANDARD**: To process fire missions.

**PERFORMANCE STEPS**:
1. Review the TAB G.
2. Plan Data Distribution.
3. Verify Automated Database Construction.
4. Verify alternate means of computing firing data.
5. Supervise the creation and implementation of a Communications Configuration.
6. Ensure the FDC is meeting the Five Requirements for Accurate Predicted Fires.
7. Supervise the emplacement of the Fire Direction Center.
8. Establish digital and voice communications with the gunline and supported unit.

**REFERENCES**:
1. JobAid AFATDS Job Aid
2. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
3. MCWP 3-16.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery
4. TB 11-7025-354-10-2 Technical Fire Direction – Paladin/M777A2 Operation for AFATDS

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**0802-FDC-1002**: Compute safety data

**EVALUATION-CODED**: NO  
**SUSTAINMENT INTERVAL**: 2 months

**MOS PERFORMING**: 0802

**BILLETS**: Btry CO, Btry XO, Fire Direction Officer, Plt Cmdr

**GRADES**: 2NDLT, 1STLT

**INITIAL TRAINING SETTING**: FORMAL
CONDITION: Given a Range safety card, section chief report, and means of determining firing data.

STANDARD: To provide safe artillery fires.

PERFORMANCE STEPS:
1. Construct SDZ.
2. Construct range safety card.
3. Receive range safety card.
4. Construct basic safety diagram.
5. Compute firing data for safety computations.
6. Compute X0s min QE.
7. Construct safety-Ts.
8. Compute data for intervening crests.
10. Issue safety-Ts.
11. Transmit safety fire area to gunline.

REFERENCES:
1. DA PAM 385-63 Department of the Army Range Safety
2. JobAid AFATDS Job Aid
3. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
4. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery
5. TFT TFTs and Addendums

0802-FDC-1003: Maintain situation map

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 2 months

MOS PERFORMING: 0802

BILLETS: Fire Direction Officer

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an operations order and map.

STANDARD: To track the most current tactical information.

PERFORMANCE STEPS:
1. Plot fire support coordinating measures (FSCM).
2. Plot maneuver control measures.
3. Plot safety fire area.
4. Plot friendly unit locations.
5. Apply appropriate overlays.
6. Maintain the situation map.

REFERENCES: ADP 1-02 Terms and Military Symbols
**0802-FDC-1004:** Supervise technical fire direction

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0802  
**BILLETS:** Fire Direction Officer  
**GRADES:** 2NDLT, 1STLT, CAPT  
**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a Fire Direction Center (FDC), commander’s guidance, and a Call for Fire (CFF) or battalion fire order.

**STANDARD:** To achieve accurate first round fire for effect.

**PERFORMANCE STEPS:**
1. Ensure the five requirements for accurate predicted fire are met.
2. Supervise the construction of a firing chart.
3. Supervise determination of site.
6. Supervise a secondary means for fire direction.
7. Supervise Consolidation, Processing, and Updating of Fire Plans.
8. Supervise the computation of Graphical Firing Table (GFT) settings.
9. Supervise the determination of GFT transfer limits.
10. Supervise the determination of TGPCs.
11. Supervise the determination of TGPC transfer limits.
13. Conduct the five steps to improve firing data.

**REFERENCES:**
1. BUCS Job Aids  
2. JobAid AFATDS Job Aid  
3. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety  
4. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

---

**0802-FDC-1005:** Conduct battery level tactical fire direction

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0802  
**BILLETS:** Fire Direction Officer  
**GRADES:** 2NDLT, 1STLT, CAPT  
**INITIAL TRAINING SETTING:** FORMAL

---
CONDITION: Given a Fire Direction Center (FDC), commander's guidance, and a Call for Fire (CFF) or battalion fire order.

STANDARD: To determine if, how, and when to attack targets.

PERFORMANCE STEPS:
1. Maintain situational awareness of the battlefield.
2. Communicate battery tactical situation to HAS.
3. Establish a fire order SOP.
4. Plot the target.
5. Analyze target attack considerations.
6. Consult commander’s guidance.
7. Issue the fire order.
8. Supervise the message to observer.
9. Conduct ammunition management.

REFERENCES:
1. BUCS Job Aids
2. Job Aid Current automated system job aides
3. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
4. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

---

0802-FDC-1006: Conduct battalion level tactical fire direction

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 2 months

MOS PERFORMING: 0802

BILLES: Fire Direction Officer

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a Fire Direction Center (FDC), multiple firing agencies, commander's guidance, and a Call for Fire (CFF).

STANDARD: To determine if, how, and when to attack targets.

PERFORMANCE STEPS:
1. Maintain situational awareness of the battlefield.
2. Communicate tactical situation to HAS.
3. Establish battalion fire order SOP.
4. Plot the target.
5. Analyze target attack considerations.
6. Consult commander’s guidance (Tab G).
7. Issue the battalion fire order.
8. Supervise the message to observer.
9. Conduct re-plot procedures.
10. Mass the battalion.
11. Conduct ammunition management.
REFERENCES:
1. BUCS Job Aids
2. JobAid AFATDS Job Aid
3. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
4. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery
   Cannon Battery

0802-FSO-1001: Direct the operations of the Company Fire Support Team (FiST) (L/S)

EVALUATION-CODED: NO
SUSTAINMENT INTERVAL: 2 months

MOS PERFORMING: 0802

BILLETS: Co Fire Support Officer

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a Fire Support Team with appropriate equipment, an
   operations order and commander's guidance.

STANDARD: To support the scheme of maneuver.

PERFORMANCE STEPS:
1. Execute the support relationship defined by the maneuver commander.
2. Control fires in accordance with the supported unit.
3. Direct fires during various types of operations.
4. Supervise the employment of organic equipment.
5. Advise the maneuver commander on fires capabilities.
6. Supervise the selection and occupation of an observation post.
7. Send battlefield reports.
8. Develop fire support products.

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces
0802-FSO-1002: Locate a target (L/S)

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0802

**BILLETs:** Co Fire Support Officer

**GRADES:** 2NDLT, 1STLT, CAPT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given the equipment organic to the Fire Support Team, an identified target, and communications with the appropriate agency.

**STANDARD:** To provide timely and accurate fires within 60 seconds of target identification and 200 meters of actual target location.

**PERFORMANCE STEPS:**
1. Orient the map.
2. Place observed fire fan on the map.
3. Locate target via appropriate method.
4. Initiate a call for fire.

**REFERENCES:** MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

**SUPPORT REQUIREMENTS:**

**SIMULATION EVALUATION:**

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**RANGE/TRAINING AREA:**
Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. Direction to the target is expressed to the nearest 10 mils and within 50 mils of the actual direction.
2. Elevation of the target is determined within 50 meters of the actual elevation.
3. Distance is expressed to the nearest 100 meters.
4. SIMULATION SUPPORT: This event may also be conducted and/or supplemented by the use of a Category I or II simulation devices and a simulation device operator.

---

0802-FSO-1003: Conduct an adjust fire mission (L/S)

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 2 months
MOS PERFORMING: 0802

BILLETS: Co Fire Support Officer

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given the equipment organic to the Fire Support Officer a designated target, and communications with the appropriate agency.

STANDARD: To transmit the appropriate call for fire in order to adjust within 50 meters of a target using no more than 3 rounds.

PERFORMANCE STEPS:
1. Determine the target location.
2. Transmit the Call for Fire (CFF).
3. Determine and transmit OT direction when using the grid method of target location.
4. Transmit subsequent corrections in the proper sequence.
5. Enter Fire for Effect (FFE) phase.

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. If the PE in range is greater than or equal to 38 meters, the observer may call FFE when a 200 meter bracket is split.
2. This event will be conducted using appropriate fires C2 and manual methods.
3. Announce subsequent corrections within 15 seconds of the burst.
   a. Deviation corrections to the nearest 10 meters.
   b. Range corrections to the nearest 100 meters until splitting the 100 meter bracket.
   c. HOB corrections to the nearest 5 meters.
4. When target has been identified via polar method of target location, elevation of the target is determined and expressed to the nearest 5 meters when the elevation change is greater than 35 meters from the observer location or know point.
5. Direction is expressed to the nearest 10 mils.
6. Distance is expressed to the nearest 100 meters.
7. SIMULATION SUPPORT: This event may also be conducted and/or supplemented by the use of a Category I or II simulation devices and a simulation device operator.

0802-FSO-1004: Adjust fire with the laser range finder

EVALUATION-CODED: NO        SUSTAINMENT INTERVAL: 2 months

MOS PERFORMING: 0802

BILLETS: Co Fire Support Officer

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given the equipment organic to the Fire Support Officer, a designated target, and communications with the appropriate agency.

STANDARD: To transmit the appropriate call for fire in order to adjust within 50 meters of a target using no more than 1 adjusting round.

PERFORMANCE STEPS:
1. Perform pre-operations checks on Laser Range Finder and global positioning system devices as required.
2. Conduct a compass compensation.
3. Aim the laser range finder at the target.
4. Determine the target location.
5. Transmit the call for fire.
6. Send appropriate burst direction, distance and vertical angle.
7. Enter Fire for Effect (FFE) phase.

REFERENCES:
1. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller
2. Operators Manual TM for Laser Range Finder

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

EQUIPMENT: SL-3 complete laser range finder with applicable technical manuals.
MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. This event will be conducted using appropriate fire C2 and manual methods.
2. Direction to the nearest 1 mil
3. Distance to the nearest 10 meters
4. Vertical angle to the nearest 1 mil.
5. Enter fire for effect (FFE) after 1st round burst.
6. SIMULATION SUPPORT: This event may also be conducted and/or supplemented by the use of a Category I or II simulation devices and a simulation device operator.

0802-FSO-1005: Conduct a Fire For Effect (FFE) mission (L/S)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 2 months

MOS PERFORMING: 0802

BILLETS: Co Fire Support Officer

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given the equipment organic to the Fire Support Officer, a designated target, and communications with the appropriate agency.

STANDARD: In order to achieve desired effects on a target without an adjustment, initiating the call for fire within 60 seconds of target identification.

PERFORMANCE STEPS:
1. Determine the target location.
2. Transmit the Call For Fire (CFF).

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:
1. This event will be conducted using appropriate fire C2 and manual methods.
2. When target has been identified via polar method of target location, elevation of the target is determined and expressed to the nearest 5 meters when the elevation change is greater than 35 meters from the observer location or known point.
3. Tolerances without a laser range finder are:
   a. Direction is expressed to the nearest 10 mils.
   b. Distance is expressed to the nearest 100 meters.
4. Tolerances using a laser range finder are:
   a. Direction to the nearest 1 mil
   b. Distance to the nearest 10 meters
   c. Vertical angle to the nearest 1 mil.
5. SIMULATION SUPPORT: This event may also be conducted and/or supplemented by the use of a Category I or II simulation devices and a simulation device operator.

0802-FSO-1006: Conduct an illumination mission

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 2 months

MOS PERFORMING: 0802

BILLETS: Co Fire Support Officer

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to the Fire Support Team, a suspected target, and communications with the appropriate agency.

STANDARD: To achieve desired effects on a target, initiating the call for fire within 60 seconds of target identification and announcing subsequent corrections within 15 seconds and adequately illuminating the target area.

PERFORMANCE STEPS:
1. Locate the target area to be illuminated.
2. Transmit the call for fire.
3. Announce ‘ILLUMINATION’ in the method of engagement.
5. Conduct End of Mission procedures.

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

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9-39 Enclosure (1)
RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. This event will be conducted using appropriate fire C2 and manual methods.
2. Announce subsequent corrections within 15 seconds of the burst.
   a. Deviation corrections to the nearest 200 meters.
   b. Range corrections to the nearest 200 meters until splitting the 100 meter bracket.
   c. HOB corrections to the nearest 50 meters.
3. SIMULATION SUPPORT: This event may also be conducted and/or supplemented by the use of a Category I or II simulation devices and a simulation device operator.

0802-FSO-1007: Conduct an immediate mission

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 2 months

MOS PERFORMING: 0802

BILLETS: Co Fire Support Officer

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given the equipment organic to the Fire Support Officer a designated target, and communications with the appropriate agency.

STANDARD: To achieve desired effects on a target transmitting the Call For Fire (CFF) within 30 seconds of target location, initial target location is within 300 meters of the actual target location, and obscure the target.

PERFORMANCE STEPS:
1. Determine target location.
2. Determine desired effects.
3. Transmit the Call for Fire (CFF).
4. Spot initial rounds.
5. Determine effectiveness of the rounds.
6. Determine and transmit subsequent corrections, as required.
7. Conduct End of Mission procedures.

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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9-40 Enclosure (1)
RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. This event will be conducted using appropriate fire C2 and manual methods and applies to immediate suppression (HE) and immediate smoke (WP or M825).
2. Target location must be within 300 meters of the actual target, and achieve desired effects.
3. From identification of target to the transmission of the CFF must be within 30 seconds.
4. When adjusting smoke:
   a. Minimum deviation corrections are 50 meters.
   b. Minimum range corrections are 100 meters.
5. SIMULATION SUPPORT: This event may be conducted and/or supplemented with the use of a Category I or II simulation devices and a simulation device operator.

0802-FSO-1008: Conduct a quick smoke mission (L/S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 2 months

MOS PERFORMING: 0802

BILLETS: Co Fire Support Officer

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given the equipment organic to the Fire Support Team, an identified target, communications with the appropriate agency, and guidance for the most vulnerable point (MVP), length, and duration for the smoke.

STANDARD: Transmitting the Call for Fire (CFF) within 90 seconds of target identification, initial target location is within 200 meters of the actual target location, and subsequent corrections made within 15 seconds of the previous burst.

PERFORMANCE STEPS:
1. Determine the maneuver-target line.
2. Determine the wind direction in relation to the maneuver-target line.
3. Determine the desired screening or obscuration effect (visual or infrared/IR).
4. Determine the adjusting point.
5. Transmit Call For Fire (CFF).
6. Request ‘smoke in effect’ in method of engagement in CFF (If target is located by grid coordinate, transmit the OT direction before or with the first correction).
7. Determine and transmit subsequent corrections.
8. Enter fire for effect phase when a 200-meter bracket is split.

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. If the M825 round is used, no HOB adjustment is necessary.
2. This event will be conducted using appropriate fire C2 and manual methods.
3. When adjusting:
   a. Minimum deviation corrections are 50 meters.
   b. Minimum range corrections are 100 meters.
4. SIMULATION SUPPORT: This event may be conducted and/or supplemented with the use of a Category I or II simulation devices and a simulation device operator.

0802-FSO-1009: Conduct a danger close fire mission (S)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 2 months

MOS PERFORMING: 0802

BILLETS: Co Fire Support Officer

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to the Fire Support Team, an identified target, and communications with the appropriate agency.

STANDARD: To achieve desired effects on a target within 600 meters or less of a friendly position.

PERFORMANCE STEPS:
1. Determine the target location.
2. Determine offset requirements.
3. Transmit the Call For Fire (CFF).
5. Determine and transmit subsequent corrections.
6. Adjust fires using creeping fire techniques.
7. Request Fire For Effect (FFE).

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

EQUIPMENT: SL-3 complete laser range finder with applicable technical manuals.

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Due to safety and range training restrictions, the "Creeping Fires" technique can be used within an approved impact area to simulate a danger close mission. Appropriate commands will still be verbally demonstrated.
2. This event will be conducted using appropriate fire C2 and manual methods.
3. SIMULATION SUPPORT: This event may be conducted and/or supplemented with the use of a Category I or II simulation devices and a simulation device operator.

0802-FSO-1010: Conduct fire mission on irregularly shaped targets (L/S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 2 months

MOS PERFORMING: 0802

BILLETS: Co Fire Support Officer

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to the Fire Support Team, an identified target, and communications with the appropriate agency.

STANDARD: To achieve the desired effects, center grids are within 200 meter of actual target location and attitude is sent to the nearest 100 mils.

PERFORMANCE STEPS:
1. Locate target.
2. Identify dimensions.
3. Transmit Call For Fire (CFF).
5. Conduct End of Mission procedures.

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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RANGE/TRAINING AREA:
Facility Code 1767I Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. This event will be conducted using appropriate fire C2 and manual methods.
2. The following are irregularly shaped targets:
   a. Linear target: transmit two grids or a center grid with length and attitude.
   b. Rectangular target: transmit length, width and attitude
   c. Circular target: transmit center grid and radius
   d. Laser drawn: use three or more grids to accurately portray a uniquely shaped target.
3. Locate and transmit CFF within 2 minutes of target identification.
4. Determine target location within 200 meter of actual target location and attitude is sent to the nearest 100 mils.
5. SIMULATION SUPPORT: This event may be conducted and/or supplemented with the use of a Category I or II simulation devices and a simulation device operator.

0802-FSO-1011: Adjust final protective fires (L/S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 2 months

MOS PERFORMING: 0802

BILLETS: Co Fire Support Officer

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Fire Support Team, an adjusting point, and communications with the appropriate agency.
STANDARD: To the location specified by the company commander.

PERFORMANCE STEPS:
1. Select an adjusting point based on the maneuver commander's guidance.
2. Transmit FPF as the target description of the CFF.
3. Transmit the complete call for fire in the proper sequence announcing, "DANGER CLOSE."
4. Adjust fires using creeping fire techniques.
5. Determine and transmit subsequent corrections for each piece to the nearest 10 meters.
6. Continue adjustment until round bursts within 50 meters of the desired location.
7. Transmit refinement data.

REFERENCES:
1. FM 6-30 Tactics, Techniques, and Procedures for Observed Fire
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

<table>
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<tr>
<th>SIMULATED</th>
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<th>UNIT OF MEASURE</th>
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<th>PM</th>
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<td>Team Hours</td>
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</tbody>
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RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. This event will be conducted using appropriate fire C2 and manual methods.
2. The following are irregularly shaped targets:
   a. Linear target: transmit two grids or a center grid with length and attitude.
   b. Rectangular target: transmit length, width and attitude
   c. Circular target: transmit center grid and radius
   d. Laser drawn: use three or more grids to accurately portray a uniquely shaped target.
3. Locate and transmit CFF within 2 minutes of target identification.
4. Determine target location within 200 meter of actual target location and attitude is sent to the nearest 100 mils.
5. SIMULATION SUPPORT: This event may be conducted and/or supplemented with the use of a Category I or II simulation devices and a simulation device operator.

0802-FSO-1012: Conduct a mission on a moving target (S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 2 months
MOS PERFORMING: 0802

BILLETS: Co Fire Support Officer

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Fire Support Officer.

STANDARD: In order to destroy or neutralize a moving target.

PERFORMANCE STEPS:
1. Identify a moving target.
2. Select an Intercept Point (IP) along the target's likely route of march as the target location.
3. Prepare and transmit a Call For Fire (CFF).
4. State the target is moving in your target description portion of the call for fire.
5. State AMC in the "Method of Control" portion of the call for fire.
6. Determine the trigger point.
7. Conduct End of Mission (EOM) procedures.

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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<thead>
<tr>
<th>SIMULATED</th>
<th>SUITABILITY</th>
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<td>S</td>
<td>DVTE</td>
<td>Marine Hours</td>
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<td>SAVT</td>
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<td>6</td>
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RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. For planned targets, adjust rounds to IP if possible. This will improve first round accuracy and increase the damage to the target.
2. This event will be conducted using appropriate fire C2 and manual methods.
3. SIMULATION SUPPORT: This event may be conducted and/or supplemented with the use of a Category I or II simulation devices and a simulation device operator.

0802-FSO-1013: Conduct a precision registration, quick and time (S/L)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 2 months

MOS PERFORMING: 0802

BILLETS: Co Fire Support Officer
GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Fire Support Team and an MTO from the FDO initiating the precision registration.

STANDARD: To determine refinement data to obtain spottings of (2) rounds over and (2) rounds short within 25 meters (impact portion of the registration mission), and correct the mean height of burst of 4 time-fuzed rounds with the same data to 20 meters above the registration point.

PERFORMANCE STEPS:
1. If directed, establish a known point.
2. Determine the OT factor.
3. Draw a diagram of the impact of all rounds, recording the spotting to the nearest mil.
4. Split the 100-meter bracket by requesting, "ADD (DROP) 50."
5. Spot the next round. Split the 50-meter bracket by requesting, "2 ROUNDS, ADD (DROP) 25", as appropriate, to obtain an opposite spotting.
6. Request, "1 ROUND, ADD (DROP) 25", as appropriate, if these rounds are spotted opposite that of the previous spotting, to make the next round impact opposite the last 2 rounds.
7. Determine and announce the range and deviation refinement data to the nearest 10 meters.
8. Announce, "RECORD AS REGISTRATION POINT, TIME REPEAT, OVER."
9. Request, "3 ROUNDS, REPEAT", once a measurable airburst is obtained.
10. Record the spotting of each round.
11. Determine the appropriate mean HOB correction of the 4 rounds to achieve a 20-meter HOB.
12. Transmit HOB refinement and end the registration.

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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<tr>
<th>SIMULATED</th>
<th>SUITABILITY</th>
<th>SIMULATOR</th>
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<th>PM</th>
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<td>DVTE</td>
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</table>

RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. This event will be conducted using appropriate fire C2 and manual methods.
2. A range correct or round on target counts as 1 over and 1 short.
3. SIMULATION SUPPORT: This event may be conducted and/or supplemented with the use of a Category I or II simulation devices and a simulation device operator.
**0802-FSO-1014:** Conduct a Suppression of Enemy Air Defense (SEAD) fire mission (S/L)

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0802

**BILLETS:** Co Fire Support Officer

**GRADES:** 2NDLT, 1STLT, CAPT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given equipment organic to a Fire Support Team, identified enemy air defenses, identified target for close air support, ingress and egress routes, and a Forward Air Controller (FAC) or Joint Terminal Air Controller (JTAC).

**STANDARD:** To degrade enemy air defenses, allowing safe maneuver of aircraft in and out of the target area, ensure the marking round impacts 30 seconds (for WP) 45 seconds (for illumination on deck) before the aircraft's bombs impact on the target, ensuring suppression rounds are within 200m of the target and the marking round is within 300 meters of the target.

**PERFORMANCE STEPS:**
1. Locate enemy air defenses.
2. Locate the target for close air support.
3. Determine location for mark.
4. Identify which SEAD timeline best supports tactical situation.
5. Synchronize timeline with terminal controller and maneuver forces.
6. Transmit the Call For Fire (CFF).
7. Conduct End of Mission procedures.

**REFERENCES:**
1. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller
2. MCRP 3-31.2 Suppression of Enemy Air Defenses (SEAD)

**SUPPORT REQUIREMENTS:**

**SIMULATION EVALUATION:**

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<td>DVTE</td>
<td>Marine Hours</td>
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</tbody>
</table>

**RANGE/TRAINING AREA:**
Facility Code 17671 Field Artillery Indirect Fire Range

**UNITS/PERSOONNEL:** Forward Air Controller or Joint Terminal Air Controller.

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. This event will be conducted using appropriate fire C2 and manual methods.
2. Ammunition requirement is based on one continuous and one interrupted SEAD mission per observer for proficiency, per iteration, and the total for annual sustainment.
3. SIMULATION SUPPORT: This event may be conducted and/or supplemented with the use of a Category I or II simulation devices and a simulation device operator.

---

0802-FSO-1015: Conduct a coordinated illumination mission (S/L)

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0802

**BILLET:** Co Fire Support Officer

**GRADES:** 2NDLT, 1STLT, CAPT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given the equipment organic to the Fire Support Team, communications with the appropriate agency, an illuminated target area, and an identified target.

**STANDARD:** To engage the target and obtain desired effects.

**PERFORMANCE STEPS:**
1. Transmit illumination mark when the illumination round best illuminates the target.
2. Transmit coordinated illumination Call for Fire (CFF).
3. Announce subsequent corrections within 15 seconds of burst.
4. Enter the Fire for Effect (FFE) phase.
5. Conduct End of Mission procedures.

**REFERENCES:**
1. FM 6-30 Tactics, Techniques, and Procedures for Observed Fire
2. MCTP 3-10F.2 Supporting Arms Observer, Spotter and Controller

**SUPPORT REQUIREMENTS:**

**SIMULATION EVALUATION:**

<table>
<thead>
<tr>
<th>SIMULATED</th>
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<th>SIMULATOR</th>
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</table>

**RANGE/TRAINING AREA:**
Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. This event will be conducted using appropriate fire C2 and manual methods.
2. Transmit coordinated illumination CFF within 60 seconds of target identification.
3. If adjusting, initial lethal munition impacts within 200m of the actual target location.
4. When entering the FFE phase or FFE mission, lethal munitions impact within 50 meters of the actual target location.
5. SIMULATION SUPPORT: This event may be conducted and/or supplemented with the use of a Category I or II simulation devices and a simulation device operator.

**0802-FSO-1016:** Conduct company-level fire support planning (L/S)

- **EVALUATION-CODED:** NO  
- **SUSTAINMENT INTERVAL:** 2 months
- **MOS PERFORMING:** 0802
- **BILLETs:** Co Fire Support Officer
- **GRADES:** 2NDLT, 1STLT, CAPT
- **INITIAL TRAINING SETTING:** FORMAL
- **CONDITION:** Given a scheme of maneuver and multiple fire support assets.
- **STANDARD:** To develop a fire support plan that supports the scheme of maneuver.
- **PERFORMANCE STEPS:**
  1. Integrate organic and supporting Indirect Fire Weapons and air assets into Fire Support Plan.
  2. Provide guidance and supervise the setup of all artillery-related digital devices for operations.
  4. Develop a Quick Fire Plan.
  5. Develop a fire support overlay.
  7. Recommend FSCMs to the Maneuver Commander.

- **REFERENCES:** MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

**SUPPORT REQUIREMENTS:**

**SIMULATION EVALUATION:**

<table>
<thead>
<tr>
<th>SIMULATED</th>
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<td>Unit Hours</td>
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</table>
**0802-FSO-1017**: Conduct Target Mensuration Only (TMO) procedures

**EVALUATION-CODED**: NO  \hspace{1cm} **SUSTAINMENT INTERVAL**: 6 months

**MOS PERFORMING**: 0802

**BILLETS**: Co Fire Support Officer

**GRADES**: 2NDLT, 1STLT, CAPT

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given communications with higher, adjacent and supporting units, and an automated system with National Geospatial-Intelligence Agency (NGA) validated TMO software.

**STANDARD**: To determine target location within specifications listed in the Marine Corps TMO CONOPS.

**PERFORMANCE STEPS**:
1. Ensure NGA validated mensuration software is properly installed on an automated system.
2. Ensure the most up to date imagery is available on the automated system.
3. Receive a grid and target description from an observer.
4. Mensurate the reported grid with automated system.

**REFERENCES**: CJCSI 3505.01C Target Coordinate Mensuration Certification and Program Accreditation

**MISCELLANEOUS**:

**ADMINISTRATIVE INSTRUCTIONS**: This event must be conducted by a TMO operator certified on an approved software.

---

**0802-FSO-1018**: Operate the Target Hand-Off System (THS)

**EVALUATION-CODED**: NO  \hspace{1cm} **SUSTAINMENT INTERVAL**: 2 months

**MOS PERFORMING**: 0802

**BILLETS**: Co Fire Support Officer

**GRADES**: 2NDLT, 1STLT, CAPT

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given communications with higher, adjacent and supporting units, and an automated system with National Geospatial-Intelligence Agency (NGA) validated TMO software.

**STANDARD**: To determine target location within specifications listed in the Marine Corps TMO CONOPS.

**PERFORMANCE STEPS**:
1. Load map data.
2. Create communications configuration (current and planned).
3. Input target block (IAW TAB G).
4. Input target and ASR block (IAW TAB G).
5. Enter information routing.
6. Enter geometries, as required.
7. Enter units, as required.
8. Transmit missions to the proper agencies.

REFERENCES:
1. MCRP 3-16E Fire Support Systems for MAGTF Operations
2. TM 10938B-OR TLDHS Technical Manual

0802-FSO-1019: Engage targets with GPS guided munitions (L/S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 2 months

MOS PERFORMING: 0802

BILLETs: Co Fire Support Officer

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to the Fire Support Team and an Target Hand-Off System (THS) with target mensuration only software.

STANDARD: To achieve the desired effects.

PERFORMANCE STEPS:
1. Ensure TMO software is properly installed on Target Hand-Off System (THS).
2. Determine initial target location.
3. Conduct refinement of target data using dynamic targeting tools.
4. Transmit refined target data to appropriate agency for attack.

REFERENCES:
1. CJCSI 3505.01C Target Coordinate Mensuration Certification and Program Accreditation
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller
3. MCRP 3-16.2 Techniques and Procedures for Fire Support Coordination
4. MCRP 3-16E Fire Support Systems for MAGTF Operations
5. TM 10938B-OR TLDHS Technical Manual

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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<th>SUITABILITY</th>
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<td>Team Hours</td>
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<td>L/S</td>
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<td>Unit Hours</td>
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<td>L/S</td>
<td>DVTE</td>
<td>Marine Hours</td>
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</table>
RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: SIMULATION SUPPORT: This event may be conducted and/or supplemented with the use of a Category I or II simulation devices and a simulation device operator.

0802-RCKT-1001: Conduct rocket fire direction

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 2 months

DESCRIPTION: The role of the FDO in a rocket FDC is similar to both battery level and battalion level fire direction depending on whether the unit is in a centralized or decentralized method of control. Rocket units are unique in their digital communications structure, target attack considerations, and ammunition management.

MOS PERFORMING: 0802

BILLETS: Fire Direction Officer

GRADES: 2NDLT, 1STLT, CAPT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a Fire Direction Center (FDC), firing agencies, commander’s guidance, and a Call for Fire (CFF).

STANDARD: To determine if, how, and when to attack targets.

PERFORMANCE STEPS:
1. Maintain situational awareness of the battlefield.
2. Communicate tactical situation to HAS.
3. Establish fire order SOP.
4. Plot the target.
5. Analyze target attack considerations.
6. Consult commander’s guidance (Tab G).
7. Issue the fire order.
8. Supervise the message to observer.
9. Mass the battery.
10. Conduct ammunition management.

REFERENCES:
1. JobAid AFATDS Job Aid
2. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
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## CHAPTER 10

### MOS 0803 INDIVIDUAL EVENTS

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<tr>
<th>PARAGRAPH</th>
<th>PAGE</th>
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<tr>
<td>PURPOSE</td>
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<tr>
<td>EVENT CODING.</td>
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<td>INDEX OF 0803 2000-LEVEL INDIVIDUAL EVENTS.</td>
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<td>0803 2000-LEVEL INDIVIDUAL EVENTS</td>
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</table>
ARTILLERY T&R MANUAL

CHAPTER 10
MOS 0803 INDIVIDUAL EVENTS

10000. PURPOSE. This chapter details the individual events that pertain to a target acquisition officer. 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.

10001. EVENT CODING. 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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>0803</td>
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</table>

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

<table>
<thead>
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<th>Code</th>
<th>Description</th>
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<tr>
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<td>RADAR</td>
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<tr>
<td>SENS</td>
<td>Sensor</td>
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<tr>
<td>TGT</td>
<td>Targeting</td>
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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:

<table>
<thead>
<tr>
<th>Code</th>
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10002. INDEX OF 0803 2000-LEVEL INDIVIDUAL EVENTS

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<th>Event Code</th>
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<th>Page</th>
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<tbody>
<tr>
<td>0803-CORE-2001</td>
<td>NO</td>
<td>Determine Mapping, Charting &amp; Geodesy (MC&amp;G) information for fire support systems</td>
<td>10-3</td>
</tr>
<tr>
<td>0803-CORE-2002</td>
<td>NO</td>
<td>Supervise hand held GPS operations</td>
<td>10-4</td>
</tr>
<tr>
<td>0803-CORE-2003</td>
<td>NO</td>
<td>Supervise embarkation of Target Acquisition equipment and personnel</td>
<td>10-4</td>
</tr>
<tr>
<td>0803-CORE-2004</td>
<td>NO</td>
<td>Supervise maintenance and accountability of equipment</td>
<td>10-5</td>
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<tr>
<td>0803-RADR-2001</td>
<td>NO</td>
<td>Plan RADAR operations</td>
<td>10-6</td>
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<tr>
<td>0803-RADR-2002</td>
<td>NO</td>
<td>Supervise RADAR operations</td>
<td>10-6</td>
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</table>
10003. 0803 2000-LEVEL INDIVIDUAL EVENTS

0803-CORE-2001: Determine Mapping, Charting & Geodesy (MC&G) information for fire support systems

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 6 months

**MOS PERFORMING:** 0803

**BILLETS:** Radar Officer, Sensor Officer, TAP Plt Cmdr, Target Acquisition Officer, Target Information Officer

**GRADES:** WO-1, CWO-2, CWO-3, CWO-4, CWO-5

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a list of current fire support systems, an area of operations (AO), map sheets of the AO, and computation software.

**STANDARD:** To identify map data that correctly satisfies the requirements for each system.

**PERFORMANCE STEPS:**
1. Determine ellipsoid and datum best suited for AO.
2. Determine inputs for those fire support systems that have the chosen ellipsoid and datum as programmed options.
3. Determine inputs for those fire support systems that do not have the chosen ellipsoid and datum as a programmed option, but do allow for user defined inputs.
4. Determine vertical datum for the AO.
5. Verify computations of datum to datum transformations (horizontal).
7. Determine map projections and grids best suited for AO.
8. Determine the need for overlays when map projections are not supported by Fire Support Systems.

REFERENCES:
1. DMA TM 8358.1 Datums, Ellipsoids, Grids and Grid Reference Systems
2. DMA TR 8350.2 DoD World Geodetic System 1984
3. MCRP 3-10E.6 Marine Artillery Survey Operations
4. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition

0803-CORE-2002: Supervise hand held GPS operations

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0803

BILLETS: Radar Officer, Sensor Officer, TAP Plt Cmdr, Target Acquisition Officer, Target Information Officer

GRADES: WO-1, CWO-2, CWO-3, CWO-4, CWO-5

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a mission, a map sheet of an area of operation, a GPS, and a cryptological fill device.

STANDARD: To ensure hand held GPS is loaded with area of operation and mission specific information in order to navigate.

PERFORMANCE STEPS:
1. Review higher headquarter's order to pull specific navigation data.
2. Supervise mission set-up procedures with hand held GPS equipment.
3. Supervise procedures for performing emergency zeroize of hand held GPS equipment, as required.


0803-CORE-2003: Supervise embarkation of Target Acquisition equipment and personnel

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0803

BILLETS: Radar Officer, Sensor Officer, TAP Plt Cmdr, Target Acquisition Officer, Target Information Officer

GRADES: WO-1, CWO-2, CWO-3, CWO-4, CWO-5
INITIAL TRAINING SETTING: MOJT

CONDITION: Given a section designated as a sourced unit for a contingency, a warning order, and commander's guidance.

STANDARD: To ensure all materiel and personnel are moved to the point of embarkation within the prescribed timeline.

PERFORMANCE STEPS:
1. Coordinate with the supported unit, artillery regiment or battalion embarkation officer, and/or other embarkation officers/movement control officers, as appropriate.
2. Verify planned transportation meets the unit's transportation lift requirements on the Unit Deployment List (UDL).
3. Verify all material is properly marked, packaged, manifested, and loaded for embarkation.
4. Conduct embarkation inspections.
5. Execute embarkation/movement plans.

REFERENCES:
1. MCTP 13-10C Unit Embarkation Handbook
2. MCTP 3-40B Tactical-Level Logistics

0803-CORE-2004: Supervise maintenance and accountability of equipment

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0803

BILLETs: Radar Operator, Sensor Chief, TAP Plt Cmdr, Target Acquisition Officer, Target Information Officer

GRADES: WO-1, CWO-2, CWO-3, CWO-4, CWO-5

INITIAL TRAINING SETTING: MOJT

CONDITION: Given maintenance management directives, GCCS-MC output reports and service requests, current unit T/O&E, publications listings (PL), and the references.

STANDARD: To ensure section equipment is properly maintained and accounted for.

PERFORMANCE STEPS:
1. Supervise all preventive, scheduled and corrective maintenance.
2. Supervise maintenance management program.
4. Account for items listed on the CMR.
5. Supervise the section calibration program.

REFERENCES:
1. MCO 5600.31_ Marine Corps Printing, Publishing and Reprographics Equipment Regulations
0803-RADR-2001: Plan RADAR operations

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0803

BILLETS: Radar Officer

GRADES: WO-1, CWO-2, CWO-3

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given higher headquarter's order.

STANDARD: To develop a RADAR plan documented in Enclosure 5 (Observations/Target Acquisitions) to Tab B (Artillery Fire Plan) to Appendix 19 (Fire Support) to Annex C (Operations) of an Operations Order, which supports the MAGTF/GCE scheme of maneuver.

PERFORMANCE STEPS:
1. Advise the commander on the current RADAR capabilities and limitations.
2. Assess the situation based on mission, enemy, terrain and weather, troops and fire support, time, space, and logistics (METT-TS-L).
3. Collect friendly unit information to determine support requirements.
4. Conduct map and imagery reconnaissance.
5. Issue a Warning Order.
6. Conduct ground reconnaissance.
7. Determine initial RADAR team locations.
8. Determine Target Processing Center requirements and location.
9. Integrate communications networks and procedures.
11. Prioritize RADAR support.
13. Issue RADAR Plan as Exhibit 6 to Tab B.

REFERENCES:
1. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. MCWP 5-10 Marine Corps Planning Process

0803-RADR-2002: Supervise RADAR operations

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0803
**BILLETS:** Radar Officer

**GRADES:** WO-1, CWO-2, CWO-3

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission, a RADAR plan, and a complete RADAR section with organic assets.

**STANDARD:** To ensure RADAR operations provide information as outlined in the RADAR plan, and supports the supported unit's scheme of maneuver.

**PERFORMANCE STEPS:**
1. Supervise site selection.
2. Supervise the emplacement.
3. Supervise ground weapons locating RADAR in hostile operations.
4. Supervise ground weapons locating RADAR in friendly-fire operations.

**REFERENCES:**
1. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. MCTP 3-10E Artillery Operations
3. TM 11-5840-380-10 OPERATOR'S MANUAL FOR RADAR SET AN/TPQ-36(V)8

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**0803-RADR-2003:** Supervise the operations of the Target Processing Center (TPC)

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 6 months

**MOS PERFORMING:** 0803

**BILLETS:** Radar Officer

**GRADES:** WO-1, CWO-2, CWO-3

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission, commander's intent, a complete Appendix 19 Fire Support, to Annex C Operations of an operations order, and a complete RADAR section with organic assets.

**STANDARD:** To ensure target acquisition assets are employed in accordance with the RADAR plan.

**PERFORMANCE STEPS:**
1. Supervise operations of the automated command and control systems in accordance with Tab G (Fire Support System Plan) to Appendix 19.
2. Supervise the processing of acquisitions from sensors.
3. Supervise the employment of RADAR teams.
4. Coordinate with supported/supporting commanders on employment of available target acquisition systems.
REFERENCES:
1. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. MCRP 3-10F.1 Fire Support Systems for MAGTF Operations
3. MCTP 3-10E Artillery Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0803-SENS-2001: Plan sensor operations

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0803

BILLETS: Sensor Officer

GRADES: WO-1, CWO-2, CWO-3

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a mission, commander's intent, a draft TAB B to Appendix 19 of Annex C of an operations order, and a complete sensor section.

STANDARD: To develop a Sensor plan, documented as Enclosure 5 (Observations/Target Acquisitions) to Tab B, that supports the MAGTF/GCE scheme of maneuver.

PERFORMANCE STEPS:
1. Advise the commander on current artillery sensor support capabilities and limitations.
2. Assess the situation based on mission, enemy, terrain and weather, troops and fire support, time, space, and logistics (METT-TS-L).
3. Collect friendly unit information to determine support requirements.
4. Conduct a map and imagery reconnaissance.
5. Issue a Warning Order.
6. Conduct a ground reconnaissance.
7. Plan for meteorological support.
8. Integrate communications networks and procedures.
10. Prioritize sensor support.
11. Synchronize sensor support operations with RADAR and collections operations.
12. Issue the Sensor Plan as Exhibit 7 to Tab B.

REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
3. MCTP 3-10E Artillery Operations
0803-SENS-2002: Supervise meteorological operations

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0803

BILLETS: Sensor Officer

GRADES: WO-1, CWO-2, CWO-3

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a mission, a sensor plan, and a complete sensor section.

STANDARD: To provide timely and accurate meteorological data to supported units.

PERFORMANCE STEPS:
1. Evaluate significant weather changes.
2. Coordinate meteorological requirements with supported units.
3. Manage meteorological logistics.
4. Supervise visual, modeled, and extrapolated met operations
5. Validate MET messages.
6. Supervise the dissemination of meteorological messages.

REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
3. MCTP 3-10E Artillery Operations

0803-SENS-2003: Supervise the operations of the Geospatial Information Center (GIC)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0803

BILLETS: Sensor Officer

GRADES: WO-1, CWO-2, CWO-3

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a mission, a sensor plan, a Combat Operations Center, a Target Processing Center, and a complete sensor section.

STANDARD: To ensure common grid and target acquisition assets are employed in accordance with the sensor plan.

PERFORMANCE STEPS:
1. Supervise Sensor Support teams.
2. Supervise the maintenance of the common grid.
3. Verify computations.
4. Supervise dissemination of sensor data.
5. Supervise acoustic operations.
6. Supervise mapping, charting, and geodesy operations.

REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
3. MCTP 3-10E Artillery Operations

0803-SENS-2004: Supervise survey operations

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months
MOS PERFORMING: 0803
BILLETS: Sensor Officer
GRADES: WO-1, CWO-2, CWO-3
INITIAL TRAINING SETTING: FORMAL
CONDITION: Given a mission, a sensor plan, and a sensor section.
STANDARD: To provide timely and accurate survey data to supported units.
PERFORMANCE STEPS:
2. Supervise intersection operations.
3. Supervise inertial navigation system operations.
4. Supervise operations with survey grade GPS.
5. Supervise astronomic observation operations.
6. Supervise conversion to common control operations.
REFERENCES: MCRP 3-10E.6 Marine Artillery Survey Operations

0803-SENS-2005: Conduct reconnaissance

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months
DESCRIPTION: This event outlines the procedures a Sensor Officer will take while directing the sensor section in the conduct of reconnaissance patrols for a higher headquarters. Objectives for the reconnaissance may include, but are not limited to, routes for artillery units, prospective firing positions, and prospective supplementary firing positions.
MOS PERFORMING: 0803
**BILLETS:**  Sensor Officer

**GRADES:**  WO-1, CWO-2, CWO-3

**INITIAL TRAINING SETTING:**  FORMAL

**CONDITION:**  Given an operation or fragmentary order, a briefing on the overall operation, map of the area of operation, and a complete sensor section.

**STANDARD:**  To collect information and data to satisfy the supported commander's requirements.

**PERFORMANCE STEPS:**
1. Conduct assembly area actions.
2. Conduct planning.
3. Task organize.
4. Integrate attachments, as required.
5. Coordinate fires.
6. Prepare for combat.
7. Execute command and control.
8. Conduct a passage of lines.
9. Move to the objective rally point (ORP).
10. Execute immediate actions, as required.
11. Execute priorities of reconnaissance.
12. Return to the ORP.
13. Submit reports.
14. Re-enter friendly lines, as required.
15. Conduct post combat actions, as required.
16. Standby for follow on actions.

**REFERENCES:**
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCTP 3-10E Artillery Operations
3. TC 3-25.26 Map Reading and Land Navigation

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**0803-SENS-2006:**  Supervise acoustic sensor operations

**EVALUATION-CODED:**  NO  **SUSTAINMENT INTERVAL:**  3 months

**MOS PERFORMING:**  0803

**BILLETS:**  Plt Cmdr, Sensor Officer, Target Acquisition Officer

**GRADES:**  WO-1, CWO-2, CWO-3, CWO-4, CWO-5

**INITIAL TRAINING SETTING:**  FORMAL

**CONDITION:**  Given a tactical scenario, a sensor plan, and a complete sensor section.

**STANDARD:**  IAW the Sensor Plan.
PERFORMANCE STEPS:
1. Supervise acoustic sensor planning.
2. Verify communications configuration.
4. Supervise operations of Sensor Posts.
5. Supervise operations of Command Post.

REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
3. TM 11138A-OR Operators Manual Ground Counter Fire Sensor

0803-TGT-2001: Develop Tab E (Targeting) of Appendix 19 to Annex C to Operation Order

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0803

BILLETS: Assistant Target Information Officer, Target Acquisition Officer

GRADES: WO-1, CWO-2, CWO-3

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a mission, a draft operations order, a draft Appendix 19, doctrinal and situational templates, maps and overlays, a targeting element, references, targeting automated systems, supporting intelligence updates and available Command and Control Communication.

STANDARD: To translate the targeting plan into written, and/or graphic communication sufficient to guide implementation and promote initiative by subordinates.

PERFORMANCE STEPS:
1. Identify necessary information for inclusion in the base Tab E.
2. Develop Exhibit 1 Targeting Board Participants.
3. Develop Exhibit 2 Targeting Board Agenda.
5. Develop Exhibit 4 Target Nomination Process and Format.
6. Develop Exhibit 5 Target Decision Guidance Message/BSM.
7. Develop Exhibit 6 Target Guidance Tools: TST, HPTL, TSS, and ensure all attack guidance is reflected in Tab G.
8. Develop Exhibit 7 Target Areas of Interest.
9. Develop Target Overlay based on Intelligence Preparation of the Battlespace (IPB) and Situation Template (SITEMP).
10. Develop the Target Synchronization Matrix.
11. Ensure all targeting related matters not discussed in the unit's Standard Operating Procedures are identified and explained in Tab E.

REFERENCES:
1. JP 3-60 Joint Targeting
2. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
3. MCTP 3-10E Artillery Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
5. MCWP 3-31 Marine Air-Ground Task Force Fires
6. MCWP 5-10 Marine Corps Planning Process
7. MSTP PAM 3-0.3 MAGTF Fires Reference Guide

0803-TGT-2002: Conduct Deliberate (D3A/Joint) targeting

EVALUATION-CODED: NO  
SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0803

BILLETS: Target Acquisition Officer

GRADES: WO-1, CWO-2

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a higher headquarters order (warning/operations) or directive (mission/task), commander's guidance, references and appropriate fires command and control systems.

STANDARD: To manage the continuous process in support of the scheme of maneuver, to achieve the commander's intent.

PERFORMANCE STEPS:
1. Participate in Operational Planning Team meetings.
2. Identify targeting battle rhythm, synchronizing it with higher headquarters targeting battle rhythm.
3. Manage all Targets.
4. Manage all Target Lists.
5. Develop Commander's targeting guidance and priorities.
6. Develop Commander's targeting objectives.
7. Integrate kinetic and non-kinetic effects.
8. Determine desired effects.
9. Participate in target development, validation, nomination, and prioritization.
10. Identify high payoff targets and create high payoff target list.
11. Facilitate the targeting board and targeting working group.
12. Conduct Collateral Damage Estimation (CDE).
15. Develop and publish Target Synchronization Matrix (TSM).
16. Identify Requirements for Battle Damage Assessment (BDA).
17. Develop Battlespace Shaping Matrix (BSM).
18. Review Battle Damage Assessment (BDA) for desired effects.
19. Develop re-attack recommendations, as required.
20. Provide targeting input to the Decision Support Template (DST).
21. Ensure all targeting products are vetted against current Rules of Engagement.
22. Synchronize targeting with the collection plan.
23. Coordinate the area of coverage for target acquisition assets with the TAP Commander to support the scheme of maneuver.

REFERENCES:
1. JP 3-60 Joint Targeting
2. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
3. MCWP 3-31 Marine Air-Ground Task Force Fires
4. MCWP 5-10 Marine Corps Planning Process
5. MSTP PAM 3-0.3 MAGTF Fires Reference Guide

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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<th>SIMULATOR</th>
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0803-TGT-2003: Participate in development of the Intelligence Preparation of the Battlespace (IPB)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0803

BILLETS: Target Acquisition Officer

GRADES: WO-1, CWO-2, CWO-3, CWO-4

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an operations order, a mission, the commander's guidance, a G-2/S-2 Section, maps, references, doctrinal templates, and overlays.

STANDARD: To develop the IPB products necessary for conduct of the targeting process.

PERFORMANCE STEPS:
1. Receive commander's IPB guidance.
2. Support defining the battlespace environment.
3. Support defining the battlespace effects.
4. Support the identification of employment considerations specific to the operating unit.
5. Support the evaluation of the adversary.
6. Support the identification of threats to the operating unit.
7. Support the development of adversary courses of action as they relate to the operating unit.
8. Develop target areas of interest (TAIs) in support of the event template.
9. Conduct target value analysis.
10. Assess enemy capabilities.
11. Identify high value targets (HVTs).
12. Develop high value target list (HVTL).
13. Refine decision points with Operations section.
14. Communicate the IPB to the operating unit/subordinate elements.
15. Refine the IPB throughout planning/operations.

REFERENCES:
1. MCRP 2-10B.1 Intelligence Preparation of the Battlefield/Battlespace
2. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
3. MCWP 3-31 Marine Air-Ground Task Force Fires
4. MCWP 5-10 Marine Corps Planning Process
5. MSTP PAM 3-0.3 MAGTF Fires Reference Guide

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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0803-TGT-2004: Conduct planning in support of dynamic targeting

EVALUATION-CODED: NO       SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0803

BILLETs: Target Acquisition Officer

GRADES: WO-1, CWO-2, CWO-3, CWO-4

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a mission, an operations order and operation plan, doctrinal and situational templates, maps and overlays, a targeting element, references, targeting automated systems, supporting intelligence updates, and available Command and Control Communication.

STANDARD: To manage the continuous process in support of the scheme of maneuver to achieve the commander's intent.

PERFORMANCE STEPS:
1. Coordinate engagement of Time Sensitive Targets (TSTs).
2. Develop Exhibit 1 Dynamic Targeting to Tab D Current Fire Support Operations.
3. Develop Exhibit 2 Damage Criteria Matrix (DCM) to Tab D Current Fire Support Operations.

REFERENCES:
1. JP 3-60 Joint Targeting
2. MCRP 3-31.5 Multi-Service Tactics, Techniques, and Procedures for Dynamic Targeting
3. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
4. MCWP 3-31 Marine Air-Ground Task Force Fires
5. MSTP PAM 3-0.3 MAGTF Fires Reference Guide
0803-TGT-2005: Conduct Target Mensuration Only (TMO) procedures

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0803

BILLETS: Target Acquisition Officer

GRADES: WO-1, CWO-2, CWO-3, CWO-4

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given the references and automated system with NGA validated TMO software.

STANDARD: To determine target location within specifications listed in the Marine Corps TMO CONOPS.

PERFORMANCE STEPS:
1. Ensure the most up to date NGA validated software is installed on an automated system.
2. Ensure the most up to date imagery is available.
3. Produce a Category I coordinate.

REFERENCES:
1. CJCSI 3505.01A Target Coordinate Mensuration Certification and Program Accreditation
2. NSG CONOPS Rev1 National System for Geospatial Intelligence Concept of Operations for the National Geospatial-Intelligence Agency Target Coordinate Mensuration Program Accreditation

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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## ARTILLERY T&R MANUAL

### CHAPTER 11

**MOS 0811 INDIVIDUAL EVENTS**

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<th>Paragraph</th>
<th>Page</th>
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<td>EVENT CODING</td>
<td>11-2</td>
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<tr>
<td>INDEX OF 0811 2000-LEVEL INDIVIDUAL EVENTS</td>
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<td>2000-LEVEL INDIVIDUAL EVENTS</td>
<td>11-4</td>
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<td>11-44</td>
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<tr>
<td>1000-LEVEL EVENTS</td>
<td>11-44</td>
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</table>
11000. PURPOSE. This chapter details the individual events that pertain to cannoneers. 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-XXXX. This chapter utilizes the following methodology

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

<table>
<thead>
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<tr>
<td>0811</td>
<td>Cannoneer</td>
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b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

<table>
<thead>
<tr>
<th>Code</th>
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<tr>
<td>GUNS</td>
<td>Howitzer section</td>
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</table>

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:

<table>
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<td>2000</td>
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<td>1000</td>
<td>Core Skills</td>
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11002. INDEX OF 0811 2000-LEVEL INDIVIDUAL EVENTS

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<th>Event Code</th>
<th>E-Coded</th>
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<th>Page</th>
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<tr>
<td>0811-GUNS-2001</td>
<td>NO</td>
<td>Lay the howitzer for initial direction of fire (DFCS)</td>
<td>11-4</td>
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<tr>
<td>0811-GUNS-2002</td>
<td>NO</td>
<td>Lay the howitzer for initial direction of fire (OFC)</td>
<td>11-5</td>
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<tr>
<td>0811-GUNS-2003</td>
<td>NO</td>
<td>Align the collimator</td>
<td>11-5</td>
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<tr>
<td>0811-GUNS-2004</td>
<td>NO</td>
<td>Refer the piece</td>
<td>11-6</td>
</tr>
<tr>
<td>0811-GUNS-2005</td>
<td>NO</td>
<td>Align the aiming posts</td>
<td>11-7</td>
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<tr>
<td>0811-GUNS-2006</td>
<td>NO</td>
<td>Prepare gunner's reference card</td>
<td>11-8</td>
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<tr>
<td>0811-GUNS-2007</td>
<td>NO</td>
<td>Prepare a howitzer range card</td>
<td>11-9</td>
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<tr>
<td>0811-GUNS-2008</td>
<td>NO</td>
<td>Measure the quadrant using the Fire Control Quadrant</td>
<td>11-9</td>
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<tr>
<td>0811-GUNS-2009</td>
<td>NO</td>
<td>Lay the howitzer for quadrant (OFC)</td>
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<tr>
<td>0811-GUNS-2010</td>
<td>NO</td>
<td>Lay howitzer for deflection (OFC)</td>
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<td>0811-GUNS-2011</td>
<td>NO</td>
<td>Boresight the direct fire elbow telescope using a Distant Aiming Point</td>
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<td>0811-GUNS-2012</td>
<td>NO</td>
<td>Conduct direct fire</td>
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<td>0811-GUNS-2101</td>
<td>NO</td>
<td>Test the gunner's quadrant</td>
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<td>0811-GUNS-2102</td>
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<td>Perform fire control alignment tests and measurements</td>
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<tr>
<td>0811-GUNS-2103</td>
<td>NO</td>
<td>Boresight the howitzer</td>
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<tr>
<td>0811-GUNS-2104</td>
<td>NO</td>
<td>Establish standard angle</td>
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<td>0811-GUNS-2105</td>
<td>NO</td>
<td>Initialize Digital Fire Control System (DFCS)</td>
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<tr>
<td>0811-GUNS-2106</td>
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<td>0811-GUNS-2107</td>
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<td>Supervise the emplacement of a howitzer (DFCS)</td>
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<tr>
<td>0811-GUNS-2108</td>
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<tr>
<td>0811-GUNS-2109</td>
<td>NO</td>
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<tr>
<td>0811-GUNS-2110</td>
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<tr>
<td>0811-GUNS-2111</td>
<td>NO</td>
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<td>0811-GUNS-2112</td>
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<td>0811-GUNS-2118</td>
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<td>0811-GUNS-2202</td>
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11003. 2000-LEVEL INDIVIDUAL EVENTS

0811-GUNS-2001: Lay the howitzer for initial direction of fire (DFCS)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Gunner

GRADES: CPL, SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a howitzer in a firing position and a determined method of lay.

STANDARD: To an accuracy of 0 mils.

PERFORMANCE STEPS:
1. Direct the crew to shift the howitzer.
2. Commands "DROP" when CMD and ACTL AZ on gunner's display are within 10 mils.
3. Align CMD and ACTL AZ until 0 mils is obtained.

REFERENCES:
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range
**0811-GUNS-2002:** Lay the howitzer for initial direction of fire (OFC)

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811  
**BILLETS:** Gunner  
**GRADES:** CPL, SGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a howitzer in a firing position and a determined method of lay.

**STANDARD:** To an accuracy of 0 mils or +/- 20 mils using the M2 compass.

**PERFORMANCE STEPS:**
1. Direct the crew to shift the howitzer until proper sight picture is obtained.
2. Announce, "Number (so and so) aiming point identified."
3. Command crew to drop howitzer.
4. Respond to commands until howitzer is laid on the azimuth of fire.
5. Record reading from the azimuth counter on the gunner's reference card.

**REFERENCES:**
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17650 Field Artillery Direct Fire Range
- Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. When reciprocal laying another howitzer the gunner on the laid howitzer will compute all data and act as the aiming circle operator. The non-laid howitzer will perform the same performance steps as listed.
2. Ensure the reading is converted using LARS (Left add, Right subtract).

---

**0811-GUNS-2003:** Align the collimator

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811
**BILLETS:** Gunner

**GRADES:** LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a howitzer laid on the azimuth of fire, and a cannoneer.

**STANDARD:** To an accuracy of 0 mils within one minute.

**PERFORMANCE STEPS:**
1. Locate collimator.
2. Direct cannoneer to adjust collimator.
3. Engage deflection clutch.
4. Update gunner's reference card.

**REFERENCES:**
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17650 Field Artillery Direct Fire Range
- Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
- Time starts: When the deflection to the aiming circle is recorded on the gunner's reference card.
- Time stops: When deflection clutch is engaged.

**0811-GUNS-2004:** Refer the piece

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Gunner

**GRADES:** CPL, SGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an emplaced howitzer laid on the azimuth of fire, a command to refer, and an aiming point.
STANDARD: To ensure the correct deflection to the aiming point is read within 15 seconds.

PERFORMANCE STEPS:
1. Verify the sight picture.
2. Read the deflection from the azimuth counter.
3. Announce, "Number _____, aiming point identified, deflection (amount)."

REFERENCES:
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17650 Field Artillery Direct Fire Range
- Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: This event is used when verifying the lay of the howitzer.

0811-GUNS-2005: Align the aiming posts

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Gunner

GRADES: CPL, SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a howitzer laid on the azimuth of fire and a cannoneer.

STANDARD: To ensure no displacement is present in the reticle pattern within.

PERFORMANCE STEPS:
1. Locate far aiming post.
2. Direct cannoneer to adjust aiming post.
3. Update gunner's reference card.

REFERENCES:
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17650 Field Artillery Direct Fire Range
- Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2006: Prepare gunner's reference card

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Gunner

GRADES: CPL, SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given an emplaced howitzer.

STANDARD: To accurately and legibly reflect data.

PERFORMANCE STEPS:
1. Record initial lay data.
2. Record standard data.
3. Record priority target data.
4. Record position corrections data.
5. Record Azimuth to all aiming points.

REFERENCES:
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17650 Field Artillery Direct Fire Range
- Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: The gunner's reference card is filled out as pertinent information becomes available.
0811-GUNS-2007: Prepare a howitzer range card

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months  
**MOS PERFORMING:** 0811  
**BILLETS:** Assistant Gunner  
**GRADES:** LCPL, CPL  
**INITIAL TRAINING SETTING:** MOJT  
**CONDITION:** Given an emplaced howitzer, and appropriate firing tables.  
**STANDARD:** To ensure range the card is accurately and legibly completed.  
**PERFORMANCE STEPS:**  
1. Sketch the sector of fire and likely avenues of approach.  
2. Ensure data section lists necessary data to engage targets.  

**REFERENCES:** MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery  

**SUPPORT REQUIREMENTS:**  
**RANGE/TRAINING AREA:**  
Facility Code 17420 Maneuver/Training Area, Heavy Forces  
Facility Code 17650 Field Artillery Direct Fire Range  
Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2008: Measure the quadrant using the Fire Control Quadrant

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months  
**MOS PERFORMING:** 0811  
**BILLETS:** Assistant Gunner  
**GRADES:** CPL, SGT  
**INITIAL TRAINING SETTING:** MOJT  
**CONDITION:** Given a howitzer in a firing position elevated to an unknown quadrant.  
**STANDARD:** To ensure an accuracy of 0 mils.  
**PERFORMANCE STEPS:**  
1. Center the bubble in the elevation vial without moving the tube.  
2. Center the bubble in the cross level vial.  
3. Announce the quadrant from the elevation counter.
REFERENCES:  MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2009:  Lay the howitzer for quadrant (OPC)

EVALUATION-CODED:  NO  SUSTAINMENT INTERVAL:  3 months

MOS PERFORMING:  0811

BILLETs:  Assistant Gunner

GRADES:  LCPL, CPL

INITIAL TRAINING SETTING:  MOJT

CONDITION:  Given a howitzer in a firing position, and a fire command.

STANDARD:  To ensure an accuracy of 0 mils within 30 seconds after the command is given or 45 seconds for high angle mission.

PERFORMANCE STEPS:
1. Apply announced quadrant.
2. Elevate or depress cannon tube to center bubble.
3. Center cross level vial.
4. Announce "Set."

REFERENCES:  MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
Time starts:  When quadrant is announced.
Time stops:  When "Set" is announced.
0811-GUNS-2010: Lay howitzer for deflection (OFC)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Gunner

GRADES: CPL, SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given an emplaced howitzer laid on the azimuth of fire, an aiming point, and a fire command.

STANDARD: To ensure howitzer is laid to an accuracy of 0 mils within 15 seconds.

PERFORMANCE STEPS:
1. Apply announced deflection to the pantel.
2. Traverse cannon tube to obtain proper sight picture.
3. Center bubbles and recheck sight picture, announce "Ready".

REFERENCES: MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17650 Field Artillery Direct Fire Range
- Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
- Time starts: When deflection is announced.
- Time stops: When gunner announces "Ready".

0811-GUNS-2011: Boresight the direct fire elbow telescope using a Distant Aiming Point

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Assistant Gunner

GRADES: LCPL, CPL

INITIAL TRAINING SETTING: MOJT
CONDITION: Given a howitzer in a firing position and section equipment.

STANDARD: To ensure an accuracy of 0 mils.

PERFORMANCE STEPS:
1. Insert boresight disks.
2. Sight in on Distant Aiming Point (DAP).
3. Align muzzle on (DAP).
4. Center bubbles.
5. Adjust 0 elevation line of the elbow telescope DAP using the elevation adjusting screw.
6. Verify sight picture.
7. Remove boresight disks.

REFERENCES: MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Muzzle crosshairs may be used in lieu of muzzle boresight discs.

0811-GUNS-2012: Conduct direct fire

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETs: Gunner

GRADES: CPL, SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a howitzer in a firing position, a target, and a fire command.

STANDARD: To neutralize or destroy close-in targets within 2 minutes (daylight) and 3 minutes (darkness) after the initial fire command.

PERFORMANCE STEPS:
1. Set 3200 on the azimuth counter and ensure the correction counter reads zero.
2. Turn azimuth knob bar to DIRECT fire position.
3. Set the announced lead.
4. Announce, "FIRE", after the assistant gunner announces "SET."
5. Continue to lay and fire on target until it is destroyed or until a subsequent fire command is issued.

REFERENCES:
1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
2. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
3. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

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<table>
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<tr>
<th>DODIC</th>
<th>QUANTITY</th>
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<tbody>
<tr>
<td>D529</td>
<td>D529 Projectile, 155mm High Explosive M795 3 projectiles per Section</td>
</tr>
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<td>DA13</td>
<td>DA13 Charge, Propellant 155mm MACS M232 3 charges per Section</td>
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<tr>
<td>N340</td>
<td>N340 Fuze, Point Detonating M739/M739A1 3 fuzes per Section</td>
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<tr>
<td>N523</td>
<td>N523 Primer, Percussion M82 3 primers per Section</td>
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<tr>
<td>NA15</td>
<td>NA15 Fuze, Electronic Time M767A1 3 fuzes per Section</td>
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</table>

ORDNANCE NOTES: N335 Fuze, Point Detonating M557 3 fuzes per Section

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Time fuzes are intended to be utilized to conduct "killer junior" missions.
2. Time starts when Warning Order is given. Time stops when target is neutralized or destroyed.

0811-GUNS-2101: Test the gunner's quadrant

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLET: Section Chief

GRADES: SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a howitzer and a gunner's quadrant.

STANDARD: To ensure it is within a tolerance of +/- 0.4 mils.

PERFORMANCE STEPS:
1. Perform the micrometer test.
2. Perform end for end test.
3. Perform the vertical shoe test.
REFERENCES: MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

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0811-GUNS-2102: Perform fire control alignment tests and measurements

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Section Chief

GRADES: SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an emplaced howitzer, section, equipment and the reference.

STANDARD: To ensure the on-carriage fire control equipment and the gunner's quadrant are serviceable and within tolerances.

PERFORMANCE STEPS:
1. Prepare the howitzer.
2. Conduct the tests of the on-carriage fire control equipment.

REFERENCES: MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

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0811-GUNS-2103: Boresight the howitzer

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Section Chief

GRADES: SGT
INITIAL TRAINING SETTING:  FORMAL

CONDITION:  Given an emplaced howitzer that is out of boresight, equipment, and the references.

STANDARD:  To aid in the delivery of accurate fires ensuring boresight to an accuracy of 0.5 mils.

PERFORMANCE STEPS:
1. Prepare the howitzer.
2. Perform actions for the method selected.

REFERENCES:
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:  
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2104: Establish standard angle
EVALUATION-CODED:  NO  SUSTAINMENT INTERVAL:  3 months
MOS PERFORMING:  0811
BILLETs:  Section Chief
GRADES:  SGT

INITIAL TRAINING SETTING:  FORMAL

CONDITION:  Given a boresighted howitzer, section equipment, and the reference.

STANDARD:  Within an accuracy of 0.5 mils.

PERFORMANCE STEPS:
1. Prepare howitzer and sight.
2. Record standard angle.

REFERENCES:  MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:  
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2105: Initialize Digital Fire Control System (DFCS)

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a howitzer and a known point.

**STANDARD:** To ensure the operational main menu screen displays "OK TO SHOOT OR MOVE."

**PERFORMANCE STEPS:**
1. Connect all necessary cables.
2. Turn on system.
3. Update necessary fields.

**REFERENCES:**
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
2. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
3. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2106: Conduct manual move order (DFCS)

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an initialized howitzer and a movement order.
STANDARD: To ensure the section arrives at the firing area.

PERFORMANCE STEPS:
1. Update manual move order entries.
2. Confirm range to destination using available resources.
3. Navigate to destination.

REFERENCES: MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2107: Supervise the emplacement of a howitzer (OFC)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Section Chief

GRADES: SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a howitzer without digital capabilities, section, equipment and an aiming point.

STANDARD: To ensure howitzer is emplaced to an accuracy of 0 mils of the azimuth of fire.

PERFORMANCE STEPS:
1. Give the command ‘Dismount, Prepare for Action’.
2. Monitor cannoneers performing emplacement procedures.
3. Correct improper procedures as required.
4. Complete section chief’s report.

REFERENCES:
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
2. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
3. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
4. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range  
Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Procedures for emplacing howitzer (OFC) are captured in the memory aid TLABSPAP (Tube, Laying, Aiming point, Boresight verification, Second circle, Pre-fire checks, Ammunition preparation, and Position improvement). To complete task, position improvement is continuous and not evaluated.

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**0811-GUNS-2108:** Supervise the emplacement of a howitzer (DFCS)

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a howitzer with digital capabilities, section, equipment and an aiming point.

**STANDARD:** To ensure howitzer is emplaced to an accuracy of within 0 mils of the azimuth of fire.

**PERFORMANCE STEPS:**
1. Give the command ‘Dismount, Prepare for Action’.
2. Monitor cannoneers performing emplacement procedures.
3. Correct improper procedures, as required.
4. Complete section chief’s report.

**REFERENCES:**
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
2. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
3. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
4. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17420 Maneuver/Training Area, Heavy Forces  
Facility Code 17650 Field Artillery Direct Fire Range  
Facility Code 17671 Field Artillery Indirect Fire Range

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**MISCELLANEOUS:**
ADMINISTRATIVE INSTRUCTIONS: Procedures for emplacing howitzer (DFCS) are captured in the memory aid TLPAP (Tube, Laying, Pre-fire checks, Ammunition preparation, and Position improvement). To complete task, position improvement is continuous and not evaluated.

0811-GUNS-2109: Measure site to crest

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Section Chief

GRADES: SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an emplaced howitzer and a measurable crest.

STANDARD: To ensure crest is measured to the nearest mil and piece to crest range measured within 100 meters of the actual location.

PERFORMANCE STEPS:
1. Measure the angle of site-to-crest.
2. Measure piece-to-crest range.
3. Record angle of site to crest and piece to crest range on section chief's report.

REFERENCES:
1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
2. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
3. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
4. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2110: Determine whether a howitzer is safe to fire

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811
BILLETS: Section Chief

GRADES: SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an emplaced howitzer, a safety "T", and fire commands.

STANDARD: To ensure authorized ammunition combinations and handling procedures are used and the command, "CHECK FIRING" is given when unsafe conditions exist.

PERFORMANCE STEPS:
1. Verify fire mission data using a safety T unless utilizing an SFA.
2. Verify ammunition being loaded is safe for firing.
3. Verify the howitzer is laid on the commanded deflection and quadrant.
4. Verify all safe conditions exist.

REFERENCES:
1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
2. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17650 Field Artillery Direct Fire Range
- Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2111: Conduct an indirect fire mission

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Section Chief

GRADES: SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an emplaced howitzer, section, equipment, and a fire command.

STANDARD: to ensure the howitzer is ready to fire within 30 seconds for low angle and 45 seconds for high angle.

PERFORMANCE STEPS:
1. Receive fire mission data.
2. Conduct section chief verification.
3. Executes fire mission per the fire commands.
REFERENCES:
1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
2. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
3. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
4. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
Time Starts: When Quadrant elevation is announced.
Time stops: When howitzer is ready to fire.

0811-GUNS-2112: Prepare howitzer to fire outside of normal traverse limits

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Section Chief

GRADES: SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an emplaced howitzer, section, equipment, and fire commands.

STANDARD: To ensure the howitzer is ready to fire within 3 minutes in daylight and 6 minutes in darkness.

PERFORMANCE STEPS:
1. Prepare howitzer for out of traverse.
2. Direct emplacement of weapon.
3. Execute mission as per fire commands.
4. Ensure gunner obtains correct sight picture on aiming point and command, "READY, DROP."
5. Direct emplacement of weapon.
6. Continue to execute the fire mission per fire commands.

REFERENCES:
1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
Time Starts: When Quadrant elevation is announced.
Time stops: When howitzer is ‘Laid’.

0811-GUNS-2113: Compute data for Sweep and Zone fire mission

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Section Chief

GRADES: SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given fire commands.

STANDARD: To compute and record firing matrix.

PERFORMANCE STEPS:
1. Determine deflections to be fired for sweep fire.
2. Determine the quadrants to be fired for zone fire.
3. Determine the order in which to fire.
4. Determine the total rounds to be fired.

REFERENCES:
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2114: Lay on priority target

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months
MOS PERFORMING: 0811

BILLETS: Section Chief

GRADES: SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an emplaced howitzer and priority target data.

STANDARD: To ensure howitzer is laid on priority target at end of mission.

PERFORMANCE STEPS:
1. Verify that projectile components are inspected and segregated.
2. Verify that propellant is prepared and segregated.
3. Verify howitzer is laid on priority target data.

REFERENCES:
1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2115: Take immediate action for misfire

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Section Chief

GRADES: SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an emplaced howitzer, a misfire, and the reference.

STANDARD: To perform immediate actions IAW the steps in MCTM 10407C-OR/_.

PERFORMANCE STEPS:
1. Direct two more attempts to fire.
2. Determine tube condition.
3. Follow procedures listed in TM.

REFERENCES: MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2116: Lay for quadrant using the Gunner's Quadrant

EVALUATION-CODED: NO       SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Section Chief

GRades: SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a howitzer and a gunner's quadrant.

STANDARD: To ensure the howitzer is laid to an accuracy of 0 mils within 30 seconds for low angle and 45 seconds for high angle.

PERFORMANCE STEPS:
1. Set the announced quadrant on the gunner's quadrant.
2. Place the gunner's quadrant on the quadrant seats.
3. Direct the Assistant Gunner to elevate or depress the tube.
4. Announce "SET" when prepared.

REFERENCES: MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
Time starts: When quadrant is announced.
Time stops: When 'Set' is announced.

0811-GUNS-2117: Measure the quadrant using the gunner's quadrant

EVALUATION-CODED: NO       SUSTAINMENT INTERVAL: 3 months
MOS PERFORMING: 0811

BILLETS: Section Chief

GRADES: SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given an emplaced howitzer with the tube elevated to an unknown quadrant, a tested gunner's quadrant.

STANDARD: To an accuracy of 0.1 mils.

PERFORMANCE STEPS:
1. Place the gunner's quadrant on the quadrant seats.
2. Center bubbles.
3. Read quadrant.

REFERENCES:
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2118: Engage targets with howitzer in direct fire role

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Section Chief

GRADES: SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an emplaced howitzer, section, equipment and a designated target.

STANDARD: To neutralize or suppress targets.

PERFORMANCE STEPS:
1. Issue fire order.
2. Supervises proper procedures.
3. Correct improper procedures, as required.
4. Receive and react to follow on orders.
REFERENCES:
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

ORDNANCE:

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<th>DODIC</th>
<th>QUANTITY</th>
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<tbody>
<tr>
<td>D529</td>
<td>3 projectiles per Section</td>
</tr>
<tr>
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<td>3 fuzes per Section</td>
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<td>3 primers per Section</td>
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</tr>
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RANGE/TRAINING AREA:

Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:

Armored Target (2 minutes daylight, 3 minutes darkness)
1. Time Starts: When section chief initiates fire command.
2. Time Stops: When target is suppressed or neutralized.

Personnel Target (1 minute daylight, 90 seconds darkness)
1. Time Starts: When section chief initiates fire command.
2. Time Stops: When target is suppressed or neutralized.
3. Personnel targets will be engaged utilizing Killer Junior

0811—GUNS—2119: Supervise securing of howitzer ammunition in preparation for transport

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETs: Section Chief

GRADES: SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an ammunition vehicle, and a load plan.

STANDARD: To ensure ammunition is safely loaded and secured.

PERFORMANCE STEPS:
1. Ensure ammunition is loaded.
2. Ensure ammunition is secure.

REFERENCES:
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17650 Field Artillery Direct Fire Range
- Facility Code 17671 Field Artillery Indirect Fire Range

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**0811-GUNS-2120:** Prepare a howitzer for vertical lift

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETs:** Section Chief

**GRADES:** SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a howitzer section, equipment, and a warning order.

**STANDARD:** To ensure all equipment is ready for lift.

**PERFORMANCE STEPS:**
1. Configure howitzer.
2. Follow direction of aviation personnel.

**REFERENCES:**
1. MCRP 4-11.3E Multi-service Helicopter Sling Load: Vols I, II and III
2. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
3. Memorandum for Record AF2A-FA-R SUBJ: Standardization of the transportability of the M777A2 Light weight 155mm Howitzer

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**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17671 Field Artillery Indirect Fire Range

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**0811-GUNS-2201:** Declinate the M2 compass

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811
**BILLiets**: Btry GySgt, Local Security Chief, Platoon Sergeant  
**Grades**: SGT, SSGT, GYSgt  
**Initial Training Setting**: MOJT  
**Condition**: Given a surveyed declination station free from magnetic attractions, an M2 compass, and a tripod.  
**Standard**: To accuracy of 10 mils.  
**Performance Steps**:  
1. Set M2 compass on aiming circle tripod over the orienting station.  
2. Center bubble in circular vial.  
3. Sight on known azimuth.  
4. Rotate the azimuth scale until it indicates the same as the known surveyed azimuth.  
5. Recheck sight picture and azimuth to known point.  
**References**: MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery  
**Support Requirements**:  
**Range/Training Area**: Facility Code 17420 Maneuver/Training Area, Heavy Forces Facility Code 17671 Field Artillery Indirect Fire Range  
**Miscellaneous**:  
**Administrative Instructions**:  
1. Ensure an appropriate distance from magnetic distractions. High tension lines 55m, Vehicles/railroad 10m, Wire/barbed fences 10m, Helmets (small metal items) 0.5m.  
2. The field expedient method can be utilized if no declination station is available.  

**0811-GUNS-2202**: Conduct advance party operations  
**Evaluation-Coded**: NO  
**Sustainment Interval**: 3 months  
**MOS Performing**: 0811  
**Billiets**: Local Security Chief, Platoon Sergeant  
**Grades**: SGT, SSGT  
**Initial Training Setting**: FORMAL  
**Condition**: Given a firing platoon/battery.  
**Standard**: To establish and receive the battery at a new position.
PERFORMANCE STEPS:
1. Identify required personnel.
2. Identify primary duties.
3. Identify required equipment.
4. Conduct the Reconnaissance.
5. Select a Position.
6. Occupy the Position.

REFERENCES: MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2203: Conduct local security operations

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 1 month

MOS PERFORMING: 0811

BILLETS: Local Security Chief

GRADES: SGT, SSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a firing platoon/battery.

STANDARD: To ensure the platoon/battery is capable of providing security for the position.

PERFORMANCE STEPS:
1. Plan for the defense of position.
2. Select positions for local security assets.
3. Supervise the emplacement of local security assets.
4. Continue to improve the position and practice continuing actions.
5. Ensure defensive plan is briefed.

REFERENCES: MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range
0811-GUNS-2204: Construct the local security diagram

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Local Security Chief

**GRADES:** SGT, SSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a battery that has occupied a new position, personnel, and equipment.

**STANDARD:** To ensure the location of observation posts and weapons systems are depicted on the defense diagram to within 10 meters, azimuths to within 10 mils, and the defense diagram is to be completed within 3 hours of occupation.

**PERFORMANCE STEPS:**
1. Plan perimeter defense per METT-T.
2. Coordinate with higher and adjacent units.
3. Plan local security patrols.
4. Plan for defense against air attack.

**REFERENCES:** MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17671 Field Artillery Indirect Fire Range

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0811-GUNS-2205: Lead a quick reaction force (QRF)

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Local Security Chief

**GRADES:** SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a battery of Marines with individual equipment, a report of an enemy force attacking and commander's guidance to remain in position.

**STANDARD:** To defend the battery position.

**PERFORMANCE STEPS:**
1. Signal the QRF to muster at the rally point.
2. Deploy the QRF.
3. Direct the actions of the QRF to defend the battery/platoon position.
4. Employ automatic weapons.
5. Call for support, if appropriate.
6. Maintain communication with higher.

REFERENCES:
1. MCTP 3-01C Machine Guns and Machine Gun Gunnery
2. MCWP 3-10 MAGTF Ground Operations
3. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: 1. Concertina Wire, sandbags and all other fortification items needed.

0811-GUNS-2206: Conduct a hasty displacement to an alternate position

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETs: Local Security Chief

GRADES: SGT, SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an emplaced battery and a tactical situation.

STANDARD: To ensure the advance party assembles and departs an alternate position after battery displacement is ordered within 4 minutes in daylight and 6 minutes in darkness.

PERFORMANCE STEPS:
1. Receive movement order.
2. Assemble the advance party with all equipment.
3. Depart with the advance party.

REFERENCES: MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:
**RANGE/TRAINING AREA:**
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

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**0811-GUNS-2207:** Perform crater analysis

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Local Security Chief

**GRADES:** SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a crater, shell fragments, and appropriate equipment.

**STANDARD:** To accurately determine back azimuth and determine type and caliber of ordnance.

**PERFORMANCE STEPS:**
1. Determine grid of the crater.
2. Determine angle of fire high or low.
3. Determine the direction to hostile weapon.
4. Collect usable shell fragments.
5. Develop shell report.

**REFERENCES:**
1. MCTP 3-10E Artillery Operations
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

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**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

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**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Ensure crater analysis is accomplished using one of the following methods: Fuze Furrow and Center of Crater, Side Spray, Ricochet Furrow, Main Axis, Splinter Groove, or Fuze Tunnel.

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**0811-GUNS-2301:** Declinate the aiming circle

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months
MOS PERFORMING: 0811

BILLETS: Btry GySgt, Platoon Sergeant

GRADES: SSGT, GYSgt

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an area free of magnetic attractions and a surveyed declination station.

STANDARD: To ensure aiming circle is prepared to accurately lay the battery.

PERFORMANCE STEPS:
1. Set up and level the aiming circle over declination station.
2. Record the declination constant for two or more azimuth markers.
3. Determine the mean and express to the nearest whole mil.

REFERENCES: MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Ensure an appropriate distance from magnetic distractions. High tension lines 55m, Vehicles/railroad 10m, Wire/barbed fences 10m, Helmets (small metal items) 0.5m.

0811-GUNS-2302: Operate the M2A2 aiming circle

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Btry GySgt, Platoon Sergeant

GRADES: SSGT, GYSgt

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an area clear of magnetic attractions, an M2A2 aiming circle, and a tripod.

STANDARD: To orient and lay the battery.

PERFORMANCE STEPS:
1. Set up the aiming circle (with tripod) for operation.
2. Level the aiming circle.
3. Recover the aiming circle.

REFERENCES: MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
Time Standards:
Set up within 2 minutes, Recover within 1 minute
Time starts upon command.
Time stops when aiming circle is centered and leveled over the known point.

0811-GUNS-2303: Determine the vertical angle (VA) and subtense

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Btry GySgt, Platoon Sergeant

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an aiming circle with tripod, personnel, and proper equipment.

STANDARD: To calculate precise distances for each artillery piece in a gun position aiding with Terrain Gun Position Corrections (TGPC).

PERFORMANCE STEPS:
1. Set up aiming circle.
2. Measure elevation.
3. Measure subtense.
4. Calculate distance.
5. Record data.

REFERENCES:
1. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
2. ST 6-50-20 Battery Executive Officer's/ Platoon Leader's Handbook
0811-GUNS-2304: Lay the firing battery

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Btry GySgt, Platoon Sergeant

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a declinated aiming circle, tripod, M2 compass, established survey point, a distant aiming point, and a battery that has occupied a new firing position.

STANDARD: To orient the howitzers along the azimuth of fire to an accuracy of 0 mils or +/- 20 mils using the M2 compass.

PERFORMANCE STEPS:
2. Conduct selected method.

REFERENCES:
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
2. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
3. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
4. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
Time Standards:
Daylight
OA: 11 min
M2: 9 min
AP: 4 min
Darkness:
OA: 19 min
M2: 14 min

0811-GUNS-2305: Compute minimum quadrant elevation (MIN QE)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Btry GySgt, Platoon Sergeant
GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given all required sight to crest information and the appropriate TFT.

STANDARD: To ensure all immediate crests are cleared.

PERFORMANCE STEPS:
1. Collect site to crest and piece to crest range from each Howitzer.
2. Calculate minimum quadrant elevation.

REFERENCES:
1. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
2. ST 6-50-20 Battery Executive Officer's/Platoon Leader's Handbook

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2306: Prepare the Executive Officer's (XO's) report
EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months
MOS PERFORMING: 0811

BILLETS: Btry GySgt, Platoon Sergeant

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a firing battery that has been laid, and administrative materials.

STANDARD: To verify all administrative data is accurate and ensure safe firing.

PERFORMANCE STEPS:
1. Verify the lay of the battery.
2. Compute the XO's Min QE
3. List the primary information in the XO's report.
4. Complete the report.

REFERENCES:
1. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
2. MCWP 3-16.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery
3. ST 6-50-20 Battery Executive Officer's/ Platoon Leader's Handbook

0811-GUNS-2307: Direct the defense of a field artillery unit

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Local Security Chief, Platoon Sergeant

**GRADES:** SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a firing element that in an occupied position.

**STANDARD:** To maintain security of the firing position while ensuring uninterrupted artillery operations.

**PERFORMANCE STEPS:**
1. Select the appropriate course of action, based upon the tactical situation.
2. Supervise the execution of the defensive plan.

**REFERENCES:**
1. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
2. MCTP 3-01C Machine Guns and Machine Gun Gunnery
3. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

0811-GUNS-2308: Displace the battery

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Btry GySgt, Platoon Sergeant

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an emplaced battery that has received a warning order to displace and all of the associated equipment.

**STANDARD:** To move all personnel and equipment to another location.

**PERFORMANCE STEPS:**
1. Prepare for displacing a battery.
2. Issue the command, "PREPARE TO MARCH ORDER."
3. Develop the method of march.
4. Plan for the march column contingencies during displacement.
5. Issue the movement order.

REFERENCES:
1. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
2. ST 6-50-20 Battery Executive Officer's/Platoon Leader's Handbook

0811-GUNS-2309: Supervise a tactical road march

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Btry GySgt, Platoon Sergeant

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a unit that has been issued a movement order.

STANDARD: To ensure the battery maintains security while en route to another location.

PERFORMANCE STEPS:
1. Determine displacement method.
2. Direct immediate action drills.
3. Direct conduct of PCC/PCIs.
4. Ensure 6400 mil security throughout.
5. Maintain accountability of all equipment and personnel.

REFERENCES: MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2310: Lay the howitzers for an emergency fire mission (hip shoot)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811
BILLETs: Btry GySgt, Platoon Sergeant

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a platoon/battery in convoy, a request for immediate fire support and the associated equipment, using the howitzer back lay method.

STANDARD: To lay the remaining howitzers after the first round is fired by the base piece.

PERFORMANCE STEPS:
1. Refer the base piece.
2. Orient the aiming circle.
3. Lay the remaining howitzers.

REFERENCES:
1. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
2. MCWP 3-16.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery
3. ST 6-50-20 Battery Executive Officer's/Platoon Leader's Handbook
4. TFT TFTs and Addendums

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17650 Field Artillery Direct Fire Range
- Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2311: Employ hasty survey techniques

EVALUATION-CODED: NO        SUSTAINMENT INTERVAL: 1 month

MOS PERFORMING: 0811

BILLETs: Btry GySgt, Platoon Sergeant

GRADES: GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an operations order involving the absence of accurate survey data and associated equipment.

STANDARD: To determine location and establish directional control.

PERFORMANCE STEPS:
1. Employ GPS (if so equipped) to obtain directional and positional control upon occupation.
2. Evaluate the situation and employ one of the following methods to obtain directional control: hasty simultaneous observation, Polaris-Kochab, dual DAGR, directional traverse, Backup Computer System (BUCS) resection, or Backup Computer System (BUCS) hasty astro.

3. Evaluate the situation and employ one of the following methods to obtain positional control: graphic resection, graphic traverse, Backup Computer System (BUCS) resection, trilateration with an eye safe laser.

4. Determine position altitude/height.

5. Employ automated systems when conducting either directional or graphic traverse, as appropriate.

REFERENCES:
1. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
3. ST 6-50-20 Battery Executive Officer's/ Platoon Leader's Handbook

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

0811-GUNS-2312: Measure the azimuth of the line of fire

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Btry GySgt, Platoon Sergeant

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an emplaced howitzer, section, and aiming circle.

STANDARD: To ensure the azimuth is measured to an accuracy of 0 mils.

PERFORMANCE STEPS:
1. Command the section to refer.
2. Apply announced azimuth.
3. Measure angle to an accuracy of 0 mils.

REFERENCES:
1. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
2. ST 6-50-20 Battery Executive Officer's/ Platoon Leader's Handbook
0811-GUNS-2313: Direct battery organizational maintenance on organic equipment

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Btry GySgt

GRADES: GYSgt

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given maintenance management directives, artillery unit maintenance management personnel, T/O cover letter, T/E, Publications listing (PL), a CMR, and references.

STANDARD: To maintain section equipment ensuring the unit is mission capable.

PERFORMANCE STEPS:
1. Ensure maintenance records are current and properly maintained.
2. Conduct inspections to determine adequacy of maintenance programs.
3. Review daily reports with the Battery Executive Officer.
4. Correct any deficiencies, as required.

REFERENCES:
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
2. TM 02498A-23/2 Machine Gun, Caliber .50, Browning, M2 HB
3. TM 08670A-10/1A Operator's Manual, Machinegun, 7.62mm, M240
4. TM 08670A-14&P/1 Supplement 1, M240G
5. TM 08671A-23&P/2A Machine Gun 5.56MM M249
6. TM 10629-10C Operator Manual for the Truck, Cargo, 7-Ton
7. TM 2320-10/6B Truck, Utility 1 1/2 Ton (HMMWV)
8. TM 4700-15/1 Ground Equipment Record Procedures
9. TM 9-1005-201-10 Operator's Manual for Machinegun, 5.56mm, M249

0811-GUNS-2314: Coordinate logistics

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Btry GySgt, Platoon Sergeant

GRADES: SSGT, GYSgt

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a unit conducting tactical operations.
STANDARD: To maintain unit equipment and personnel ensuring the unit is mission capable.

PERFORMANCE STEPS:
1. Consider the logistics functions in the development of tactical plans.
2. Include attached elements in all logistical planning.
3. Comply with basic loads established by higher headquarters.
4. Maintain dispersion between material and ammunition within positions.
5. Submit logistics reports, per Standing Operating Procedures (SOP).
6. Conduct Preventive Maintenance (PM) and Corrective Maintenance (CM) in a field.
7. Ensure small arms Basic Load (BL) are maintained for all equipment.
8. Forecast and submit requisitions to maintain the Required Supply Rate (RSR).

REFERENCES: MCWP 3-16.1E Combat Service Support for Artillery Unit

0811-GUNS-2315: Conduct the pickup and delivery of designated classes of supply

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Btry GySgt, Platoon Sergeant

GRADeS: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given supplies requiring distribution, and the appropriate equipment.

STANDARD: To ensure the proper supplies are delivered and issued to the unit in a secure and timely manner.

PERFORMANCE STEPS:
1. Obtain supplies from authorized sources.
2. Maintain appropriate security to prevent loss, damage, or theft.
3. Ensure timely schedule of delivery to minimize the probability of contamination or spoilage.
4. Deliver to proper battery elements, as directed by requisitions.

REFERENCES: MCWP 3-16.1E Combat Service Support for Artillery Unit

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA: Facility Code 17420 Maneuver/Training Area, Heavy Forces
0811-GUNS-2316: Prepare for embarkation

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Btry GySgt, Platoon Sergeant

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an artillery unit and organic equipment.

STANDARD: To ensure all assets are accounted for and ready for movement.

PERFORMANCE STEPS:
1. Determine the unit’s transportation lift requirements.
2. Ensure all material is marked, packaged, and manifested.
3. Facilitate handoff with embarkation personnel.
4. Provide security for material during embarkation.

REFERENCES: LFM 03 Amphibious Embarkation

MISCELLANEOUS:


0811-GUNS-2318: Supervise Mounting a machinegun on a prime mover

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 4 months

MOS PERFORMING: 0811

GRADES: CPL, SGT, SSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a prime mover with a ring mount, a MK 64 (universal) mount with appropriate adapters and a machinegun (M240B, M2A1, or MK19).

STANDARD: Ensuring it is secured for movement.

PERFORMANCE STEPS:
1. Connect the appropriate weapon to ring mount.
2. Mount machinegun to appropriate weapon mount.

REFERENCES: MCTP 3-01C Machine Guns and Machine Gun Gunnery
11004. INDEX OF 0811 1000-LEVEL INDIVIDUAL EVENTS

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11005. 1000-LEVEL EVENTS

**0811-GUNS-1001**: Perform Advance Party operations

**EVALUATION-CODED**: NO  **SUSTAINMENT INTERVAL**: 3 months

**MOS PERFORMING**: 0811

**BILLETS**: Cannoneer

**GRADES**: PVT, PFC, LCPL

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given appropriate advance party gear, an azimuth of fire, and an aiming circle operator (OFC).

**STANDARD**: To prepare gun positions for expedient emplacements ensuring tape and stakes are emplaced within +/- 20 mils of the azimuth of fire and correctly recording initial lay data.

**PERFORMANCE STEPS**:
1. Prepare position to receive howitzer.
2. Receive howitzer at pick up point.

**REFERENCES**:
1. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

**MISCELLANEOUS**:

11-44 Enclosure (1)
**ADMINISTRATIVE INSTRUCTIONS:** Performance steps may vary according to unit SOP.

---

**0811-GUNS-1002:** Emplace the collimator  

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months  
**MOS PERFORMING:** 0811  
**BILLETS:** Cannoneer  
**GRADES:** PVT, PFC, LCPL  
**INITIAL TRAINING SETTING:** FORMAL  
**CONDITION:** Given an emplaced howitzer and sandbags.  
**STANDARD:** To establish the primary aiming point approximately 9 to 12 meters from the pantel within one (1) minute.  

**PERFORMANCE STEPS:**  
1. Pace off to setup position.  
2. Set up the collimator.  
3. Sight in on pantel.  
4. Rotate azimuth adjustment screw left and right, as directed by the gunner.  

**REFERENCES:**  
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2  
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery  

**SUPPORT REQUIREMENTS:**  
**RANGE/TRAINING AREA:** Facility Code 17413 Field Training Area  

**MISCELLANEOUS:**  
**ADMINISTRATIVE INSTRUCTIONS:** When using DFCS, this task will be performed during position improvement.  

---

**0811-GUNS-1003:** Emplace the aiming posts  

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months  
**MOS PERFORMING:** 0811
BILLETS: Cannoneer

GRADES: PVT, PFC, LCPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an emplaced howitzer and a gunner on the pantel.

STANDARD: To establish supplemental aiming points at 150 meters for the far post, 75 meters for the near post, or as dictated by terrain.

PERFORMANCE STEPS:
1. Assemble the aiming posts.
2. Emplace aiming posts at proper distances.
3. Make adjustments from the gunner's hand and arm signals.

REFERENCES:
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17413 Field Training Area

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: If far aiming post cannot be placed 150 meters from the Howitzer, place it as far away as possible; then place near post one half the distance.

0811-GUNS-1004: Perform pre-fire checks

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Cannoneer

GRADES: PVT, PFC, LCPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an emplaced howitzer.

STANDARD: To ensure the safe firing of the howitzer and safety of the section.

PERFORMANCE STEPS:
1. Ensure bore clear.
2. Ensure howitzer has 5 points of contact with the ground.
3. Ensure oil index pin is flush or slightly indented.
4. Ensure breech and PFM witness marks are aligned.

REFERENCES:
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
2. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17650 Field Artillery Direct Fire Range
- Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: If using alternate obturator group ensure that split rings are 180 degrees apart.

0811-GUNS-1005: Employ proper ammunition storage procedures

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Cannoneer

GRADES: PVT, PFC, LCPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an ammunition vehicle, required ammunition, and adequate materials for dunnage.

STANDARD: Ensuring storage on vehicle is at least 2 inches off the bed of the vehicle, and if the ammunition is on the ground it must be 6 inches off the deck with 18 inches of overhead and separated by type, lot, and weight zone, with 6 inches of separation on all sides of the storage area.

PERFORMANCE STEPS:
1. Store ammunition on a vehicle.
2. Secure ammunition on a vehicle.
3. Store ammunition on the ground, separating ammunition by lot, type, and weight zone.

REFERENCES:
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17650 Field Artillery Direct Fire Range
- Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: This task does not apply to combat lading of ammunition. DODICs listed in ammunition table reflect a requirement if this task was trained as a stand-alone task. This task is normally performed and evaluated during collective live-fire training. Dummy/inert ammunition may be used for non-live-fire training/simulation.

0811-GUNS-1006: Record all fire commands

EVALUATION-CODED: NO   SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Cannoneer

GRADES: PVT, PFC, LCPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a fire mission and Record of Missions Fired (DA 4513).

STANDARD: To ensure all firing data is accurately and legibly completed on the DA 4513.

PERFORMANCE STEPS:
1. Receive all fire commands.
2. Record all parts of the DA form.
3. Communicate all firing reports.

REFERENCES: MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

0811-GUNS-1007: Prepare separate-loading ammunition for firing

EVALUATION-CODED: NO   SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Cannoneer

GRADES: PVT, PFC, LCPL
INITIAL TRAINING SETTING: FORMAL

CONDITION: Given the components of a complete round, appropriate fuze wrenches and fuze setters, and a fire command.

STANDARD: To provide correct ammunition for fire missions.

PERFORMANCE STEPS:
1. Inspect ammunition.
2. Select appropriate projectile.
3. Select appropriate propellant and charge.
4. Select appropriate fuze.
5. Prepare shell-fuze combination.

REFERENCES:
1. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: DODICs in quantities listed in ammunition table reflect amount and type necessary to train the task as a stand-alone task. This task is normally performed and evaluated during collective live-fire training. Dummy/inert/ammunition mock-ups may be used for non-live-fire training.

0811-GUNS-1008: Fire a prepared round

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Cannoneer

GRADES: PVT, PFC, LCPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an emplaced howitzer, section equipment, a prepared round, and a fire command.

STANDARD: Following all safety precautions and directions from the Section Chief.

PERFORMANCE STEPS:
1. Verify bore clear.
2. Load projectile and propellant.
3. Close breech and verify witness marks aligned.
4. Prime and fire the howitzer on command.

REFERENCES:
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
2. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

SUPPORT REQUIREMENTS:

MSPS EVENTS SUPPORTED:

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RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Performance step 1 is an MOS Specific Physical Standard required for the MOS of 0811 and 0802. See Appendix E for further detail.
2. Dummy/inert/ammunition mock-ups may be used for non-live-fire training.

0811-GUNS-1009: Perform misfire procedures

EVALUATION-CODED: NO          SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Cannoneer

GRADES: PVT, PFC, LCPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an emplaced howitzer, a misfire, and the reference.

STANDARD: To attempt to get the howitzer back into operational status.

PERFORMANCE STEPS:
1. Attempt to fire two more times.
2. Identify tube condition.
3. Standby for follow on direction from Section Chief.

REFERENCES: MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17650 Field Artillery Direct Fire Range
Facility Code 17671 Field Artillery Indirect Fire Range


EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0811

BILLETS: Cannoneer

GRADES: PVT, PFC, LCPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a field ammunition storage point, M777A2 Lightweight Howitzer, and projectiles.

STANDARD: Following all safety precautions and directions from the Section Chief.

PERFORMANCE STEPS:
1. Lift projectile to shoulder height at field ammunition pit.
2. Carry projectile to ammunition storage vehicle.
3. Hand off projectile to Marine on bed of MTVR for storage and transport.

REFERENCES:
1. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

MSPS EVENTS SUPPORTED:

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</tbody>
</table>

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: This event is a MOS-Specific Physical Standard required for the MOSs of 0811 and 0802. See Appendix E for further detail.
**0811-GUNS-1011**: Operate the Muzzle Velocity Sensor System (MVSS)

**EVALUATION-CODED**: NO  
**SUSTAINMENT INTERVAL**: 3 months

**MOS PERFORMING**: 0811  
**BILLETS**: Cannoneer  
**GRADES**: PVT, PFC, LCPL  
**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given an emplaced howitzer.

**STANDARD**: Recording and reporting all muzzle velocities to the FDC.

**PERFORMANCE STEPS**:
1. Check for obvious defects.  
2. Connect all applicable cables.  
3. Record muzzle velocities following fire mission.

**REFERENCES**: MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

**SUPPORT REQUIREMENTS**:

**RANGE/TRAINING AREA**:
- Facility Code 17420 Maneuver/Training Area, Heavy Forces  
- Facility Code 17650 Field Artillery Direct Fire Range  
- Facility Code 17671 Field Artillery Indirect Fire Range

---

**0811-GUNS-1012**: Perform Preventive Maintenance Checks and Services (PMCS)

**EVALUATION-CODED**: NO  
**SUSTAINMENT INTERVAL**: 3 months

**MOS PERFORMING**: 0811  
**BILLETS**: Cannoneer  
**GRADES**: PVT, PFC, LCPL  
**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given a howitzer, section gear, maintenance form, appropriate lubricants, and the reference.

**STANDARD**: To ensure the howitzer is maintained, operational safety precautions and warnings are followed, while correcting or reporting all defects.

**PERFORMANCE STEPS**:
1. Perform equipment checks and services.  
2. Perform authorized maintenance inspections.

REFERENCES: MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Inspections occur at regular intervals to avoid equipment damage and/or failure.
ARTILLERY T&R MANUAL

CHAPTER 12
MOS 0814 INDIVIDUAL EVENTS

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ARTILLERY T&R MANUAL

CHAPTER 12

MOS 0814 INDIVIDUAL EVENTS

12000. PURPOSE. This chapter details the individual events that pertain to HIMARS crewman. 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-XXXX. This chapter utilizes the following methodology:

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0814</td>
<td>HIMARS Crewman</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM</td>
<td>Communications</td>
</tr>
<tr>
<td>CSS</td>
<td>Combat Service Support</td>
</tr>
<tr>
<td>LAUN</td>
<td>Launcher Section</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>Core Plus Skills</td>
</tr>
<tr>
<td>2100</td>
<td>Section Chief Skills</td>
</tr>
<tr>
<td>2200</td>
<td>Local Security Chief Skills</td>
</tr>
<tr>
<td>2300</td>
<td>Platoon Sergeant Skills</td>
</tr>
<tr>
<td>2400</td>
<td>Battery Field Artillery Chief Skills</td>
</tr>
<tr>
<td>1000</td>
<td>Core Skills</td>
</tr>
</tbody>
</table>

12002. INDEX OF 0814 2000-LEVEL INDIVIDUAL EVENTS

<table>
<thead>
<tr>
<th>Event Code</th>
<th>E-Coded</th>
<th>Event Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>0814-COMM-2101</td>
<td>NO</td>
<td>Troubleshoot digital communications</td>
<td>12-3</td>
</tr>
<tr>
<td>0814-CSS-2301</td>
<td>NO</td>
<td>Coordinate sustainment of HIMARS platoon</td>
<td>12-4</td>
</tr>
<tr>
<td>0814-CSS-2401</td>
<td>NO</td>
<td>Conduct logistics for the battery</td>
<td>12-5</td>
</tr>
<tr>
<td>0814-LAUN-2002</td>
<td>NO</td>
<td>Prepare M142 HIMARS for C-130 transport</td>
<td>12-5</td>
</tr>
<tr>
<td>0814-LAUN-2101</td>
<td>NO</td>
<td>Conduct operations of the Universal Fire Control System (UFCS)</td>
<td>12-6</td>
</tr>
<tr>
<td>0814-LAUN-2102</td>
<td>NO</td>
<td>Load cryptographic keys</td>
<td>12-7</td>
</tr>
</tbody>
</table>
0814-LAUN-2103 | NO | Process masking data | 12-7
0814-LAUN-2104 | NO | Compute safety | 12-8
0814-LAUN-2105 | NO | Utilize a HIMARS Safety-T | 12-9
0814-LAUN-2106 | NO | Execute a digital fire mission | 12-9
0814-LAUN-2107 | NO | Supervise misfire and hang-fire procedures | 12-10
0814-LAUN-2108 | NO | Conduct reload operations | 12-11
0814-LAUN-2201 | NO | Conduct local security operations | 12-12
0814-LAUN-2301 | NO | Conduct a tactical road march | 12-13
0814-LAUN-2302 | NO | Conduct operations in the position area | 12-14
0814-LAUN-2303 | NO | Supervise operator level maintenance | 12-14

12003. 0814 2000-LEVEL INDIVIDUAL EVENTS

0814-COMM-2101: Troubleshoot digital communications

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0814

BILLETS: Assistant Section Chief, Section Chief

GRADES: SGT, SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a M142 HIMARS, all communication assets, while conducting operations, and disrupted communications with the Platoon Operations Center (POC).

STANDARD: To restore digital communications with the POC.

PERFORMANCE STEPS:
1. Supervise Gunner's verification of UFCS communications database is in accordance with the platoon digital communications plan.
2. Inspect hardware set up and radio settings.
3. Take corrective action for identified issue(s), as required.
4. Conduct digital communication check with FDC.
5. Continue operations.

REFERENCES:
1. TM 10254A-10/1 Operator's Manual for Data Transfer Device, AN/CYZ-10(V)3
2. TM 11-5820-890-10-8 SINCGARS Ground Combat Net Radio, ICOM

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range
**0814-CSS-2301:** Coordinate sustainment of HIMARS platoon

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0814

**BILLETs:** Platoon Sergeant

**GRADES:** SSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a HIMARS platoon executing operations and operational communication equipment.

**STANDARD:** To coordinate and receive logistical support for the platoon without interrupting the operational tempo.

**PERFORMANCE STEPS:**
1. Begin logistics planning.
2. Identify shortages.
3. Consolidate and track subordinate unit logistical requirements.
4. Submit requests for identified shortages.
5. Track support requests submissions.
6. Task organize for logistics requirements.
7. Coordinate link-up point, resupply point(s), distribution point(s), and storage point(s) for unit logistics.
8. Coordinate tactical maintenance.
9. Track maintenance status of all inducted equipment.
10. Ensure supplies are tactically distributed.
11. Recover delivery equipment.
12. Report logistics status, as required.
13. Continue assigned missions.

**REFERENCES:**
1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCTP 3-40B Tactical-Level Logistics

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Task organizing for logistics may require a security element and a logistics element to collect resupply, distribute resupply, or conduct maintenance.
**0814-CSS-2401:** Conduct logistics for the battery

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0814

**BILLETS:** Battery Field Artillery Chief

**GRADES:** MSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a firing battery

**STANDARD:** To logistically support operations without interruption of the operational tempo.

**PERFORMANCE STEPS:**
1. Supervise operator level maintenance checks and services.
2. Report and evacuate items requiring higher echelon maintenance.
3. Coordinate Field Service Representative (FSR) support for the firing platoons.
4. Coordinate resupply points.
5. Coordinate rocket/missile reloads.
6. Coordinate refuel points.
7. Coordinate section supply.
8. Coordinate equipment recovery support.
9. Coordinate medical support.
10. Report emergency re-supply requirements to higher headquarters immediately.
11. Ensure Basic Allowance (BA) and Critical Supply Rates (CSR) are maintained.
12. Maintain communications with higher HQ and/or supporting CSS unit on appropriate logistics NET.
13. Submit logistics status reports, as required.

**REFERENCES:**
1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCTP 3-10E Artillery Operations
3. MCTP 3-40B Tactical-Level Logistics

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17420 Maneuver/Training Area, Heavy Forces  
Facility Code 17671 Field Artillery Indirect Fire Range

---

**0814-LAUN-2002:** Prepare M142 HIMARS for C-130 transport

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 1 month

**MOS PERFORMING:** 0814
**BILLETS:** Gunner, Rocket Marine

**GRADES:** PVT, PFC, LCPL, CPL

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a C-130, M142 HIMARS launcher, and Basic Issue Items (BII).

**STANDARD:** To rig the system for embarkation on aircraft.

**PERFORMANCE STEPS:**
1. Compress suspension springs.
2. Select "Mud, Sand, and Snow" setting on central tire inflation system.
3. Install bracket.
4. Install locking pins.
5. Remove auxiliary equipment, as required.
6. Place UFCS in "Air" mode.
7. Powder down UFCS.

**REFERENCES:**

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
- Facility Code 17420 Maneuver/Training Area, Heavy Forces
- Facility Code 17671 Field Artillery Indirect Fire Range
- Facility Code 17911 Air Transport Mockup

---

**0814-LAUN-2101:** Conduct operations of the Universal Fire Control System (UFCS)

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0814

**BILLETS:** Assistant Section Chief, Section Chief

**GRADES:** SGT, SSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an M142 HIMARS and Survey Control Point.

**STANDARD:** To maintain operational readiness and firing capability.

**PERFORMANCE STEPS:**
1. Verify Gunners operations within UFCS.
2. Supervise troubleshooting procedures during UFCS malfunctions using the Commanded Built in Test (CBIT) program.


SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:  
Facility Code 17420 Maneuver/Training Area, Heavy Forces  
Facility Code 17671 Field Artillery Indirect Fire Range

0814-LAUN-2102: Load cryptographic keys

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0814

BILLETS: Assistant Section Chief, Section Chief

GRADERS: SGT, SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a M142 HIMARS, a simple key loader, and communications equipment.

STANDARD: To transfer load set with cryptographic key to SINGARS and UFCS, allowing encrypted and secure communications.

PERFORMANCE STEPS:
1. Initialize UFCS.
2. Load cryptographic keys.
3. Verify key status in UFCS.

REFERENCES:
1. TM 11-5820-890-10-8 SINCGARS Ground Combat Net Radio, ICOM

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:  
Facility Code 17420 Maneuver/Training Area, Heavy Forces  
Facility Code 17671 Field Artillery Indirect Fire Range
0814-LAUN-2103: Process masking data

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0814

BILLETS: Assistant Section Chief, Section Chief

GRADES: SGT, SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a HIMARS, M2 compass, a firing point with an immediate mask, a gunner, and a map.

STANDARD: To measure and record data to ensure munitions clear immediate crest.

PERFORMANCE STEPS:
1. Measure left and right azimuth utilizing the M2 compass.
2. Measure vertical angle to immediate crest utilizing the M2 compass.
3. Record masking data.
4. Enter data into the Universal Fire Control System.

REFERENCES:
1. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

0814-LAUN-2104: Compute safety

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0814

BILLETS: Assistant Section Chief, Section Chief

GRADES: SGT, SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a HIMARS, grid coordinates for the Operations Area, Firing Point, and targets, and a safety computation worksheet.
STANDARD: To determine parameters for ballistic solutions, utilizing Operations Area, Firing Point and Point-To-Point safety methods, ensuring computations are done without error.

PERFORMANCE STEPS:
1. Verify MET.
2. Create databases.
3. Compute ballistic solution.
4. Record solution on safety computation worksheet.

REFERENCES:
1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
2. TM 10921A-13&P System Operation Maintenance Manual and repair parts and special tools list for HIMARS Re-Supply Trailer

0814-LAUN-2105: Utilize a HIMARS Safety-T

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0814

BILLETS: Assistant Section Chief, Section Chief

GRADES: SGT, SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a Safety-T and firing data.

STANDARD: To determine if firing data is safe or unsafe, without error.

PERFORMANCE STEPS:
1. Identify all required information on a Safety-T.
2. Verify Safety-T is current and valid.
3. Compare firing data to Safety-T.
4. Command "check-firing" to the FDC, if firing data is unsafe.

REFERENCES: JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

0814-LAUN-2106: Execution a digital fire mission

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months
MOS PERFORMING: 0814

BILLETS: Assistant Section Chief, Section Chief

GRADES: SGT, SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an operational M142 HIMARS, a crew, and fire mission data.

STANDARD: To provide rocket fires within 0 mils deviation of given firing data, within time allotted by FDC.

PERFORMANCE STEPS:
1. Direct driver to firing point.
2. Park on designated heading.

REFERENCES:
1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

0814-LAUN-2107: Supervise misfire and hang-fire procedures

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0814

BILLETS: Assistant Section Chief, Section Chief

GRADES: SGT, SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a HIMARS Launcher, crew, and training pod.

STANDARD: To manage malfunctioned ammunition safely and allow for the HIMARS to resume normal firing operations, while ensuring crew safety.

PERFORMANCE STEPS:
1. Supervise input of operator options during initialization.
2. Supervise hang-fire procedures.
3. Supervise misfire procedures.
4. Supervise dud procedures.

SUPPORT REQUIREMENTS:

ORDNANCE:

<table>
<thead>
<tr>
<th>DODIC</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>H185 Rocket, 298mm Practice Red Range M28A1/A2 (MLRS)</td>
<td>12 rockets per Team</td>
</tr>
<tr>
<td>HA51- Rocket, 298mm Tactical Unitary M31A1 (MLRS)</td>
<td>12 rockets per Team</td>
</tr>
</tbody>
</table>

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

0814-LAUN-2108: Conduct reload operations

EVALUATION-CODED: NO     SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0814

BILLETS: Assistant Section Chief, Section Chief

GRADES: SGT, SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an operational M142 HIMARS, crew, and a rocket pod.

STANDARD: To upload a rocket pod.

PERFORMANCE STEPS:
1. Guide launcher into reload point.
2. Inspect the rocket pod.
3. Direct the gunner to initiate reload.
4. Stow launcher module.

REFERENCES:
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety

SUPPORT REQUIREMENTS:

ORDNANCE:

<table>
<thead>
<tr>
<th>DODIC</th>
<th>QUANTITY</th>
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<tbody>
<tr>
<td>H185 Rocket, 298mm Practice Red Range M28A1/A2 (MLRS)</td>
<td>12 rockets per Team</td>
</tr>
</tbody>
</table>
HA51- Rocket, 298mm Tactical Unitary M31A1 (MLRS) 12 rockets per Team

**RANGE/TRAINING AREA:**
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

---

**0814- LAUN-2201:** Conduct local security operations

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0814

**BILLETS:** Local Security Chief

**GRADES:** SSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a position, a firing platoon, communication assets, security board, navigational aids, and an operations order.

**STANDARD:** To provide security for the firing platoon, allowing unit to conduct operations.

**PERFORMANCE STEPS:**
1. Select an appropriate course of action based on the enemy situation.
2. Conduct coordination with higher and adjacent platoons.
3. Identify danger areas.
4. Identify likely avenues of approach.
5. Assign sectors of fire for subordinate, supporting, and attached units.
6. Establish trigger lines, engagement criteria, and target precedence for all weapons systems.
7. Establish priorities of work and timeline.
8. Issue the security plan/order.
9. Conduct patrols as directed.
10. Ensure automatic/crew served weapons are properly emplaced.
11. Deconflict geometry of fires.
12. Supervise marking of sectors of fire.
13. Supervise establishment of fields of fire.
15. Collect fire plan sketches and range cards from subordinate units then refine position.
16. Submit unit fire plan sketch.
17. Supervise entrenchment of positions.
18. Supervise alert postures.
20. Supervise position improvement and refinement.

**REFERENCES:**
1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCRP 3-10A.2 Infantry Company Operations
3. MCRP 3-10A.4 Marine Rifle Squad
4. MCTP 3-01C Machine Guns and Machine Gun Gunnery

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

---

**0814-LAUN-2301:** Conduct a tactical road march

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0814

**BILLETs:** Platoon Sergeant

**GRADES:** SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a movement order, a HIMARS platoon, ammunition and equipment.

**STANDARD:** To navigate the platoon to the specified position within the standards contained in the movement order.

**PERFORMANCE STEPS:**
1. Conduct METT-T Analysis.
2. Task organize platoon.
3. Coordinate with adjacent, supporting, and attached units, as required.
4. Conduct a route reconnaissance, as required.
5. Establish, or verify given, tactical control measures and routes.
6. Complete a route overlay, as required.
7. Establish target precedence and engagement criteria for all weapon systems.
8. Issue the order.
9. Supervise the pre-combat actions (pre-combat checks, pre-combat inspections, rehearsals, and brief backs).
10. Conduct movement at specified times and along specified routes.
12. Supervise the execution of appropriate immediate action drills, as required.
13. Maintain situational awareness of units and factors relative to the movement.
14. Receive and send required reports.
15. Occupy position upon arrival at designated area.

**REFERENCES:**
1. MCIP 3-10E5i Marine Rocket Battery Operations
2. MCRP 4-11.3F Convoy Operations Handbook
3. TC 3-25.26 Map Reading and Land Navigation
SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

0814-LAUN-2302: Conduct operations in the position area
EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months
MOS PERFORMING: 0814
BILLETS: Platoon Sergeant
GRADES: SSGT
INITIAL TRAINING SETTING: FORMAL
CONDITION: Given an operations order and a firing capable platoon.
STANDARD: To support the mission through the employment of proper position area (PA) organization and tactical control measures.

PERFORMANCE STEPS:
1. Supervise subordinate element movement internal and external to the position area.
2. Maintain situation map with subordinate unit locations.
3. Supervise the conduct of fire missions.
4. Supervise logistics within the PA.
5. Supervise security within the PA.
6. Maintain communications with subordinate and higher units.
7. Disseminate tactical information, as required.

REFERENCES: MCIP 3-10E5i Marine Rocket Battery Operations

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

0814-LAUN-2303: Supervise operator level maintenance
EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months
MOS PERFORMING: 0814
BILLETS: Platoon Sergeant
GRADES: SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a firing platoon with all organic equipment.

STANDARD: To keep all equipment functioning and ready operations, ensure all maintenance is performed at the correct level and all records are submitted to higher headquarters.

PERFORMANCE STEPS:
1. Review applicable documents (technical manuals and maintenance records).
2. Verify proper PMCS is conducted in accordance with the appropriate technical manual.
3. Verify corrective maintenance is conducted on any identified deficiencies.
4. Verify maintenance records are current and properly maintained.
5. Verify higher echelon maintenance equipment is inducted into the correct maintenance cycle, as required.
6. Verify usage of maintenance management forms for the requisition of repair parts, as required.
7. Verify deficiencies have been corrected.

REFERENCES:
1. MCTP 3-01C Machine Guns and Machine Gun Gunnery
2. TM 10920A-10 System Operation Manual with components list for HIMARS Re-Supply Vehicle
4. TM 2320-10/6B Truck, Utility 1 1/2 Ton (HMMWV)

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

12004. INDEX OF 0814 1000-LEVEL INDIVIDUAL EVENTS

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<tbody>
<tr>
<td>0814-COMM-1001</td>
<td>NO</td>
<td>Operate the vehicle mounted Single Channel Ground Radio and Airborne Radio System (SINCGARS)</td>
<td>12-16</td>
</tr>
<tr>
<td>0814-COMM-1002</td>
<td>NO</td>
<td>Operate Vehicle Intercom Communications III (VIC-III) system</td>
<td>12-16</td>
</tr>
<tr>
<td>0814-COMM-1003</td>
<td>NO</td>
<td>Troubleshoot digital communications</td>
<td>12-17</td>
</tr>
<tr>
<td>0814-LAUN-1001</td>
<td>NO</td>
<td>Perform Preventive Maintenance Checks and Services (PMCS) on HIMARS launcher chassis</td>
<td>12-18</td>
</tr>
<tr>
<td>MOS</td>
<td>Event Description</td>
<td>Sustainment Interval</td>
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<td></td>
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<td>0814-LAUN-1002</td>
<td>Prepare Universal Fire Control System (UFCS)</td>
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<td>0814-LAUN-1003</td>
<td>Operate the Universal Fire Control System (UFCS)</td>
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</tr>
<tr>
<td>0814-LAUN-1004</td>
<td>Record missions fired</td>
<td>12-20</td>
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<tr>
<td>0814-LAUN-1005</td>
<td>Prepare re-supply system for transportation of rocket/missile ammunition</td>
<td>12-21</td>
<td></td>
</tr>
<tr>
<td>0814-LAUN-1006</td>
<td>Conduct reload operations</td>
<td>12-21</td>
<td></td>
</tr>
</tbody>
</table>

**12005. 0814 1000-LEVEL INDIVIDUAL EVENTS**

**0814-COMM-1001:** Operate the vehicle mounted Single Channel Ground Radio and Airborne Radio System (SINCGARS)

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0814

**BILLETS:** Rocket Marine

**GRADES:** PVT, PFC, LCPL

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a tactical vehicle with radio equipment.

**STANDARD:** To establish communications with another station.

**PERFORMANCE STEPS:**
1. Install SINCGARS into radio mounts.
2. Load applicable cryptographic keys.
3. Configure communications.
4. Conduct communications check.
5. Conduct scheduled PMCS on communications equipment.
6. Conduct operator level corrective maintenance (CM).
7. Perform follow on procedures.

**REFERENCES:**
1. TM 10254A-10/1 Operator's Manual for Data Transfer Device, AN/CYZ-10(V)3
2. TM 11-5820-890-10-8 SINCGARS Ground Combat Net Radio, ICOM
3. TM 11-5830-263-10 Operator's Manual for Vehicular Intercommunication Set, AN/VIC-3(V)

**0814-COMM-1002:** Operate Vehicle Intercom Communications III (VIC-III) system

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0814
BILLETS: Rocket Marine

GRADES: PVT, PFC, LCPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a tactical vehicle, VIC-III, SINCGARS radio(s), frequency or NET ID.

STANDARD: To establish internal and external communications conducted with use of Combat Vehicle Crewman Helmet.

PERFORMANCE STEPS:
1. Power up the Master Control Station and program.
2. Program VIC-III.
3. Conduct an internal communications check.
4. Conduct an external communications check over the radio net via the VIC-III.
5. Troubleshoot system, as required.
6. Standby to receive and transmit internal and external messages.

REFERENCES:
1. TM 11-5820-890-10-8 SINCGARS Ground Combat Net Radio, ICOM
2. TM 11-5830-263-10 Operator's Manual for Vehicular Intercommunication Set, AN/VIC-3(V)

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

0814-COMM-1003: Troubleshoot digital communications

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 1 month

MOS PERFORMING: 0814

BILLETS: Rocket Marine

GRADES: PVT, PFC, LCPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a M142 HIMARS launcher and all communication assets.

STANDARD: To restore digital communications with the platoon operations center (POC).

PERFORMANCE STEPS:
1. Verify UFCS communications settings.
2. Verify communications equipment settings.
REFERENCES:
1. TM 10254A-10/1 Operator's Manual for Data Transfer Device, AN/CYZ-10(V)3
2. TM 11-5820-890-10-8 SINCGARS Ground Combat Net Radio, ICOM

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

0814-LAUN-1001: Perform Preventive Maintenance Checks and Services (PMCS) on HIMARS launcher chassis

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0814

BILLETs: Rocket Marine

GRADES: PVT, PFC, LCPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an M142 High Mobility Artillery Rocket System (HIMARS) Launcher, required tools and equipment.

STANDARD: To keep the M142 HIMARS vehicle in operating condition by finding, correcting, and reporting problems so that defects may be discovered and corrected.

PERFORMANCE STEPS:
1. Perform before operations PMCS.
2. Perform during operations PMCS.
3. Perform after operations PMCS.
4. Perform weekly and monthly PMCS.
5. Troubleshoot identified deficiencies, if possible.

REFERENCES:
SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces

0814-LAUN-1002: Prepare Universal Fire Control System (UFCS)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0814

BILLETS: Rocket Marine

GRADES: PVT, PFC, LCPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an M142 HIMARS Launcher.

STANDARD: To establish an operational ready Universal Fire Control System (UFCS).

PERFORMANCE STEPS:
1. Power on the system.
2. Initialize Universal Fire Control System
3. Update system parameters in accordance with the technical manual.


0814-LAUN-1003: Operate the Universal Fire Control System (UFCS)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0814

BILLETS: Rocket Marine

GRADES: PVT, PFC, LCPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an operational M142 HIMARS.

STANDARD: To maintain firing capability.

PERFORMANCE STEPS:
1. Create databases.
2. Manage databases.
3. Operate in GPS-aided mode.
4. Operate in inertial mode.
5. Troubleshoot UFCS malfunctions.


SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range

0814-LAUN-1004: Record missions fired

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0814

BILLETS: Rocket Marine

GRADES: PVT, PFC, LCPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a HIMARS Fire Mission Log and fire mission data.

STANDARD: To record firing data without error.

PERFORMANCE STEPS:
1. Record target location.
2. Record required munitions.
3. Record ballistic solution.

REFERENCES:
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
2. MCIP 3-10E5i Marine Rocket Battery Operations

SUPPORT REQUIREMENTS:

ORDNANCE:

<table>
<thead>
<tr>
<th>DODIC</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>H185 Rocket, 298mm Practice Red Range M28A1/A2 (MLRS)</td>
<td>12 rockets per Section</td>
</tr>
<tr>
<td>HA51- Rocket, 298mm Tactical Unitary M31A1 (MLRS)</td>
<td>12 rockets per Section</td>
</tr>
</tbody>
</table>

RANGE/TRAINING AREA:
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range
0814-LAUN-1005: Prepare re-supply system for transportation of rocket/missile ammunition

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0814  
**BILLETS:** Rocket Marine  
**GRADES:** PVT, PFC, LCPL  
**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a complete Re-Supply System, driver, rocket pods, Basic Issue Items (BII), required Hazardous Cargo Forms and Placards.

**STANDARD:** To rig vehicle and ammunition for transport.

**PERFORMANCE STEPS:**
1. Configure vehicle.
2. Inspect rocket pod for serviceability/type.

**REFERENCES:**
1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety  
2. TM 10629-10C Operator Manual for the Truck, Cargo, 7-Ton  
3. TM 10920A-10 System Operation Manual with components list for HIMARS Re-Supply Vehicle  

0814-LAUN-1006: Conduct reload operations

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0814  
**BILLETS:** Rocket Marine  
**GRADES:** PVT, PFC, LCPL  
**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an operational M142 HIMARS launcher and a rocket pod.

**STANDARD:** To reload launcher with appropriate ammunition.

**PERFORMANCE STEPS:**
1. Select reload right or left as directed by Section Chief.
2. Manipulate boom controller as directed by Section Chief.
3. Stow LM from Universal Gunners Display Unit as directed by Section Chief.

**REFERENCES:**
1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
2. MCIP 3-10E5i Marine Rocket Battery Operations
3. TM 9-1055-1646-13&P Operator's Organizational, and Direct Support
   Maintenance Manual Including Repair Parts and Special Tools List for
   High Mobility Artillery Rocket System

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**
Facility Code 17420 Maneuver/Training Area, Heavy Forces
Facility Code 17671 Field Artillery Indirect Fire Range
ARTILLERY T&R MANUAL

CHAPTER 13
MOS 0842 INDIVIDUAL EVENTS

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<td>PURPOSE</td>
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<td>EVENT CODING</td>
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<td>0842 2000-LEVEL INDIVIDUAL EVENTS</td>
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<tr>
<td>INDEX OF 0842 1000-LEVEL INDIVIDUAL EVENTS</td>
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<tr>
<td>0842 1000-LEVEL INDIVIDUAL EVENTS</td>
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</tr>
</tbody>
</table>
ARTILLERY T&R MANUAL

CHAPTER 13
MOS 0842 INDIVIDUAL EVENTS

13000. PURPOSE. This chapter details the individual events that pertain to RADAR operator. 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-XXXX. This chapter utilizes the following methodology:

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0842</td>
<td>Radar Operator</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADR</td>
<td>RADAR</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>Core Plus Skills</td>
</tr>
<tr>
<td>1000</td>
<td>Core Skills</td>
</tr>
</tbody>
</table>

13002. INDEX OF 0842 2000-LEVEL INDIVIDUAL EVENTS

<table>
<thead>
<tr>
<th>Event Code</th>
<th>E-Coded</th>
<th>Event</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>0842-RADR-2001</td>
<td>NO</td>
<td>Destroy RADAR equipment</td>
<td>13-2</td>
</tr>
<tr>
<td>0842-RADR-2002</td>
<td>NO</td>
<td>Supervise RADAR Operations</td>
<td>13-3</td>
</tr>
<tr>
<td>0842-RADR-2003</td>
<td>NO</td>
<td>Maintain a tactical situation map</td>
<td>13-4</td>
</tr>
<tr>
<td>0842-RADR-2004</td>
<td>NO</td>
<td>Operate the TPC</td>
<td>13-4</td>
</tr>
</tbody>
</table>

13003. 0842 2000-LEVEL INDIVIDUAL EVENTS

0842-RADR-2001: Destroy RADAR equipment

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 12 months
MOS PERFORMING: 0842

BILLETS: Radar Operator

GRADES: CPL, SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a RADAR plan, equipment organic to a RADAR section, and the references.

STANDARD: To render the equipment useless.

PERFORMANCE STEPS:
1. Destroy classified materials.
2. Destroy RADAR components.
3. Destroy communications equipment.
4. Destroy GPS equipment.

REFERENCES:
1. TM 08211D/08211E-01/P AN/TPQ-46A RADAR Set
2. TM 750-244-2 Procedures for Destruction of Electronic Material to Prevent Enemy Use (Electronic Command)

0842-RADR-2002: Supervise RADAR Operations

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0842

BILLETS: Radar Team Chief

GRADES: SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a RADAR section, RADAR Plan, a RADAR deployment order, equipment organic to the RADAR Section, map of area of operations, and the references.

STANDARD: To ensure the RADAR is employed as directed in the RADAR deployment order.

PERFORMANCE STEPS:
1. Select site.
2. Supervise the emplacement of the RADAR.
3. Supervise RADAR operations.
5. Supervise position improvement.

REFERENCES:
1. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. MCTP 3-10E Artillery Operations
3. TM 08211D/08211E-0I/P AN/TPQ-46A RADAR Set
4. TM 11652B-OR/1 RADAR Set AN/TPQ-49

0842-RADR-2003: Maintain a tactical situation map

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0842

BILLETS: Assistant Processing Team Leader, Processing Team Leader, Recorder/Plotter

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a map, plotting equipment, a range azimuth fan, operations order, and maneuver graphics in either text or graphic form.

STANDARD: To accurately plot operational graphics to maintain current tactical picture.

PERFORMANCE STEPS:
1. Establish Situation map.
2. Update the Situation map.
3. Maintain appropriate overlays.

REFERENCES:
1. ADP 1-02 Terms and Military Symbols
2. MCTP 3-10E Artillery Operations
3. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0842-RADR-2004: Operate the TPC

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0842

BILLETS: Targeting Clerk

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a AN/TSQ-267 Target Acquisition System and all organic equipment.
STANDARD: Operate the Target Processing Center.

PERFORMANCE STEPS:
1. Emplace Target Acquisition System.
2. Establish communications.
3. Initialize AFATDS.
4. Displace Target Acquisition System.

REFERENCES: MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition

13004. INDEX OF 0842 1000-LEVEL INDIVIDUAL EVENTS

<table>
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<tr>
<td>0842-RADR-1001</td>
<td>NO</td>
<td>Conduct RADAR planning</td>
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<tr>
<td>0842-RADR-1002</td>
<td>NO</td>
<td>Employ the AN/TPQ-46 RADAR</td>
<td>13-6</td>
</tr>
<tr>
<td>0842-RADR-1003</td>
<td>NO</td>
<td>Employ the AN/TPQ-54 Counterfire Target Acquisition Radar System (CTARS)</td>
<td>13-6</td>
</tr>
<tr>
<td>0842-RADR-1004</td>
<td>NO</td>
<td>Conduct hand held GPS operations</td>
<td>13-7</td>
</tr>
<tr>
<td>0842-RADR-1005</td>
<td>NO</td>
<td>Conduct hasty survey operations</td>
<td>13-8</td>
</tr>
<tr>
<td>0842-RADR-1006</td>
<td>NO</td>
<td>Operate Automated Fire Support System</td>
<td>13-8</td>
</tr>
</tbody>
</table>

13005. 0842 1000-LEVEL INDIVIDUAL EVENTS

0842-RADR-1001: Conduct RADAR planning

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0842

BILLETS: Radar Operator

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a RADAR plan, a map of the area of operation, a computer with position analysis software, and the references.

STANDARD: To determine a position which provides optimal support to the scheme of maneuver.

PERFORMANCE STEPS:
1. Perform map reconnaissance.
2. Input hostile mission parameters for AN/TPQ-46.
3. Input hostile mission parameters for the AN/TPQ-54 LCMR.
5. Evaluate performance data.

REFERENCES:
1. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. TM 11-5840-380-10 OPERATOR'S MANUAL FOR RADAR SET AN/TPQ-36(V)8
3. TM 11652B-OR/1 RADAR Set AN/TPQ-49

0842-RADR-1002: Employ the AN/TPQ-46 RADAR

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0842

BILLETS: Radar Operator

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a RADAR, a RADAR plan, equipment and personnel organic to a RADAR section, and the references.

STANDARD: To process acquisitions in accordance with TM 08211D/08211E-OI/P.

PERFORMANCE STEPS:
1. Perform Site Selection.
2. Emplace the AN/TPQ-46 utilizing the Modular Azimuth Positioning System Hybrid.
4. Initialize the AN/TPQ-46.
5. Establish communications.
6. Perform hostile operations.
7. Perform friendly-fire operations.
8. Displace the AN/TPQ-46, as required.

REFERENCES:
1. MCRP 3-16.1A Tactics, Techniques and Procedures for Field Artillery Target Acquisition
2. TM 08211D/08211E-OI/P AN/TPQ-46A RADAR Set

0842-RADR-1003: Employ the AN/TPQ-54 Counterfire Target Acquisition Radar System (CTARS)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0842

BILLETS: Radar Operator

GRADES: PVT, PFC, LCPL, CPL, SGT
INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a RADAR, RADAR plan, equipment and personnel organic to a RADAR section, and the references.

STANDARD: To process acquisitions in accordance with TM 11652B-OR/1.

PERFORMANCE STEPS:
1. Perform Site Selection.
2. Perform hasty survey.
3. Emplace the CTARS.
4. Initialize the CTARS.
5. Establish communications.
6. Perform RADAR operations.
7. Displace the CTARS, as required.

REFERENCES:
1. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. TM 11138A-OR Operators Manual Ground Counter Fire Sensor
3. TM 11652B-OR/1 RADAR Set AN/TPQ-49

0842-RADR-1004: Conduct hand held GPS operations

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0842

BILLETS: Radar Operator

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a map sheet of AO, equipment organic to a RADAR section, a cryptographic device with fills, and the references.

STANDARD: To self-locate and navigate accurately.

PERFORMANCE STEPS:
1. Load GPS cryptographic fills.
2. Verify Setup of handheld GPS.
3. Enter user defined datums.
4. Determine position data.
5. Perform waypoint management.
6. Navigate in the DIRECT TO mode.
7. Create routes.
8. Navigate in the ROUTE mode.
9. Compute azimuth and distance.

REFERENCES:
2. TO 31R4-2PSN13-1 Defense Advanced GPS Receiver (DAGR) satellite signals navigation set AN/PSN-13

**0842-RADR-1005:** Conduct hasty survey operations

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0842

**BILLETS:** Radar Operator

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

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a trig list, map sheet of the operational area, a declination station, and survey equipment organic to a RADAR section.

**STANDARD:** To establish grid and direction within established tolerances per the references.

**PERFORMANCE STEPS:**
1. Conduct Azimuth Determination System operations.
2. Emplace an aiming circle.
3. Declinate aiming circle.
4. Determine a grid azimuth.
5. Measure a horizontal/vertical angle.
6. Perform hasty astronomic observations.
7. Compute hasty astronomic observations.
8. Displace aiming circle.

**REFERENCES:**
1. MCRP 3-10E.6 Marine Artillery Survey Operations
4. TO 31R4-2PSN13-1 Defense Advanced GPS Receiver (DAGR) satellite signals navigation set AN/PSN-13

**0842-RADR-1006:** Operate Automated Fire Support System

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0842

**BILLETS:** Radar Operator

**GRADES:** PVT, PFC, LCPL, CPL, SGT
INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an automated workstation and communication plan.

STANDARD: To input and process data, without error, in a digital environment.

PERFORMANCE STEPS:
1. Load the system.
2. Initialize the system.
3. Activate the workstation.
4. Display the "current situation".
5. Build a planned communications configuration.
6. Input Geometries.
7. Add units.
8. Edit the database.
9. Troubleshoot the system.
10. Perform proper shutdown.

REFERENCES: Job Aid Current automated system job aides
### MOS 0844 INDIVIDUAL EVENTS

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<td>EVENT CODING</td>
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<tr>
<td>INDEX OF 0844 2000-LEVEL INDIVIDUAL EVENTS</td>
<td>14-2</td>
</tr>
<tr>
<td>0844 2000-LEVEL INDIVIDUAL EVENTS</td>
<td>14-3</td>
</tr>
<tr>
<td>INDEX OF 0844 1000-LEVEL INDIVIDUAL EVENTS</td>
<td>14-7</td>
</tr>
<tr>
<td>0844 1000-LEVEL INDIVIDUAL EVENTS</td>
<td>14-7</td>
</tr>
</tbody>
</table>
14000. PURPOSE. This chapter details the individual events that pertain to Fire Control Marine. 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.

14001. EVENT CODING. 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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0844</td>
<td>Fire Controlman</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDC</td>
<td>Fire Direction Center</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>Core Plus Skills</td>
</tr>
<tr>
<td>1000</td>
<td>Core Skills</td>
</tr>
</tbody>
</table>

14002. INDEX OF 0844 2000-LEVEL INDIVIDUAL EVENTS

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<td>0844-FDC-2001</td>
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<td>Maintain a situation map</td>
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<td>0844-FDC-2002</td>
<td>NO</td>
<td>Maintain a Fire Direction Center (FDC) Journal</td>
<td>14-3</td>
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<td>0844-FDC-2003</td>
<td>NO</td>
<td>Determine Muzzle Velocity Variation (MVV) when Muzzle Velocity Sensor System (MVSS) is in a degraded status</td>
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<tr>
<td>0844-FDC-2004</td>
<td>NO</td>
<td>Determine terrain gun position corrections</td>
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<td>0844-FDC-2005</td>
<td>NO</td>
<td>Compute special fire missions</td>
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<td>0844-FDC-2006</td>
<td>NO</td>
<td>Manage Fire Plans</td>
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<td>0844-FDC-2007</td>
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<td>Process a fire mission at a tactical FDC</td>
<td>14-6</td>
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</table>

14003. 0844 2000-LEVEL INDIVIDUAL EVENTS
0844-FDC-2001: Maintain a situation map

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0844

BILLETs: Fire Control Marine

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a map, plotting equipment, a range azimuth fan, operations order, and any applicable fire support coordination measures.

STANDARD: To track the most current tactical information.

PERFORMANCE STEPS:
1. Construct the situation map.
2. Maintain the situation map.

REFERENCES:
1. ADP 1-02 Terms and Military Symbols
2. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
3. MCTP 3-10E Artillery Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0844-FDC-2002: Maintain a Fire Direction Center (FDC) Journal

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0844

BILLETs: Fire Control Marine

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given an operational FDC and a tactical scenario.

STANDARD: To depict a current, running record of all activities occurring in the FDC.

PERFORMANCE STEPS:
1. Record all applicable information.
2. Record date/time group for each entry.

REFERENCES:
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
2. MCTP 3-10E Artillery Operations
MISCELLANEOUS:

**ADMINISTRATIVE INSTRUCTIONS:** The journal will be maintained for a period of 30 days, or for a length of time established by the Commander.

---

**0844-FDC-2003:** Determine Muzzle Velocity Variation (MVV) when Muzzle Velocity Sensor System (MVSS) is in a degraded status

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0844

**BILLETS:** Assistant Operations Chief

**GRADES:** CPL, SGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an MVV worksheet, muzzle velocity correction table (MVCT), first lot calibrated muzzle velocities, and current propellant efficiency tables, and weapon data.

**STANDARD:** To compensate for the effect of the nonstandard muzzle velocity.

**PERFORMANCE STEPS:**
1. Process current recorded system data to obtain pullover gauge reading or compute Equivalent Full Charge (EFC).
2. Determine first lot MVVs.
3. Determine subsequent lot MVVs.
4. Determine predicted MVVs.

**REFERENCES:*
1. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
2. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery
3. MVCT Muzzle Velocity Corrections Table

---

**0844-FDC-2004:** Determine terrain gun position corrections

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0844

**BILLETS:** Assistant Operations Chief

**GRADES:** CPL, SGT

**INITIAL TRAINING SETTING:** MOJT
CONDITION: Given computational means, a registration/special corrections worksheet, desired sheaf, and unit data.

STANDARD: To obtain a precise burst pattern (sheaf) in the target area.

PERFORMANCE STEPS:
1. Plot the aim points.
2. Conduct computational procedures.
3. Disseminate TGPC’s.

REFERENCES:
1. Firing Tables
2. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
3. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery

0844-FDC-2005: Compute special fire missions

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months


MOS PERFORMING: 0844

BILLETS: Assistant Operations Chief

GRADES: CPL, SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a manual or automated computational means.

STANDARD: To ensure accurate firing data is computed.

PERFORMANCE STEPS:
1. Receive call for fire.
2. Receive fire order.
4. Perform appropriate computational procedures.
5. Announce fire commands.

REFERENCES:
1. AFATDS Regt/Bn FDC Job Aids AFATDS Regt/Bn FDC Job Aids
2. BUCS Job Aids
3. Firing Tables
4. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
5. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery

**0844-FDC-2006:** Manage Fire Plans

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0844

**BILLETS:** Assistant Operations Chief

**GRADES:** CPL, SGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a target list worksheet, a fire plan, and a situation map.

**STANDARD:** In order to execute future schedules of fire.

**PERFORMANCE STEPS:**
1. Validate targets.
2. Assign firing units.
3. Compute data.
4. Execute fire plan.

**REFERENCES:**
1. AFATDS Regt/Bn FDC Job Aids AFATDS Regt/Bn FDC Job Aids
2. MCRP 3-10F.1 Fire Support Systems for MAGTF Operations
3. MCTP 3-10E Artillery Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

---

**0844-FDC-2007:** Process a fire mission at a tactical FDC

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0844

**BILLETS:** Fire Control Marine

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

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given manual or automated means of processing a fire mission, at least one firing unit, and a Call for Fire (CFF).

**STANDARD:** In order to provide artillery fires for supported units.

**PERFORMANCE STEPS:**
1. Receive call for fire or fire request
3. Receive and process check firing and cancel check firing.
4. Initiate and cancel check firing with appropriate clearance/approval.
5. Process and unsupported mission.

REFERENCES:
1. AFATDS Regt/Bn FDC Job Aids AFATDS Regt/Bn FDC Job Aids
2. BUCS Job Aids
3. Firing Tables
4. MCTP 3-10E Artillery Operations
5. MCWP 3-16C Tactics, Techniques, and Procedures for the Targeting Process

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<td>Determine chart data</td>
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<td>0844-FDC-1003</td>
<td>NO</td>
<td>Determine site</td>
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<tr>
<td>0844-FDC-1004</td>
<td>NO</td>
<td>Determine firing data (TFT)</td>
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<tr>
<td>0844-FDC-1005</td>
<td>NO</td>
<td>Determine firing data (GFT)</td>
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<tr>
<td>0844-FDC-1006</td>
<td>NO</td>
<td>Process and record a fire mission</td>
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<td>0844-FDC-1007</td>
<td>NO</td>
<td>Operate the primary automated system</td>
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</tr>
<tr>
<td>0844-FDC-1008</td>
<td>NO</td>
<td>Operate the secondary automated system</td>
<td>14-11</td>
</tr>
<tr>
<td>0844-FDC-1009</td>
<td>NO</td>
<td>Determine a GFT setting and total corrections</td>
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14005. 0844 1000-LEVEL INDIVIDUAL EVENTS

0844-FDC-1001: Construct a surveyed firing chart

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0844

BILLETS: Fire Control Marine

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given the standard plotting equipment and position data.

STANDARD: To ensure an accurate and complete firing chart is ready for use.

PERFORMANCE STEPS:
1. Label grid lines.
2. Plot unit locations.
3. Plot targets.
4. Construct azimuth indexes.
5. Construct deflection indexes.
REFERENCES: MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: The firing chart is to be constructed within 10 minutes. The time begins when the Operations Chief announces position data. Units required are your own unit and supported observers.

0844-FDC-1002: Determine chart data

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0844

BILLETS: Fire Control Marine

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an accurate and complete firing chart, plotting equipment, a call for fire, observer-target (OT) direction and subsequent corrections.

STANDARD: To ensure chart data is determined within accepted tolerances.

PERFORMANCE STEPS:
1. Plot target location.
2. Determine and announce chart range.
3. Determine and announce chart deflection.
4. Determine and announce Angle T.
5. Plot subsequent corrections.

REFERENCES: MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery

0844-FDC-1003: Determine site

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0844

BILLETS: Fire Control Marine

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a charge, chart range, TFT/GST, and target altitude.
STANDARD: To ensure site is determined to the nearest whole mil.

PERFORMANCE STEPS:
1. Determine the vertical interval.
2. Determine angle of site.
3. Determine complimentary angle of site.
4. Compute site.

REFERENCES:
1. Firing Tables
2. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery
   Manual Cannon Gunnery

0844-FDC-1004: Determine firing data (TFT)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0844

BILLETS: Fire Control Marine

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a complete set of Tabular Firing Tables (TFT) with
addendums for appropriate weapon system, charge, chart range, and site.

STANDARD: To ensure there are no errors.

PERFORMANCE STEPS:
1. Select the appropriate Tabular Firing Tables (TFT) or addendum.
2. Enter the appropriate table.
3. Enter the appropriate column.
4. Determine fuze setting, if applicable.
5. Determine drift/deflection correction.
6. Determine deflection to fire.
7. Determine elevation.
9. Compute quadrant elevation.

REFERENCES:
1. Firing Tables
2. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery
   Manual Cannon Gunnery

0844-FDC-1005: Determine firing data (GFT)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

14-9 Enclosure (1)
MOS PERFORMING: 0844

BILLETS: Fire Control Marine

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given charge, chart range, site, and complete set of Graphical Firing Tables (GFT) with or without a GFT setting applied for appropriate weapon system.

STANDARD: To ensure there are no errors.

PERFORMANCE STEPS:
1. Select the appropriate Graphical Firing Table.
2. Determine fuze setting, if applicable.
3. Determine drift/deflection correction.
4. Determine deflection to fire.
5. Determine elevation.
7. Compute quadrant elevation.

REFERENCES: MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery

0844-FDC-1006: Process and record a fire mission

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0844

BILLETS: Fire Control Marine

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a blank record of fire a call for fire, fire order and computed firing data.

STANDARD: To ensure the record of fire is completed without error, and fire commands are determined and announced.

PERFORMANCE STEPS:
1. Properly record all necessary information.
2. Police the record of fire.
3. Announce fire commands.

REFERENCES:
1. Firing Tables
2. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery
0844-FDC-1007: Operate the primary automated system

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0844

**BILLETS:** Fire Control Marine

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

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an automated workstation.

**STANDARD:** To ensure data is processed without error.

**PERFORMANCE STEPS:**
1. Load the system with applicable software.
2. Initialize the system.
3. Activate the workstation.
4. Input appropriate database information.
5. Process the enhanced muzzle velocity variations.
7. Edit the database.
8. Conduct fire mission processing.
9. Troubleshoot the system.
10. Perform proper shutdown procedures.

**REFERENCES:**
1. AFATDS Regt/Bn FDC Job Aids AFATDS Regt/Bn FDC Job Aids
2. MCRP 3-10F.1 Fire Support Systems for MAGTF Operations
3. TM 10690A Advanced Field Artillery Tactical Data System (AFATDS), Operational System Software

0844-FDC-1008: Operate the secondary automated system

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0844

**BILLETS:** Fire Control Marine

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

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an operational Back-Up Computer System (BUCS).

**STANDARD:** To ensure data is processed without error.

**PERFORMANCE STEPS:**
1. Load the system with applicable software.
2. Initialize the system.
3. Input appropriate database information.
4. Edit the database.
5. Conduct fire mission processing.
6. Troubleshoot the system.
7. Perform proper shutdown procedures.

REFERENCES:
1. BUCS Job Aids
2. MCRP 3-10F.1 Fire Support Systems for MAGTF Operations

0844-FDC-1009: Determine a GFT setting and total corrections

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0844

BILLET: Fire Control Marine

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a fire order, blank record of fire, manual and/or automated computational means, and appropriate firing tables.

STANDARD: To ensure all non-standard conditions are accounted for.

PERFORMANCE STEPS:
1. Process a registration.
2. Construct Graphical Firing Table (GFT) setting.
3. Determine total corrections.

REFERENCES:
1. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery
2. MCRP 3-10F.1 Fire Support Systems for MAGTF Operations
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CHAPTER 15

MOS 0847 INDIVIDUAL EVENTS

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CHAPTER 15

MOS 0847 INDIVIDUAL EVENTS

15000. PURPOSE. This chapter details the individual events that pertain to Sensor Support Man. 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-XXXX. This chapter utilizes the following methodology:

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

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<tr>
<td>0847</td>
<td>Sensor Support Marine</td>
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</tbody>
</table>

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

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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>SENS</td>
<td>Sensor</td>
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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:

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<td>Core Skill</td>
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<td>Perform conversion to common control operations</td>
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</tr>
<tr>
<td>0847-SENS-2002</td>
<td>NO</td>
<td>Perform crater analysis</td>
<td>15-3</td>
</tr>
<tr>
<td>0847-SENS-2003</td>
<td>NO</td>
<td>Conduct reconnaissance</td>
<td>15-4</td>
</tr>
<tr>
<td>0847-SENS-2004</td>
<td>NO</td>
<td>Conduct acoustic sensor planning</td>
<td>15-4</td>
</tr>
<tr>
<td>0847-SENS-2005</td>
<td>NO</td>
<td>Perform sensor post operations</td>
<td>15-5</td>
</tr>
<tr>
<td>0847-SENS-2006</td>
<td>NO</td>
<td>Perform command post operations</td>
<td>15-6</td>
</tr>
</tbody>
</table>

15003. 0847 2000-LEVEL INDIVIDUAL EVENTS
0847-SENS-2001: Perform conversion to common control operations

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0847

**BILLETS:** Sensor Support Man

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

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given higher and lower echelon survey data, references, and a survey computer system.

**STANDARD:** To ensure common grid within specifications IAW MCWP 3-16.7.

**PERFORMANCE STEPS:**
1. Determine the need to convert.
2. Perform slide the grid method.
3. Perform swing the grid method.
4. Perform swing and slide the grid method.

**REFERENCES:** MCRP 3-10E.6 Marine Artillery Survey Operations

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0847-SENS-2002: Perform crater analysis

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0847

**BILLETS:** Sensor Support Man

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

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a crater, shell fragments, equipment organic to your section, map of the AO, and the references.

**STANDARD:** To determine the location of the crater and the direction to the firing platform within specifications for the equipment used.

**PERFORMANCE STEPS:**
1. Determine crater position.
2. Determine crater type.
3. Determine the direction.
4. Collect usable shell fragments.
5. Develop shell report.

**REFERENCES:**
1. MCRP 3-10E.6 Marine Artillery Survey Operations
0847-SENS-2003: Conduct reconnaissance

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0847

**BILLETS:** Sensor Support Man

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

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a movement order, map of the AO, and equipment organic to a sensor section.

**STANDARD:** To facilitate the movement and emplacement of supported units.

**PERFORMANCE STEPS:**
1. Verify friendly and enemy situation.
2. Coordinate the reconnaissance with maneuver units through the artillery headquarters.
3. Prepare equipment necessary to extend survey control.
5. Conduct position reconnaissance of areas specified in the reconnaissance order.
6. Confirm suitability of artillery positions.
7. Conduct reconnaissance for supplementary positions as time permits.
8. Report any significant findings/deviations.

**REFERENCES:**
1. FM 5-36 Route Reconnaissance and Classification
2. MCRP 3-10E.6 Marine Artillery Survey Operations
3. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
4. MCTP 3-10E Artillery Operations
5. TC 3-25.26 Map Reading and Land Navigation

0847-SENS-2004: Conduct acoustic sensor planning

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0847

**BILLETS:** Sensor Support Marine
GRADES:  PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING:  MOJT

CONDITION:  Given a sensor plan, equipment organic to a Sensor Section, meteorological data, a map of the operational area, and the references.

STANDARD:  To determine optimal positions IOT maximize acquisitions.

PERFORMANCE STEPS:
1. Describe the effects of sound propagation.
2. Load digital maps.
3. Load DTED.
4. Input meteorological data.
5. Build firing unit(s).
7. Build command post.

REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
3. TM 11138A-OR  Operators Manual Ground Counter Fire Sensor

0847-SENS-2005:  Perform sensor post operations

EVALUATION-CODED:  NO  SUSTAINMENT INTERVAL:  3 months

MOS PERFORMING:  0847

BILLETS:  Sensor Support Marine

GRADES:  PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING:  MOJT

CONDITION:  Given a Sensor Plan, equipment organic to a Sensor Section, and the references.

STANDARD:  To properly employ assets IOT ensure the command post can process acoustic events.

PERFORMANCE STEPS:
1. Perform site selection for sensor post.
2. Emplace sensor post.
3. Initialize sensor post.
4. Perform acoustic test.
5. Perform fault analysis.
6. Displace sensor post.
7. Record data.

REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
0847-SENS-2006: Perform command post operations

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0847

BILLETS: Sensor Support Marine

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a Sensor Plan, equipment organic to a Sensor Section, and the references.

STANDARD: To ensure the system can process events IOT detect acoustic anomalies.

PERFORMANCE STEPS:
1. Emplace command post.
2. Establish sensor post communications.
3. Process acoustic events.
4. Manage sensor post health.
5. Displace command post.

REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
3. TM 11138A-OR Operators Manual Ground Counter Fire Sensor

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<th>E-Coded</th>
<th>Event</th>
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<td>Provide required survey information to fire support assets</td>
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<td>0847-SENS-1002</td>
<td>NO</td>
<td>Perform survey computations with automated systems</td>
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<td>15-9</td>
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<tr>
<td>0847-SENS-1006</td>
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<td>Perform survey operations with an Inertial Navigation System (INS)</td>
<td>15-10</td>
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<tr>
<td>0847-SENS-1007</td>
<td>NO</td>
<td>Conduct operations with a survey grade GPS</td>
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<td>NO</td>
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0847-SENS-1011 | NO | Operate Automated Fire Support System | 15-13

15005. 0847 1000-LEVEL INDIVIDUAL EVENTS

0847-SENS-1001: Provide required survey information to fire support assets

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0847

BILLETS: Sensor Support Marine

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a sensor plan, a list of current fire support assets, current map sheets, survey computation software, references, and trigonometric data.

STANDARD: To ensure common grid and common direction within the AO.

PERFORMANCE STEPS:
1. Determine required survey information for fire support assets.
2. Determine geodetic data for an area of operations.
3. Determine user defined data for geodetic data sets in required formats.
4. Determine map projections.
5. Determine grid and coordinate systems.

REFERENCES:
1. DMA TM 8358.1 Datums, Ellipsoids, Grids and Grid Reference Systems
2. DMA TR 8350.2 DoD World Geodetic System 1984
3. MCRP 3-10E.6 Marine Artillery Survey Operations

0847-SENS-1002: Perform survey computations with automated systems

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0847

BILLETS: Sensor Support Marine

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL
CONDITION: Given a handheld survey computer system, a computer with current GEOTRANS software, appropriate forms, a trig list, current map sheet, field recorders notes, references, and a check computer.

STANDARD: To ensure that primary and check computer data match and that the data computed meets published tolerances IAW the references.

PERFORMANCE STEPS:
1. Compute azimuth and distance from coordinates.
2. Compute conversion between geographic coordinates and UTM grids.
3. Compute universal transverse mercator (UTM) grid convergence.
4. Compute conversion from UTM grids to geographic coordinates.
5. Compute conversion of Zone-to-Zone transformations.
6. Compute intersection.
7. Perform conversions between coordinate and grid systems with GEOTRANS.
8. Perform conversions between UTM grid and the military grid reference system with GEOTRANS.
9. Perform elevation shifts between earth gravity models with GEOTRANS.
10. Compute transformation from one UTM grid zone to another with GEOTRANS.
11. Perform datum to datum transformation (horizontal) with GEOTRANS.

REFERENCES:
1. DMA TM 8358.1 Datums, Ellipsoids, Grids and Grid Reference Systems
2. DMA TR 8350.2 DoD World Geodetic System 1984
4. MCRP 3-10E.6 Marine Artillery Survey Operations

0847-SENS-1003: Perform astronomic observations

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0847

BILLETs: Sensor Support Marine

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Sensor Section and observable celestial bodies.

STANDARD: Determining the azimuth within the specifications; recorders notes and computations performed.

PERFORMANCE STEPS:
1. Emplace survey equipment.
2. Select celestial body.
3. Conduct hasty astronomic observation.
4. Conduct 4th order astronomic observation.
5. Record astronomic observations.
6. Compute astronomic observations.
7. Displace survey equipment.

REFERENCES: MCRP 3-10E.6 Marine Artillery Survey Operations

0847-SENS-1004: Conduct hand held GPS operations

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0847

BILLETS: Sensor Support Marine

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a map sheet of an AO, a GPS, and a cryptological fill device.

STANDARD: To ensure proper data IOT self-locate and navigate accurately.

PERFORMANCE STEPS:
1. Load GPS cryptographic fills.
2. Verify Setup of handheld GPS.
3. Enter user defined datums.
4. Determine position data.
5. Perform waypoint management.
6. Navigate in the DIRECT TO mode.
7. Create routes.
8. Navigate in the ROUTE mode.
10. Conduct zone to zone transformations.
11. Compute azimuth and distance between waypoints.
12. Conduct data transfer.

REFERENCES:
2. TO 31R4-2PSN13-1 Defense Advanced GPS Receiver (DAGR) satellite signals navigation set AN/PSN-13

0847-SENS-1005: Conduct hasty survey operations

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0847

BILLETS: Sensor Support Marine
GRADES:  PVT, PFC, LCPL, CPL, SGT  

INITIAL TRAINING SETTING:  FORMAL  

CONDITION:  Given a map sheet of the AO, a declination station, and survey equipment organic to a sensor section.  

STANDARD:  To establish grid and direction within established tolerances per the references.  

PERFORMANCE STEPS:  
1. Conduct azimuth determination system operations.  
2. Emplace an aiming circle.  
3. Declinate an aiming circle.  
4. Determine a grid azimuth with an aiming circle.  
5. Measure a horizontal/vertical angle.  
6. Displace aiming circle.  

REFERENCES:  
1. MCRP 3-10E.6 Marine Artillery Survey Operations  
4. TO 31R4-2PSN13-1 Defense Advanced GPS Receiver (DAGR) satellite signals navigation set AN/PSN-13  

0847-SENS-1006:  Perform survey operations with an Inertial Navigation System (INS)  

EVALUATION-CODED:  NO  SUSTAINMENT INTERVAL:  3 months  

MOS PERFORMING:  0847  

BILLETS:  Sensor Support Marine  

GRADES:  PVT, PFC, LCPL, CPL, SGT  

INITIAL TRAINING SETTING:  FORMAL  

CONDITION:  Given a sensor plan, a trig list, equipment organic to a Sensor Section, and references.  

STANDARD:  To conduct proper procedures IOT ensure survey data meets published tolerances IAW the references.  

PERFORMANCE STEPS:  
1. Load cryptographic fills.  
2. Perform initialization.  
3. Perform update procedures.  
4. Conduct one position mark.  
5. Conduct a two position mark.  
7. Record field notes.  

15-10  Enclosure (1)
8. Perform data management.

REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. TM 9-6675-349-12&P Operator and Unit Maintenance Manual for Improved Position and Azimuth Determining System (IPADS) M111

0847-SENS-1007: Conduct operations with a survey grade GPS

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0847

BILLETS: Sensor Support Marine

GRADES: PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a sensor plan, a map of the AO, equipment organic to a Sensor Section, and references.

STANDARD: To conduct proper procedures IOT establish survey control that meets published tolerances IAW TM-10667A-OR/1.

PERFORMANCE STEPS:
1. Load cryptographic fills.
2. Set up the survey grade GPS for operations.
3. Perform absolute surveys.
4. Conduct real time kinematic/on the fly (RTK/OTF) survey.
5. Conduct fast static survey.
6. Conduct data management.

REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. TM 10667A-OR/1 Operator and Field Maintenance Manual for Survey System, Navigation AN/GSN-14

0847-SENS-1008: Determine significant weather changes

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0847

BILLETS: Sensor Support Marine

GRADES: PVT, PFC, LCPL, CPL, SGT
INITIAL TRAINING SETTING:  FORMAL

CONDITION:  Given equipment organic to a sensor section and the references.

STANDARD:  To identify meteorological anomalies that could have adverse effects on operations.

PERFORMANCE STEPS:
1. Determine frontal passages.
2. Perform surface observations.
3. Determine types of clouds.
4. Determine height of clouds.
5. Develop Meteorological schedule.

REFERENCES:  MCRP 3-10E.6 Marine Artillery Survey Operations

0847-SENS-1009:  Conduct Modeled Meteorological Operations

EVALUATION-CODED:  NO  SUSTAINMENT INTERVAL:  3 months

MOS PERFORMING:  0847

BILLETS:  Sensor Support Marine

GRADES:  PVT, PFC, LCPL, CPL, SGT

INITIAL TRAINING SETTING:  FORMAL

CONDITION:  Given a modeled meteorological system, surface meteorological equipment, and communications assets.

STANDARD:  To produce meteorological messages IAW STANAG requirements and transmit to appropriate agencies.

PERFORMANCE STEPS:
1. Set up the Modeled Meteorological Information Manager (MMIM).
2. Identify correct GFS DATA Region.
3. Perform initialization.
4. Obtain modeled data.
5. Load modeled data.
6. Generate required MET message.
7. Verify MET message.
8. Transmit MET message (Voice/Digital).
9. Shut down the MMIM.

REFERENCES:
1. MCWP 3-16.5 Field Artillery Meteorology
2. TM 12122A-OR/1 Operator and Field Manual for Computer, Meteorological Data, AN/GMK-2 (PROFILER)
**0847-SENS-1010:** Perform visual meteorological operations

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0847

**BILLETs:** Sensor Support Marine

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

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a Sensor Plan, equipment organic to a Sensor Section, and the references.

**STANDARD:** To produce meteorological messages IAW STANAG requirements.

**PERFORMANCE STEPS:**
1. Place a meteorological theodolite.
2. Declinate the meteorological theodolite.
3. Perform surface observations.
4. Perform balloon inflation.
5. Track a pilot balloon.
6. Record observations.
7. Compute observation data.
8. Perform extrapolated meteorological procedures.

**REFERENCES:**
1. MCRP 3-10E.6 Marine Artillery Survey Operations

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**0847-SENS-1011:** Operate Automated Fire Support System

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0847

**BILLETs:** Sensor Support Marine

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

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an automated workstation and communication plan.

**STANDARD:** To input and process data IOT operate in a digital environment.

**PERFORMANCE STEPS:**
1. Load the system.
2. Initialize the system.
3. Activate the workstation.
4. Display the "current situation."
5. Build a planned communications configuration.
6. Input Geometries.
7. Add units.
8. Edit the database.
9. Troubleshoot the system.
10. Perform proper shutdown.

REFERENCES: Job Aid Current automated system job aides
# ARTILLERY T&R MANUAL

## CHAPTER 16

**MOS 0848 INDIVIDUAL EVENTS**

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<td>INDEX OF 0848 2000-LEVEL INDIVIDUAL EVENTS</td>
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<td>0848 2000-LEVEL INDIVIDUAL EVENTS</td>
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</table>
16000. PURPOSE. This chapter details the individual events that pertain to operations chief. 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-XXXX. This chapter utilizes the following methodology:

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

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<tbody>
<tr>
<td>0848</td>
<td>Operations Chief</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>FDC</td>
<td>Fire Direction Center</td>
</tr>
<tr>
<td>RADR</td>
<td>RADAR</td>
</tr>
<tr>
<td>SENS</td>
<td>Sensor</td>
</tr>
<tr>
<td>TAP</td>
<td>Target Acquisition Platoon</td>
</tr>
<tr>
<td>TPC</td>
<td>Target Processing Center</td>
</tr>
</tbody>
</table>

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:

<table>
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<tr>
<th>Code</th>
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<td>2000</td>
<td>Core Plus Skills</td>
</tr>
<tr>
<td>1000</td>
<td>Core Skills</td>
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16002. INDEX OF 0848 2000-LEVEL INDIVIDUAL EVENTS

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<td>0848-FDC-2001</td>
<td>NO</td>
<td>Apply the principle of artillery ballistics to artillery fires</td>
<td>16-3</td>
</tr>
<tr>
<td>0848-FDC-2002</td>
<td>NO</td>
<td>Supervise the construction of a surveyed firing chart</td>
<td>16-4</td>
</tr>
<tr>
<td>0848-FDC-2003</td>
<td>NO</td>
<td>Verify the computation of firing data (TFT/GFT)</td>
<td>16-5</td>
</tr>
<tr>
<td>0848-FDC-2004</td>
<td>NO</td>
<td>Verify the computation of site</td>
<td>16-5</td>
</tr>
<tr>
<td>0848-FDC-2005</td>
<td>NO</td>
<td>Verify muzzle velocity data</td>
<td>16-6</td>
</tr>
<tr>
<td>0848-FDC-2006</td>
<td>NO</td>
<td>Determine Terrain Gun Position Corrections</td>
<td>16-7</td>
</tr>
</tbody>
</table>
16003. 0848 2000-LEVEL INDIVIDUAL EVENTS

**0848-FDC-2001**: Apply the principle of artillery ballistics to artillery fires

- **EVALUATION-CODED**: NO
- **SUSTAINMENT INTERVAL**: 3 months
DESCRIPTION: The Marine must define and explain the causes and effects of each term, and its relationship to artillery accuracy and massing of fires.

MOS PERFORMING: 0848

BILLETS: Operations Chief

GRADES: SSgt, GYSgt, MSGt, MGYSgt

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a list of artillery ballistic terms and the references.

STANDARD: In order to define and explain the causes and effects of each term and its relationship to artillery accuracy and massing of fires without error.

PERFORMANCE STEPS:
1. Define Interior Ballistics and its effect on accuracy and massing fires.
2. Define Transitional Ballistics.
3. Define Exterior Ballistics and its effect on accuracy and massing fires.
5. Define Inherent Error.
6. Define the Mean Point of Impact.
7. Define Probable Error.
10. Define Time to Burst Probable Error.
11. Define Height of Burst Probable Error.
14. Demonstrate the usage of the Assurance Table in determining Registration Validity.

REFERENCES:
1. MCWP 3-16.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery
2. TFT TFTs and Addendums

0848-FDC-2002: Supervise the construction of a surveyed firing chart

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0848

BILLETS: Operations Chief

GRADES: SSgt, GYSgt, MSGt, MGYSgt

INITIAL TRAINING SETTING: FORMAL
CONDITION: Given a map portraying an area of operations, position data card, firing chart, and Fire Direction Center (FDC) plotting equipment.

STANDARD: Ensuring an accurate and complete firing chart is ready for use.

PERFORMANCE STEPS:
1. Determine the azimuth of lay.
2. Determine long axis orientation.
3. Determine the lower left-hand corner coordinates.
4. Provide the data to the HCO.
5. Verify the construction of the firing chart.
6. Direct correction of errors.

REFERENCES:
1. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
2. MCWP 3-16.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery

0848-FDC-2003: Verify the computation of firing data (TFT/GFT)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0848

BILLETS: Operations Chief

GRADES: SSGT, GYSGT, MSGT, MGYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a complete set of firing tables (TFT/GFT) with addendums for appropriate weapon system, charge, chart range, and site.

STANDARD: To ensure there are no errors.

PERFORMANCE STEPS:
1. Select the appropriate firing tables (TFT/GFT) or addendum.
2. Enter the appropriate table (TFT).
3. Enter the appropriate column (TFT).
4. Determine fuze setting, if applicable.
5. Determine drift.
6. Determine deflection.
7. Determine elevation.
8. Determine time of flight (TOF).
9. Determine quadrant elevation.

REFERENCES:
1. Firing Tables
2. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
3. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery
0848-FDC-2004: Verify the computation of site

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months
MOS PERFORMING: 0848
BILLETS: Operations Chief
GRADES: SSgt, GYSgt, MSGt, MGYSGt
INITIAL TRAINING SETTING: FORMAL
CONDITION: Given charge, chart range, and appropriate TFT/GST, and target altitude.
STANDARD: To ensure site is determined correctly to the nearest whole mil.

PERFORMANCE STEPS:
1. Verify the vertical interval.
2. Verify the angle of site.
3. Verify the complimentary angle of site.
4. Ensure Site is computed accurately.

REFERENCES:
1. Firing Tables
2. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
3. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery

0848-FDC-2005: Verify muzzle velocity data

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months
MOS PERFORMING: 0848
BILLETS: Operations Chief
GRADES: SSgt, GYSgt, MSGt, MGYSGt
INITIAL TRAINING SETTING: FORMAL
CONDITION: Given a Digital Fire Control System (DFCS) and an AFATDS in the enhanced muzzle velocity mode.
STANDARD: To compensate for the effect of the nonstandard muzzle velocity.

PERFORMANCE STEPS:
1. Verify the determination of Equivalent Full Charges (EFCs) from the last Pullover Gauge (POG) reading and subsequent rounds fired.
2. Verify the stored MVV Lot (Propellant Efficiency) data.
3. Supervise the determination and application of predicted MVV Lot data.
4. Verify all muzzle velocity messages from the DFCS before processing in AFATDS.
0848-FDC-2006: Determine Terrain Gun Position Corrections

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0848

BILLETS: Operations Chief

GRADES: SSGT, GYSGT, MSGT, MGYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given computational means, a registration/special corrections worksheet, desired sheaf, and unit data.

STANDARD: To obtain a precise burst pattern (sheaf) in the target area.

PERFORMANCE STEPS:
1. Plot the aim points.
2. Conduct computational procedures.
3. Disseminate TGPC’s.

REFERENCES:
1. Firing Tables
2. JREGTO 3570.1_ Standing Operating Procedures for Field Artillery Safety
3. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery

0848-FDC-2007: Manage fire plans

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0848

BILLETS: Operations Chief

GRADES: SSGT, GYSGT, MSGT, MGYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a target list worksheet, a fire plan, and a situation map.

STANDARD: In order to execute future schedules of fire.

PERFORMANCE STEPS:
1. Validate targets.
2. Assign firing units.
3. Verify the computation of the data.
4. Execute fire plan.

REFERENCES:
1. Job Aid Current automated system job aides
2. MCRP 3-10F.1 Fire Support Systems for MAGTF Operations
3. MCTP 3-10E Artillery Operations

0848-FDC-2008: Supervise operation of the primary automated system

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months
MOS PERFORMING: 0848
BILLETS: Operations Chief
GRADES: SSgt, GYSgt, MSGT, MGYSgt
INITIAL TRAINING SETTING: FORMAL
CONDITION: Given an automated workstation.
STANDARD: In order to ensure the processing of data without error.

PERFORMANCE STEPS:
1. Supervise system loading.
2. Supervise system initialization.
3. Supervise workstation activation.
4. Verify the input of appropriate database information.
5. Verify the processing of enhanced muzzle velocity variations.
6. Verify the processing of meteorological data.
7. Supervise the conduct of mission processing.
8. Supervise troubleshooting of the system.
9. Verify proper shutdown procedures.

REFERENCES:
1. Job Aid Current automated system job aides
2. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
3. MCRP 3-10F.1 Fire Support Systems for MAGTF Operations

0848-FDC-2009: Supervise the operation of the secondary automated system

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months
MOS PERFORMING: 0848
BILLETS: Operations Chief
GRADES: SSGT, GYSGT, MSGT, MGYS GT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an operational Back-Up Computer System (BUCS).

STANDARD: To ensure the processing of data without error.

PERFORMANCE STEPS:
1. Verify system initialization.
2. Verify the database.
4. Supervise troubleshooting.
5. Verify proper shutdown.

REFERENCES: BUCS Job Aids

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: The secondary automated system may be utilized in degraded operations.

0848-FDC-2010: Supervise the computation of the GFT setting and total corrections

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0848

BILLETS: Operations Chief

GRADES: SSGT, GYSGT, MSGT, MGYS GT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a fire order, blank record of fire, manual and/or automated computational means, and appropriate firing tables.

STANDARD: To ensure all non-standard conditions are accounted for.

PERFORMANCE STEPS:
1. Supervise the processing of a registration.
2. Verify the construction of a Graphical Firing Table (GFT) setting.
3. Verify the total corrections.

REFERENCES:
1. Firing Tables
2. Job Aid Current automated system job aides
3. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
4. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery
0848-FDC-2011: Supervise fire mission processing

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0848

BILLETS: Operations Chief

GRADES: SSgt, GYSgt, MSGT, MGYSgt

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an operational FDC, call for fire, fire order.

STANDARD: To ensure computational procedures are accurate, and fire commands are determined without error.

PERFORMANCE STEPS:
1. Verify all necessary information is computed and recorded properly.
2. Verify the fire commands reflect the fire order.
3. Supervise the transmission of data to firing units.

REFERENCES:
1. BUCS Job Aids
2. Firing Tables
3. JobAid AFATDS Job Aid
4. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
5. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery

0848-FDC-2012: Determine the cause of inaccurate fires

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0848

BILLETS: Operations Chief

GRADES: SSgt, GYSgt, MSGT, MGYSgt

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an operational FDC.

STANDARD: To account for the five requirements for accurate predicted fires.

PERFORMANCE STEPS:
1. Evaluate accuracy of fires.
2. Determine that inaccuracies exist.
3. Determine direction and magnitude of the error.
4. Evaluate fire control data.
5. Evaluate and decide upon corrective action for errors in position area location and direction which are firing unit specific.
6. Evaluate and decide on corrective action for errors in target area location and direction.
7. Evaluate and decide on corrective action for errors in weapons and ammunition that are fire unit/gun specific.
8. Evaluate and decide on corrective action for errors in MET information.
9. Evaluate and decide on corrective action for errors in computation/FDC procedures which are fire unit/gun specific.
10. Evaluate and decide on corrective action for errors in gun procedures.
11. Evaluate and decide on corrective action for errors in observer procedures.
12. Evaluate and decide on corrective action for errors between firing units.
13. Direct the appropriate corrective action to be taken.

REFERENCES:
1. BUCS Job Aids
2. Firing Tables
3. Job Aid Current automated system job aides
4. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
5. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery
   Manual Cannon Gunnery

0848-FDC-2013: Supervise an automated mission converted to manual procedures

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0848

BILLETS: Operations Chief

GRADES: SSgt, GYSgt, MSGt, MGYSgt

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an operational Fire Direction Center (FDC) and an automated fire mission in progress.

STANDARD: In order to announce firing data to the gun line.

PERFORMANCE STEPS:
1. Select base piece.
2. Determine firing data for the target.
3. Apply TGPCs.
4. Prepare to process subsequent corrections.

REFERENCES:
1. BUCS Job Aids
2. Firing Tables
3. Job Aid Current automated system job aides
4. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
5. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery
   Manual Cannon Gunnery
0848-FDC-2014: Compute basic safety data

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0848

BILLETS: Operations Chief

GRADES: SSGT, GYSGT, MSGT, MGYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given computational means, firing point, and an impact/target area.

STANDARD: To provide safe artillery fires.

PERFORMANCE STEPS:
1. Construct SDZ.
2. Construct range safety card.
3. Construct safety diagram.
4. Compute safety data.
5. Verify XOs min QE.
6. Construct safety-Ts.
7. Apply safety data to situation map.
8. Apply safety graphic to digital systems and firing charts.
9. Update safety as required.

REFERENCES:
1. BUCS Job Aids
2. DA PAM 385-63 Department of the Army Range Safety
3. Firing Tables
4. Job Aid Current automated system job aides
5. JREGTO 3570.1 Standing Operating Procedures for Field Artillery Safety
6. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery

0848-FDC-2015: Supervise the processing of replot targets and replot data (FZ Quick and VT)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0848

BILLETS: Operations Chief

GRADES: SSGT, GYSGT, MSGT, MGYSGT

INITIAL TRAINING SETTING: MOJT
CONDITION: Given the deflection, the Quadrant Elevation (QE) and total site fired, a Graphical Firing Table (GFT) with a GFT setting applied, the successive site determined by the chart operator, and the target number.

STANDARD: To ensure replot procedures are being conducted without error.

PERFORMANCE STEPS:
1. Verify the replot deflection.
2. Verify the replot grid and altitude.
3. Verify the replot grid and altitude using fuze VT.
4. Verify refinement data (fuze time) with Height of Burst (HOB) correction.

REFERENCES: MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery

0848-FDC-2016: Maintain situation map

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0848

BILLET: Operations Chief

GRADES: SSGT, GYSGT, MSGT, MGYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given an operations order and map.

STANDARD: In order to track the most current tactical information.

PERFORMANCE STEPS:
1. Plot fire support coordinating measures (FSCM).
2. Plot maneuver control measures.
3. Plot safety fire area.
4. Plot friendly unit locations.
5. Apply appropriate overlays.
6. Maintain the situation map.

REFERENCES:
1. ADP 1-02 Terms and Military Symbols
2. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
3. MCWP 3-16.1 Artillery Operations

0848-FDC-2017: Verify MVVs when Muzzle Velocity Sensor System (MVSS) is in a degraded status.

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months
MOS PERFORMING: 0848

BILLETS: Operations Chief

GRADES: SSGT, GYSGT, MSGT, MGYSgt

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a velocimeter work sheet, muzzle velocity correction table (MVCT), first lot calibrated muzzle velocities, current propellant efficiency tables, and weapon data.

STANDARD: To compensate for the effect of the nonstandard muzzle velocity.

PERFORMANCE STEPS:
1. Supervise the determination of current recorded system data to obtain pullover gauge reading or compute Equivalent Full Charges (EFCs).
2. Supervise the determination of first lot MVVs.
3. Supervise the determination of subsequent lot MVVs.
4. Supervise the determination of predicted MVVs.

REFERENCES:
1. MCRP 3-10E.4 Tactics, Techniques and Procedures for the Field Artillery Manual Cannon Gunnery
2. Muzzle Velocity Corrections Table

0848-FDC-2401: Set up the M16 plotting board for weapons equipped with the M64-series sight

EVALUATION-CODED: NO          SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0848

BILLETS: 81mm Platoon Sergeant

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given position data and azimuth of lay.

STANDARD: To ensure an accurate and complete plotting board is ready for use.

PERFORMANCE STEPS:
1. Plot the aiming circle.
2. Plot the remaining pieces.
3. Establish an azimuth index.
4. Determine piece displacement.

REFERENCES:
1. FM 23-91 Mortar Gunnery
2. FM 3-22.91 Mortar Fire Direction Procedures
**0848-FDC-2402:** Determine terrain gun position corrections  
**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months  
**MOS PERFORMING:** 0848  
**BILLETS:** 81mm Platoon Sergeant  
**GRADES:** SSGT, GYSGT  
**INITIAL TRAINING SETTING:** MOJT  
**CONDITION:** Given a plotting board with pieces plotted, instructions from the Platoon Commander (PLT CMDR) with regard to range and charge.  
**STANDARD:** To obtain a precise burst pattern (sheaf) in the target area.  
**PERFORMANCE STEPS:**  
1. Plot the aimpoints.  
2. Determine each mortar deflection correction.  
3. Determine each mortar muzzle velocity range correction.  
4. Determine each mortar range correction.  
5. Determine each mortar Quadrant Elevation (QE) correction.  
6. Determine each mortar time correction.  
7. Determine each mortar limits and plot the limits on the firing chart.  
**REFERENCES:**  
1. FM 23-91 Mortar Gunnery  
2. FM 3-22.91 Mortar Fire Direction Procedures

**0848-FDC-2403:** Determine special corrections  
**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months  
**MOS PERFORMING:** 0848  
**BILLETS:** 81mm Platoon Sergeant  
**GRADES:** SSGT, GYSGT  
**INITIAL TRAINING SETTING:** MOJT  
**CONDITION:** Given a plotting board with pieces plotted and a fire order.  
**STANDARD:** To ensure corrections are applied.  
**PERFORMANCE STEPS:**  
1. Determine special corrections for a converged sheaf.  
2. Determine special corrections for a target described by a grid, length, and an attitude.  
3. Determine special corrections for a target described by two grids.  
4. Determine special corrections for a target described by the three or more grids.
5. Determine special corrections for a circular target.

**REFERENCES:**
1. FM 23-91 Mortar Gunnery
2. FM 3-22.91 Mortar Fire Direction Procedures

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**0848-FDC-2404:** Determine hasty special corrections

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0848

**BILLETS:** 81mm Platoon Sergeant

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a plotting board with pieces plotted, a fire order, and the appropriate hasty correction table.

**STANDARD:** To ensure corrections are applied.

**PERFORMANCE STEPS:**
1. Determine the hasty deflection correction.
2. Determine the hasty Quadrant Elevation (QE) correction.
3. Determine the hasty Muzzle Velocity (MV) correction.
4. Determine the hasty total Quadrant Elevation (QE) correction.
5. Determine the hasty fuze setting correction.

**REFERENCES:**
1. FM 23-91 Mortar Gunnery
2. FM 3-22.91 Mortar Fire Direction Procedures

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**0848-FDC-2405:** Direct the employment of mortars in support of defensive operations

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0848

**BILLETS:** 81mm Platoon Sergeant

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT
**CONDITION:** Given a mortar squad or section as part of a platoon or company defense and all related equipment and ammunition.

**STANDARD:** To ensure mortar fires are within the assigned sector.

**PERFORMANCE STEPS:**
1. Receive a five paragraph order.
2. Conduct a reconnaissance of the area.
3. Issue a defensive order to your attachments.
4. Direct the method of employment assigned by unit commander.
5. Assign sector's Final Protective Fires (FPFs) of the defense or attach squads to supported units.
6. Establish and maintain communications with each squad or section and the unit commander.
7. Supervise the improvement of positions.
8. Ensure the security of the crews is integrated with parent or adjacent units.
9. Direct the consolidation of the squad or section, as required.

**REFERENCES:**
1. FM 23-91 Mortar Gunnery
2. FM 3-22.91 Mortar Fire Direction Procedures
3. FM 7-90 Tactical Employment of Mortars
4. MCWP 3-11.1 Marine Rifle Company/Platoon

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** The Marine must prepare and issue a defensive operation order and subsequent fragment orders to the attached mortar squad or section that includes: the method of employment, rates of fire, signals to begin and cease assigned Final Protective Fires (FPFs). He must ensure FPFs are clearly understood by the mortar crews and that tactical mortar positions are prepared by the squad or section. He must maintain communications with the squads or sections and higher. He must ensure mortar employment principles are used to neutralize, canalize, or destroy enemy personnel and armor threats.

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**0848-FDC-2406:** Direct the employment of mortars in support of offensive operations

**EVALUATION-CODED:** No  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0848

**BILLET:** 81mm Platoon Sergeant

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mortar squad or section as part of a platoon, company or larger attack and all related equipment and ammunition.
STANDARD: To ensure mortar fires are timely and accurate.

PERFORMANCE STEPS:
1. Receive a five paragraph order.
2. Plan mission assigned.
3. Issue the order.
4. Select firing positions.
5. Identify and determine range to targets.
6. Establish internal and external communications.
7. Supervise lay of the guns or positioning of vehicles.
8. Determine safety limits.
9. Ensure the security of the crews is integrated with parent or adjacent units.
10. Issue fire commands.
11. Cease the engagement.
12. Direct the displacement of the squad or section.
13. Assist in the consolidation of objective by firing to protect against counterattack, as required.

REFERENCES:
1. FM 23-91 Mortar Gunnery
2. FM 3-22.91 Mortar Fire Direction Procedures
3. FM 7-90 Tactical Employment of Mortars
4. MCWP 3-11.1_ Marine Rifle Company/Platoon

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: The Marine must prepare and issue an offensive operation order, and subsequent fragment orders must include: the method of employment, rates of fire, and signals to begin and cease fires on assigned targets. The Marine must ensure priority of targets and scheme of maneuver are clearly understood by the mortar crews and tactical mortar positions are prepared by the squad or section, as required. The Marine must maintain communications with the squads or sections and higher. The Marine must ensure mortar employment principles are used to neutralize, canalize, or, destroy enemy personnel and armor threats.

0848-FDC-2407: Select a mortar position

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0848

BILLETS: 81mm Platoon Sergeant

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a mortar unit and all related equipment and ammunition.
STANDARD: To ensure the platoon is prepared to support the scheme of maneuver.

PERFORMANCE STEPS:
1. Conduct reconnaissance.
2. Determine if position supports mission accomplishment.
3. Analyze both friendly and enemy tactical situation.
4. Establish range criteria.
5. Ensure maximum target area coverage.
6. Determine survivability.
7. Analyze overhead and mask clearance.
8. Inspect ground surface conditions.
9. Assess communications ability.
10. Assess routes.

REFERENCES:
1. FM 23-91 Mortar Gunnery
2. FM 3-22.91 Mortar Fire Direction Procedures
3. FM 7-90 Tactical Employment of Mortars

0848-FDC-2408: Lay mortar section/platoon parallel

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0848

BILLETS: 81mm Platoon Sergeant

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given an 81mm mortar section/platoon, an M2 compass, and an aiming circle.

STANDARD: To ensure the platoon is prepared to support the scheme of maneuver.

PERFORMANCE STEPS:
1. Repeat this process until mortars are laid to within one mil.
2. Refer the base mortar to the lens of the remaining guns.
3. Confirm each mortar's lay.
4. Direct aiming posts to be placed out.
5. Direct the lay of each mortar on direction posts with a deflection of 2800 set on the sight (M64).
6. Orient the circle using grid direction.
7. Refer remaining guns to the lens of the base mortar.
8. Align the base gun on the desired azimuth.

REFERENCES:
1. FM 23-90 Mortars
2. FM 3-22.91 Mortar Fire Direction Procedures
**0848-FDC-2409**: Supervise fire mission processing

**EVALUATION-CODED**: NO  **SUSTAINMENT INTERVAL**: 3 months

**MOS PERFORMING**: 0848

**BILLETS**: 81mm Platoon Sergeant

**GRADES**: SSGT, GYSgt

**INITIAL TRAINING SETTING**: MOJT

**CONDITION**: Given an 81mm mortar platoon/section, Fire Direction Center (FDC), Call For Fire (CFF), an operations order, and a tactical situation.

**STANDARD**: To ensure the mortar section/platoon is supporting the scheme of maneuver with timely and accurate fires.

**PERFORMANCE STEPS**:
1. Evaluate the incoming Call For Fire (CFF).
2. Prepare fire command.
3. Prepare the Fire Direction Center (FDC) order.
4. Verify corrections and commands.
5. Maintain records of all fire missions and all applied corrections, including round count.
6. Evaluate and relay target surveillance data and intelligence reports from Forward Observer (FO).
7. Inform Fire Support Coordinator (FSC) of any Calls For Fire (CFFs) that cannot be engaged.

**REFERENCES**:
1. FM 23-91 Mortar Gunnery
2. FM 3-22.91 Mortar Fire Direction Procedures

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**0848-FDC-2410**: Direct a mortar section/platoon displacement

**EVALUATION-CODED**: NO  **SUSTAINMENT INTERVAL**: 3 months

**MOS PERFORMING**: 0848

**BILLETS**: 81mm Platoon Sergeant

**GRADES**: SSGT, GYSgt

**INITIAL TRAINING SETTING**: MOJT

**CONDITION**: Given an 81mm mortar section/platoon, a Fire Direction Center (FDC), ammunition, all necessary equipment, and a displacement order.

**STANDARD**: To ensure proper procedures for movement are conducted.

**PERFORMANCE STEPS**:
1. Select next position.
2. Issue order to displace.
5. Conduct "hip shoot", as required.
6. Direct establishment of new position within range of the maneuvering units.
7. Ensure capacity to provide continuous fire support by maintaining communication with the Fire Direction Center (FDC) and the other section.

REFERENCES:
1. FM 23-90 Mortars
2. FM 3-22.91 Mortar Fire Direction Procedures
3. FM 7-90 Tactical Employment of Mortars

0848-RADR-2001: Supervise RADAR Operations

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0848

BILLET: Radar Employment Chief

GRADES: GYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a tactical scenario, a RADAR plan, and a complete RADAR section with organic assets.

STANDARD: To ensure continuous and effective operations IAW the RADAR plan.

PERFORMANCE STEPS:
1. Supervise site selection.
2. Supervise the emplacement.
5. Supervise AN/TPQ-49 (LCMR) operations.
6. Supervise the displacement of the RADAR.

REFERENCES:
1. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. MCTP 3-10E Artillery Operations
3. TM 11652B-OR/1 RADAR Set AN/TPQ-49

0848-RADR-2002: Supervise RADAR Squad Operations

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 6 months
MOS PERFORMING: 0848

BILLETS: Radar Squad Chief

GRADES: SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a RADAR Plan and a RADAR squad with TO&E.

STANDARD: To ensure continuous operations IAW the RADAR Plan.

PERFORMANCE STEPS:
1. Supervise RADAR planning at the squad level.
2. Supervise RADAR emplacement.
3. Supervise RADAR operations.
4. Execute RADAR plan.
5. Supervise the maintenance of RADAR system.
6. Coordinate logistical support for RADAR teams.
7. Supervise RADAR displacement.

REFERENCES:
1. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. MCTP 3-10E Artillery Operations
3. TM 11652B-OR/1 RADAR Set AN/TPQ-49

0848-SENS-2001: Supervise meteorological operations

EVALUATION-CODED: NO  
SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0848

BILLETS: Sensor Chief, Sensor Squad Chief

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a Sensor Plan, equipment organic to the Sensor Section, map of operational area, and the references.

STANDARD: To ensure continuous and accurate meteorological data IAW the Sensor plan.

PERFORMANCE STEPS:
1. Perform site selection.
2. Supervise visual, modeled, and extrapolated met operations.
3. Manage meteorological logistics.
4. Verify MET message accuracy.
5. Supervise the maintenance of equipment.
6. Coordinate, develop, and disseminate the met schedule.
REFERENCES:
1. MCTP 3-10E Artillery Operations
2. MCWP 3-16.4 Tactics, Techniques and Procedures for the Field Artillery
   Manual Cannon Gunnery

0848-SENS-2002: Supervise survey operations

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0848

BILLETS: Sensor Chief, Sensor Squad Chief

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a tactical scenario, a sensor plan, and a sensor section
   TO&E.

STANDARD: To ensure accurate common control IAW MCRP 3-10E.6.

PERFORMANCE STEPS:
1. Perform survey planning.
2. Supervise reconnaissance.
3. Supervise the assumption of survey control.
5. Verify survey data.
6. Verify survey data distribution.

REFERENCES:
1. DMA TM 8358.1 (EDITION 1) DATUMS, ELLIPSOIDS, GRIDS, AND GRID REFERENCES
   SYSTEM
2. DMA TR 8350.2 DoD World Geodetic System 1984
3. MCRP 3-10E.6 Marine Artillery Survey Operations
4. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery
   Target Acquisition
5. MCTP 3-10E Artillery Operations

0848-SENS-2003: Supervise acoustic sensor operations

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0848

BILLETS: Sensor Chief, Sensor Squad Chief

GRADES: SSGT, GYSGT
INITIAL TRAINING SETTING:  FORMAL

CONDITION:  Given a map of AO, Sensor Section TO&E, and the references.

STANDARD:  To ensure continuous acoustic operations IAW the Sensor Plan.

PERFORMANCE STEPS:
1.  Perform sensor planning.
2.  Conduct reconnaissance.
3.  Supervise emplacement.
4.  Supervise command post emplacement.
5.  Verify sensor post health.
6.  Verify sensor post data.
7.  Supervise acoustic processing operations.
8.  Supervise position improvement.
10.  Supervise the maintenance of equipment.

REFERENCES:
1.  MCRP 3-10E.6 Marine Artillery Survey Operations
2.  MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
3.  TM 11138A-OR  Operators Manual Ground Counter Fire Sensor

0848-SENS-2004:  Supervise Geospatial Information Center (GIC) operations

EVALUATION-CODED:  NO  SUSTAINMENT INTERVAL:  6 months

MOS PERFORMING:  0848

BILLETS:  Geospatial Chief, Sensor Chief

GRADES:  SSGT, GYSGT

INITIAL TRAINING SETTING:  FORMAL

CONDITION:  Given a Sensor Plan, a Sensor section TO&E, and the references.

STANDARD:  To ensure continuous and effective operations IAW the Sensor Plan.

PERFORMANCE STEPS:
1.  Supervise the GIC emplacement.
2.  Manage sensor support team operations.
3.  Maintain the common grid.
4.  Supervise sensor operations.
5.  Manage sensor data.
7.  Supervise the GIC displacement.

REFERENCES:
1.  MCRP 3-10E.6 Marine Artillery Survey Operations
2.  MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
3. MCTP 3-10E Artillery Operations

0848-SENS-2005: Conduct reconnaissance

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 6 months

**MOS PERFORMING:** 0848

**BILLETS:** Sensor Chief, Sensor Squad Chief

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a movement order, map of the AO, and sensor section TO&E.

**STANDARD:** To facilitate the movement of supported units.

**PERFORMANCE STEPS:**
1. Verify the friendly and enemy situation.
2. Coordinate the reconnaissance with maneuver units through the artillery headquarters.
3. Conduct a map and imagery reconnaissance.
4. Prepare equipment necessary to extend survey control.
5. Conduct route reconnaissance.
6. Conduct position reconnaissance of areas specified in the reconnaissance order.
7. Confirm suitability of artillery positions.
8. Conduct reconnaissance for supplementary positions as time permits.
9. Report any significant findings/deviations.

**REFERENCES:**
1. FM 5-36 Route Reconnaissance and Classification
2. MCRP 3-10E.6 Marine Artillery Survey Operations
3. MCTP 3-10E Artillery Operations
4. TC 3-25.26 Map Reading and Land Navigation

0848-SENS-2006: Perform Crater Analysis

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 6 months

**MOS PERFORMING:** 0848

**BILLETS:** Sensor Chief, Sensor Squad Chief

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT
CONDITION: Given a crater, shell fragments, equipment organic to your section, map of the AO, and the references.

STANDARD: Determine the location of the crater and the direction to the firing platform within specifications for the equipment used.

PERFORMANCE STEPS:
1. Determine crater position.
2. Determine crater type.
3. Determine the direction.
4. Collect usable shell fragments.
5. Develop shell report.

REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
3. MCTP 3-10E Artillery Operations
4. MCWP 3-16.3 Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery
5. MCWP 3-16.6A Supporting Arms Observer, Spotter and Controller (FMFM 6-8)
6. ST 6-50-20 Battery Executive Officer's/Platoon Leader's Handbook

0848-TAP-2001: Supervise TAP Operations

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0848

BILLETs: Target Acquisition Platoon Chief

GRADES: MGYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given an operations plan, equipment and personnel organic to the TAP, map of operational area, and the references.

STANDARD: To ensure the optimal employment and task organization of the platoon to support operations.

PERFORMANCE STEPS:
1. Coordinate with the Regimental Operations Chief.
2. Ensure the synchronization of tasks within the platoon.

REFERENCES:
1. MCRP 3-10E.6 Marine Artillery Survey Operations
2. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
3. MCTP 3-10E Artillery Operations
4. TM 11652B-OR/1 RADAR Set AN/TPQ-49
0848-TPC-2001: Supervise Target Processing Center (TPC) Operations

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0848

BILLETS: TPC Chief, TPC Team Chief

GRADES: SSGT, GYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a RADAR Plan, equipment and personnel organic to the RADAR section.

STANDARD: To ensure continuous centralized operations IAW the RADAR Plan.

PERFORMANCE STEPS:
1. Supervise TPC emplacement.
2. Supervise the conduct of TPC operations.
3. Supervise TPC personnel in their duties.
4. Manage the TPC integration within the FDC/FSCC.
5. Supervise communications.
6. Coordinate with the GIC chief for all acquisitions.
7. Supervise TPC displacement.

REFERENCES:
1. MCRP 3-10E.7 Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
2. MCTP 3-10E Artillery Operations
3. TM 11652B-OR/1 RADAR Set AN/TFQ-49
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ARTILLERY T&R MANUAL

CHAPTER 17
MOS 0861 INDIVIDUAL EVENTS

17000. PURPOSE. This chapter details the individual events that pertain to Fire Support Marine. 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-XXXX. This chapter utilizes the following methodology:

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0861</td>
<td>Fire Support Marine</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBS</td>
<td>Sensor</td>
</tr>
<tr>
<td>NSFS</td>
<td>Naval surface fire support</td>
</tr>
<tr>
<td>FSCC</td>
<td>Fire support coordination center</td>
</tr>
<tr>
<td>FSC2</td>
<td>Fire support command and control</td>
</tr>
<tr>
<td>MGTF</td>
<td>Force fires coordination center</td>
</tr>
<tr>
<td>PLAN</td>
<td>Planning</td>
</tr>
<tr>
<td>TGT</td>
<td>Targeting</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>Core Plus Skills</td>
</tr>
<tr>
<td>1000</td>
<td>Core Skills</td>
</tr>
</tbody>
</table>

17002. INDEX OF 0861 2000-LEVEL INDIVIDUAL EVENTS

<table>
<thead>
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<th>Event Code</th>
<th>E-Coded</th>
<th>Event</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>0861-FSC2-2001</td>
<td>NO</td>
<td>Setup the Advanced Field Artillery Tactical Data System (AFATDS)</td>
<td>17-4</td>
</tr>
<tr>
<td>0861-FSC2-2002</td>
<td>NO</td>
<td>Receive a Meteorological Computer Message (METCM)</td>
<td>17-5</td>
</tr>
<tr>
<td>0861-FSC2-2003</td>
<td>NO</td>
<td>Build GARS reference system within AFATDS</td>
<td>17-6</td>
</tr>
<tr>
<td>0861-FSC2-2004</td>
<td>NO</td>
<td>Nominate a Kill Box</td>
<td>17-7</td>
</tr>
<tr>
<td>0861-FSC2-2005</td>
<td>NO</td>
<td>Establish MLRS Guidance</td>
<td>17-8</td>
</tr>
<tr>
<td>Code</td>
<td>NO/YES</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
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<td>------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>0861-FSC2-2006</td>
<td>NO</td>
<td>Establish Operational Backup Units to Support Transfer of Control (Continuity Operations Set Up)</td>
<td>17-9</td>
</tr>
<tr>
<td>0861-FSC2-2007</td>
<td>NO</td>
<td>Transfer Control of Fire Mission Processing Between Fire Support Coordination Agencies.</td>
<td>17-9</td>
</tr>
<tr>
<td>0861-FSC2-2008</td>
<td>NO</td>
<td>Create a Future-Plan</td>
<td>17-10</td>
</tr>
<tr>
<td>0861-FSC2-2009</td>
<td>NO</td>
<td>Create Fire Plans Based on Future Operations</td>
<td>17-11</td>
</tr>
<tr>
<td>0861-FSC2-2010</td>
<td>NO</td>
<td>Schedule a Smoke Screen as Part of the Fire Plan</td>
<td>17-11</td>
</tr>
<tr>
<td>0861-FSC2-2011</td>
<td>NO</td>
<td>Plan and Coordinate Position Area Artillery (PAAs) and Fire Support Area (FSAs)</td>
<td>17-12</td>
</tr>
<tr>
<td>0861-FSC2-2012</td>
<td>NO</td>
<td>Conduct Digital Planning Data Exchange</td>
<td>17-13</td>
</tr>
<tr>
<td>0861-FSC2-2013</td>
<td>NO</td>
<td>Process a Fire Mission</td>
<td>17-14</td>
</tr>
<tr>
<td>0861-FSC2-2014</td>
<td>NO</td>
<td>Service a CAS Mission from the CAS Stack</td>
<td>17-15</td>
</tr>
<tr>
<td>0861-FSC2-2015</td>
<td>NO</td>
<td>Troubleshoot a Mission at Intervention Point (IP)</td>
<td>17-16</td>
</tr>
<tr>
<td>0861-FSC2-2016</td>
<td>NO</td>
<td>Create a Named Collaboration Target List (NCTL)</td>
<td>17-16</td>
</tr>
<tr>
<td>0861-FSC2-2017</td>
<td>NO</td>
<td>Conduct collaborative Dynamic Targeting</td>
<td>17-17</td>
</tr>
<tr>
<td>0861-FSC2-2018</td>
<td>NO</td>
<td>Manage Target Area of Interest (TAI) or Named Area of Interest (NAI)</td>
<td>17-18</td>
</tr>
<tr>
<td>0861-FSC2-2019</td>
<td>NO</td>
<td>Create Trigger Events</td>
<td>17-19</td>
</tr>
<tr>
<td>0861-FSC2-2020</td>
<td>NO</td>
<td>Submit an immediate air request (CAS, UAS, Assault support)</td>
<td>17-20</td>
</tr>
<tr>
<td>0861-FSC2-2021</td>
<td>NO</td>
<td>Merge ASLs of Subordinates</td>
<td>17-21</td>
</tr>
<tr>
<td>0861-FSC2-2022</td>
<td>NO</td>
<td>Manage CAS stack</td>
<td>17-21</td>
</tr>
<tr>
<td>0861-FSC2-2023</td>
<td>NO</td>
<td>Request Air Support from DASC or TACC</td>
<td>17-22</td>
</tr>
<tr>
<td>0861-FSC2-2024</td>
<td>NO</td>
<td>Query Targeting List from JTT (JTL, RTL, NSL)</td>
<td>17-23</td>
</tr>
<tr>
<td>0861-FSC2-2025</td>
<td>NO</td>
<td>Query JDPI for a Target from MIDB workspace</td>
<td>17-23</td>
</tr>
<tr>
<td>0861-FSC2-2026</td>
<td>NO</td>
<td>Query JTT for a Target's Attachments or Imagery</td>
<td>17-24</td>
</tr>
<tr>
<td>0861-FSC2-2027</td>
<td>NO</td>
<td>Conduct TNL/ASL development</td>
<td>17-25</td>
</tr>
<tr>
<td>0861-FSC2-2028</td>
<td>NO</td>
<td>Create TNL sub-lists</td>
<td>17-26</td>
</tr>
<tr>
<td>0861-FSC2-2029</td>
<td>NO</td>
<td>Conduct Preplanned Air/ASL development</td>
<td>17-26</td>
</tr>
<tr>
<td>0861-FSC2-2030</td>
<td>NO</td>
<td>Start JTCW/EMT Client</td>
<td>17-27</td>
</tr>
<tr>
<td>0861-FSC2-2031</td>
<td>NO</td>
<td>Create AFATDS JTT connection</td>
<td>17-28</td>
</tr>
<tr>
<td>0861-FSC2-2032</td>
<td>NO</td>
<td>Employ the operations planning tool</td>
<td>17-29</td>
</tr>
<tr>
<td>0861-FSC2-2033</td>
<td>NO</td>
<td>Configure the AFATDS Mobile Tactical Shelter (MTS) for operations</td>
<td>17-30</td>
</tr>
<tr>
<td>0861-FSC2-2034</td>
<td>NO</td>
<td>Utilize available geospatial visualization products (L/S)</td>
<td>17-31</td>
</tr>
<tr>
<td>0861-FSC2-2035</td>
<td>NO</td>
<td>Operate the Joint Tactical Cop Workstation (JTCW)/Command and Control Personal Computer (C2PC)</td>
<td>17-32</td>
</tr>
<tr>
<td>0861-FSC2-2036</td>
<td>NO</td>
<td>Operate the Effects Management Tool (EMT)</td>
<td>17-32</td>
</tr>
<tr>
<td>0861-FSC2-2037</td>
<td>NO</td>
<td>Operate Joint Automated Deep Operations Coordination System (JADOCs)</td>
<td>17-33</td>
</tr>
<tr>
<td>0861-FSC2-2038</td>
<td>NO</td>
<td>Operate the Joint Targeting Toolbox (JTT) in support of deliberate targeting</td>
<td>17-34</td>
</tr>
<tr>
<td>Code</td>
<td>NO/YES</td>
<td>Description</td>
<td>Event Code</td>
</tr>
<tr>
<td>--------------</td>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>0861-FSCC-2001</td>
<td>NO</td>
<td>Supervise the establishment the fire support coordination center (FSCC)</td>
<td>17-35</td>
</tr>
<tr>
<td>0861-FSCC-2002</td>
<td>NO</td>
<td>Perform the duties of a fire support chief (L/S)</td>
<td>17-36</td>
</tr>
<tr>
<td>0861-MGTF-2001</td>
<td>NO</td>
<td>Supervise the establishment of MAGTF CE FECC</td>
<td>17-37</td>
</tr>
<tr>
<td>0861-MGTF-2002</td>
<td>NO</td>
<td>Perform the duties of the Fires and Effects Coordination Chief (L/S)</td>
<td>17-38</td>
</tr>
<tr>
<td>0861-MGTF-2003</td>
<td>NO</td>
<td>Perform the duties of Fires Plans Chief (L/S)</td>
<td>17-39</td>
</tr>
<tr>
<td>0861-MGTF-2004</td>
<td>NO</td>
<td>Perform the duties of the Targeting Chief (L/S)</td>
<td>17-40</td>
</tr>
<tr>
<td>0861-MGTF-2006</td>
<td>NO</td>
<td>Perform the duties of the Current Fires Chief (L/S)</td>
<td>17-42</td>
</tr>
<tr>
<td>0861-OBS-2001</td>
<td>NO</td>
<td>Conduct an abbreviated registration (S/L)</td>
<td>17-43</td>
</tr>
<tr>
<td>0861-OBS-2002</td>
<td>NO</td>
<td>Conduct a high-burst or mean-point-of-impact (MPI) registration (S/L)</td>
<td>17-44</td>
</tr>
<tr>
<td>0861-OBS-2003</td>
<td>NO</td>
<td>Conduct a mortar precision registration (L/S)</td>
<td>17-45</td>
</tr>
<tr>
<td>0861-OBS-2004</td>
<td>NO</td>
<td>Conduct a FASCAM mission (S)</td>
<td>17-46</td>
</tr>
<tr>
<td>0861-OBS-2005</td>
<td>NO</td>
<td>Conduct an ICM mission (S/L)</td>
<td>17-47</td>
</tr>
<tr>
<td>0861-OBS-2006</td>
<td>NO</td>
<td>Conduct Target Mensuration Only (TMO) procedures</td>
<td>17-48</td>
</tr>
<tr>
<td>0861-OBS-2007</td>
<td>NO</td>
<td>Perform crater analysis</td>
<td>17-49</td>
</tr>
<tr>
<td>0861-OBS-2008</td>
<td>NO</td>
<td>Adjust final protective fires (S)</td>
<td>17-50</td>
</tr>
<tr>
<td>0861-OBS-2009</td>
<td>NO</td>
<td>Conduct a destruction mission (S)</td>
<td>17-51</td>
</tr>
<tr>
<td>0861-PLAN-2001</td>
<td>NO</td>
<td>Develop fires products during MCPP</td>
<td>17-51</td>
</tr>
<tr>
<td>0861-PLAN-2002</td>
<td>NO</td>
<td>Produce the Fire Support Execution Matrix (FSEM)</td>
<td>17-53</td>
</tr>
<tr>
<td>0861-TGT-2001</td>
<td>NO</td>
<td>Develop High Pay-Off Target List (HPTL)</td>
<td>17-53</td>
</tr>
<tr>
<td>0861-TGT-2002</td>
<td>NO</td>
<td>Develop a Battlespace Shaping Matrix (BSM)</td>
<td>17-54</td>
</tr>
<tr>
<td>0861-TGT-2003</td>
<td>NO</td>
<td>Support development of Damage Criteria Matrix (DCM)</td>
<td>17-56</td>
</tr>
<tr>
<td>0861-TGT-2004</td>
<td>NO</td>
<td>Produce an Attack Guidance Matrix (AGM)</td>
<td>17-56</td>
</tr>
</tbody>
</table>

17003. 0861 2000-LEVEL INDIVIDUAL EVENTS

**0861-FSC2-2001**: Setup the Advanced Field Artillery Tactical Data System (AFATDS)

**EVALUATION-CODED**: NO  **SUSTAINMENT INTERVAL**: 3 months

**DESCRIPTION**: The proper installation of AFATDS C2 software and the appropriate versions of each application with required software updates (as identified in TAB G and Information Management Tab) is vital to the proper functioning and integration within the C2 architecture.

**MOS PERFORMING**: 0861

**BILLETS**: Fire Support Marine

**GRADES**: PVT, PFC, LCPL, CPL, SGT, SSgt, GYSgt
INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, required AFATDS software, and an operations order.

STANDARD: To ensure systems interoperability supports planning, execution and coordination of fires and targeting processes.

PERFORMANCE STEPS:
1. Review software requirements for each fires C2 system as identified in the TAB G and Information Management Plan.
2. Install AFATDS software.
3. Install Information Assurance (IA) updates.
4. Install the current Joint Master Unit List (JMUL).
5. Configure Windows communications.
6. Set computer time.
7. Update security classification level.
8. Load security certificates.
9. Initiate the AFATDS.
10. Initiate Fires Data Server (FDS) "Application Deployment Tool."
11. Enable services required to support interfaces to other C2 systems and databases.
12. Establish AFATDS Clients.
13. Start AFATDS.
14. Load database.
15. Build communications network(s).
16. Make communications network(s) current.
17. Turn communications networks(s) on.
18. Initiate FDS.
20. Connect FDS.
22. Connect to external clients.
23. Connect to external interfaces.

REFERENCES:
1. JobAid AFATDS Job Aid
2. MCRP 3-16E Fire Support Systems for MAGTF Operations
3. Unit Digital SOP for Fire Support C2 Systems

0861-FSC2-2002: Receive a Meteorological Computer Message (METCM)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: AFATDS provides an automated capability for fire planning. The AFATDS workstation receives, displays and processes a METCM to conduct more effective fire data.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine
GRADES:  PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT, MSGT

INITIAL TRAINING SETTING:  MOJT

CONDITION:  Given a functional AFATDS workstation, a functional communications network, Operation Order (OpOrd).

STANDARD:  To provide accurate and predicted fires in support of the concept of operations.

PERFORMANCE STEPS:
1. Request supporting FDC transmits METCM to the supported fire support agency access window and initiate startup procedures.
2. Access the MET workspace to display transmitted METCM.
3. Identify/named received MET and make current.
4. Access/View Pasquil, enter pertinent data, and save.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2003:  Build GARS reference system within AFATDS

EVALUATION-CODED:  NO  SUSTAINMENT INTERVAL:  3 months

DESCRIPTION:  AFATDS provides the ability to build and visualize the Common Grid Reference System/Global Area Reference System CGRS/GARS reference system to support Kill Box operations in accordance with Joint references. A CGRS is a reference system based on lines of latitude (LAT) and longitude (LONG), which is established by a the JFACC, to provide an integrated common frame of reference for joint force situational awareness to facilitate attack coordination, deconfliction, integration, and synchronization. This reference system provides a common language between the components and simplifies communications (MCRP 3-25H Multi-Service TTP for Kill Box Employment). Global Area Reporting System (GARS) has replaced CGRS. Where CGRS is a locally defined system, GARS is a world-wide system that covers the earth from the South Pole to North Pole.

MOS PERFORMING:  0861

BILLETS:  Fire Support Marine

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

INITIAL TRAINING SETTING:  MOJT

CONDITION:  Given a functional AFATDS workstation, a TAB G, a functional communications network, and an operations order.
STANDARD: To provide timely and coordinated fires in support of the concept of operations.

PERFORMANCE STEPS:
1. Access CGRS workspace in current
2. Identify and label theater CGRS in accordance with designated naming convention.
3. Provide amplifying data to support operator understanding of GARS structure.
4. Define starting point with south-west corner location of GARS.
5. Define number of cells for area of operation.
6. Define structures of cells.
7. Label starting point.
8. Display the GARS on the AFATDS Map.
9. Distribute GARS.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCRP 3-25H Multi-Service Tactics, Techniques, and Procedures for Killbox Employment
5. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2004: Nominate a Kill Box

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: AFATDS provides the ability to nominate the CGRS/GARS reference system to support kill box operation in accordance with Joint references. This functionality supports the integration of air and surface fires to maximize fire support integration in support of maneuver.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, a TAB G, a functional communications network, and an operations order.

STANDARD: To provide timely and coordinated fires in support of the concept of operations.

PERFORMANCE STEPS:
1. Access CGRS workspace.
2. Access nominations tab.
3. Create nomination with all pertinent request data.
4. Submit nomination.
REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCRP 3-25H Multi-Service Tactics, Techniques, and Procedures for Killbox Employment
5. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2005: Establish MLRS Guidance

EVALUATION-CODED: NO          SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: AFATDS provides the ability to establish MLRS guidance to support execution of rocket operations. This guidance must be coordinated with the supporting artillery FDC. This guidance includes dwell time, the longest period of time a Self-Propelled Loader/Launcher (SPLL) should remain at a firing point after firing this allows a fire plan to be scheduled with multiple aim points to each launcher.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, a TAB G, a functional communications network, and an operations order.

STANDARD: To provide timely, accurate and predictive fires in support of the concept of operations.

PERFORMANCE STEPS:
2. Access Rocket/Missile folder.
3. Establish guidance in accordance with OpOrd and/or SOP.
4. Save Guidance.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2006: Establish Operational Backup Units to Support Transfer of Control (Continuity Operations Set Up)

EVALUATION-CODED: NO          SUSTAINMENT INTERVAL: 3 months
DESCRIPTION: AFATDS provides the ability to support continuity of operations. This functionality supports both planned and unplanned passage of control between headquarters/units or elements within the same unit. This will affect data-distribution as well as mission processing.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, a TAB G, a functional communications network, and an operations order.

STANDARD: To provide uninterrupted fire support operations.

PERFORMANCE STEPS:
1. Access Unit workspace.
2. Establish unit continuity operations data.
3. Save continuity operations configuration.
4. Distribute continuity operations configuration.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element


EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: AFATDS provides the ability to support continuity operations (CONOPS). This functionality supports both planned and unplanned passage of control between headquarters/units or elements within the same unit. This will allow a transfer of control during mission processing.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, a TAB G, a functional communications network, operations order, and a requirement to support current or future maneuver.
STANDARD: To provide uninterrupted digital fire support operations.

PERFORMANCE STEPS:
1. The principle initiates transfer of control using planned continuity operations procedures.
2. The backup unit performs planned continuity operations procedures.
3. Satellite units perform planned continuity operations procedures.
4. All stations exit continuity operations.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Note. If Loss of Communication by principal unit, back up unit will initiate transfer of continuity of operations.

0861-FSC2-2008: Create a Future-Plan

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: AFATDS provides the ability to plan for future phases, stages, and parts of an operation. When conducting a future plan AFATDS allows the operator to create the situation either by utilizing the current situation or creating the friendly task organization for a specific phase/stage/part, projected enemy layout, and provides guidance for the plan.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

GRADES: PVT, PFC, LCPL, CPL, SGT, SSgt, GYSgt, MSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, a TAB G, a functional communications network, and an operations order/FRAGO.

STANDARD: To execute a specific future plan or transition into the next phase/stage/part of an operation.

PERFORMANCE STEPS:
2. Establish plan name.
3. Select the source of the starting database for the plan.
5. Access Planning, Select COA to conduct any addition planning needed.
6. Save plan.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2009: Create Fire Plans Based on Future Operations

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: AFATDS provides the ability to create a fire plan within future phases, stages, and parts of an operation.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, a TAB G, a functional communications network, and an operations order/FRAGO.

STANDARD: Execute a fire plan specific to a future phase/stage/part of an operation.

PERFORMANCE STEPS:
1. Open future plan.
2. Move appropriate fires support assets to planned position area for artillery (PAAs) and fire support areas (FSAs).
3. Correct/update fire support asset guidance to support the fire plan.
4. Create fire support (FS) system tasks guidance to support the fire plan.
5. Target for the fire plan.
6. Create a fire plan.
7. Save plan.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2010: Schedule a Smoke Screen as Part of the Fire Plan

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: AFATDS provides the ability to create a smokescreen within a fire plan as a part of future phases, stages, and parts of an operation.
MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, a TAB G, a functional communications network, and an operations order/FRAGO.

STANDARD: Execute a smokescreen within a fire plan specific to a future phase/stage/part of an operation.

PERFORMANCE STEPS:
1. Locate the smoke screen target on the fire plan’s target list.
2. Access munitions tab and enter pertinent data (Shell, Screen Length, Wind Direction, Weather Condition, and Type of Screen).
3. Save the updated target.
4. Add the target to the fire plan schedule.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2011: Plan and Coordinate Position Area Artillery (PAAs) and Fire Support Area (FSAs)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: AFATDS provides the ability to plan, coordinate, and implement PAAs and FSAs.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, a TAB G, a functional communications network, operations order and a requirement to support current or future maneuver.

STANDARD: Create a PAA or FSA within a plan for a future phase/stage/part of an operation and implement.

PERFORMANCE STEPS:
1. PLANS AFATDS creates planned PAA/FSA locations.
2. PLANS AFATDS implements the PAAs and FSAs into the current situation.
3. PLANS JTCW/EMT creates desired PAAs and FSAs into a planning overlay.
4. PLANS AFATDS coordinates with maneuver G-3s/S-3s in whose zones the
   PAAs.
5. PLANS AFATDS coordinates with MCC for placement of FSAs.
6. PLANS AFATDS adjusts PAA and FSA locations as required.
7. PLANS AFATDS deletes implemented PAAs and FSAs from the current plan.
8. PLANS JTCW/EMT deletes PAA overlay from the NETWORK folder and the local
   computer.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2012: Conduct Digital Planning Data Exchange

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: AFATDS provides the ability to conduct fires planning and
   disseminate throughout subordinate commands.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, a TAB G, a functional
   communications network, and an operations order/FARGO.

STANDARD: Create and disseminate a future plan to all subordinate commands
   and implement.

PERFORMANCE STEPS:
1. Actions from Plans to Current: Plans creates Future Plan Phase.
2. Plans transmits Future Plan Phase to MSC's Plans AFATDS.
3. Plans Hands-off MAGTF Future Plan Phase to MAGTF CURR AFATDS.
4. CURR AFATDS Receives and stores MAGTF Future Plan Phase.
5. CURR AFATDS Implements MAGTF Future Plan Phase into Current Situation.
6. CURR AFATDS Automatically transmits updated unit data and geometry to
   MSCs.
7. CURR AFATDS Transmits guidance to MSCs.
8. Actions from HHQ to MSCs: MSC Plans AFATDS Receives MAGTF future plan
   phase guidance, target lists and fire plans to subordinates.
9. GCE Plans AFATDS Creates GCE Plan Phase by copying all data from the
   MAGTF Plan Phase.
10. GCE Plans AFATDS Makes changes to GCE Plan Phase to reflect needs of
    GCE.
11. GCE Plans AFATDS Transmits Future Plan Phase to subordinate’s Plans
    AFATDS.
12. GCE Plans Hands-off GCE Future Plan Phase to GCE CURR AFATDS.
13. GCE FSCC AFATDS Receives and stores GCE Future Plan Phase.
14. GCE FSCC AFATDS Implements GCE Future Plan Phase into Current Situation.
15. GCE FSCC AFATDS Automatically transmits updated unit data and geometry to subordinates.
16. GCE FSCC AFATDS Transmits guidance, target lists and fire plans to subordinates.
18. RCT/BN Plans AFATDS Create RC Plan Phase by copying all data from the GCE Plan Phase.
19. RCT Plans AFATDS Makes change to RCT Plan Phase to reflect needs of RCT.
20. RCT Plans AFATDS Transmits Future Plan Phase to BN FSCC AFATDS and to DS BN FDC AFATDS.
21. RCT Plans AFATDS Hand-off RCT Future Plan Phase to RCT FSCC AFATDS.
22. RCT FSCC AFATDS Receives and stores RCT Future Plan Phase.
23. RCT FSCC AFATDS Implements RCT Future Plan Phase into Current Situation.
24. RCT FSCC AFATDS Automatically transmits updated unit data and geometry to BNs.
25. RCT FSCC AFATDS Transmits guidance, target lists and fire plans to BNs.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2013: Process a Fire Mission

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: AFATDS provides the ability to receive, initiate, deconflict, and execute kinetic fires.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, a TAB G, a functional communications network, and an operations order.

STANDARD: Receive or initiate fire mission, select appropriate fire support system, conduct deconfliction, and End of Mission (EOM) procedures.

PERFORMANCE STEPS:
1. Open Intervention Protocol (IP) icon upon audible.
2. View Target Information.
3. Identify desired fire support system.
4. View coordination requirements.
5. Select fire support system button as required (FA Cannon etc).
6. Send Selected/Accept recommendations.
7. Troubleshoot as required.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2014: Service a CAS Mission from the CAS Stack

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: AFATDS provides the ability to process a CAS.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, a TAB G, a functional communications network, and an operations order.

STANDARD: Receive or initiate air request, conduct deconfliction.

PERFORMANCE STEPS:
1. Open Intervention Protocol (IP) icon upon audible and/or visible alert.
2. View Target Information.
3. Decision is made to employ an aviation asset that is available and on station.
4. Transmit mission to DASC/TACC.
5. Troubleshoot as required.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2015: Troubleshoot a Mission at Intervention Point (IP)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months
**DESCRIPTION:** AFATDS provides operators/supervisors the ability to review mission data to make appropriate modifications to facilitate integration and execution.

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Marine

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

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a functional AFATDS workstation, a TAB G, a functional communications network, and an operations order.

**STANDARD:** Receive and execute mission utilizing the best fire support option in order to support maneuver.

**PERFORMANCE STEPS:**
1. Open Intervention Protocol (IP) icon upon audible and/or visible alert.
2. Verify System, Preferences, Mission Processing and the Attack Analysis Level is set to FS System.
3. Verify within the Guidance Workspace that the system attack parameters have been entered.
4. Make appropriate adjustments.

**REFERENCES:**
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

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**0861-FSC2-2016:** Create a Named Collaboration Target List (NCTL)

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**DESCRIPTION:** AFATDS has the ability to provide multi-echelon collaboration rooms to facilitate planning, coordination, and execution of dynamic targets.

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Marine

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

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a functional AFATDS workstation, a TAB G, a functional communications network, Operations order.

**STANDARD:** To build collaboration room with the appropriate structure and permission.
**PERFORMANCE STEPS:**
1. Create the target list (i.e. Name list appropriately).
2. Identify list as a NCTL.
5. Setup Agencies.
7. Setup Reason Codes.
8. Setup Status Indicators.
9. Setup Target Indicators.
10. Setup CoT Status Indicators.
11. Activate list.
12. Send list to community of interest.

**REFERENCES:**
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

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**0861-FSC2-2017:** Conduct collaborative Dynamic Targeting

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**DESCRIPTION:** AFATDS provides the ability to conduct multi echelon collaboration in the coordination, and execution of dynamic targets.

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Marine

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

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a functional AFATDS workstation, a TAB G, a functional communications network, and an operations order.

**STANDARD:** Collaboratively process a target acquired via an ISR asset that meets targeting guidance in a timely manner in support of the concept of operations.

**PERFORMANCE STEPS:**
1. Add Target to NCTL from Fires Web Portal.
2. Conduct initial validating and vetting to determine the appropriate NCTL for processing.
3. FECC/FSCC WOs, CEWCC, MSCs and other staff conduct analysis of target based on: (Location, Threats, Review of available assets/Range, ROE, CDE, target guidance, and ensuring target still meets TSS).
4. Community of interest provide input.
5. FSC/FSO/Chief determines the best weapon/target (unit, weapon platform and ordnance) base voting and coordination requirements.
6. FSC/FSO/Chief conducts coordination and provides any additional instructions.
7. Initiate execution.
8. Coordinate BDA and assessment.
9. Conduct Re-attack Assessment and Re-attack Decision.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2018: Manage Target Area of Interest (TAI) or Named Area of Interest (NAI)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: AFATDS can create target area of interest and named area of interest geometries. These are then ranked to give priority to fire missions that plot inside the NAI or TAI. The NAI or TAI can also be linked to trigger events.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, a TAB G, a functional communications network, and an operations order.

STANDARD: Collaborate with the G/S2 develop, manage TAI and NAI in accordance with the Attack Guidance Matrix (AGM) to support targeting guidance execution.

PERFORMANCE STEPS:
1. Receive overlay from G-2/S-2 via EMT.
2. Create TAI and DPs.
3. Creates trigger events on the TPLs, NAI, TAI and DPs.
4. G-2/S-2 receives report that meets CCIR.
5. G-2/S-2 creates target in EMT in the IOC NCTL or TARGET INTEL NCTL.
6. RTC/TIO decides target meets guidance, moves to DYNAMIC TARGET NCTL (See dynamic target collaboration T&R task).
7. Save and ensure TAI value is stored.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
**0861-FSC2-2019**: Create Trigger Events

**EVALUATION-CODED**: NO  **SUSTAINMENT INTERVAL**: 3 months

**DESCRIPTION**: AFATDS provides the ability to automatically initiate events (messages, targets, fire plans, and fire missions) based on criteria developed in planning (Decision Support Matrix, Targeting Guidance, EFSTs, etc’).

**MOS PERFORMING**: 0861

**BILLETS**: Fire Support Marine

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

**INITIAL TRAINING SETTING**: MOJT

**CONDITION**: Given a functional AFATDS workstation, a TAB G, Decision Support Template, a functional communications network, and an operations order.

**STANDARD**: To develop trigger events that support the operation order for a specific phase, stage, or part.

**PERFORMANCE STEPS**:
1. Initiate the Trigger Event tool on the AFATDS Current menu bar.
2. Initiate the new button and enter pertinent data (Name (accordance w/ FSCC quick reference guide), Unit/Target-Related, Item ID and select Any Enemy Unit, Reported and select Reported In area, associated Geometry (TPL, NAI, DP, or TAI).
3. Initiate the activation actions tab.
4. Initiate the desired actions to take place when the unit moves into/through the geometry (TPL, NAI, DP, or TAI).
5. Add in the comments field include notes to aid in identifying the reason the trigger was created.
6. Initiate the apply button.

**REFERENCES**:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

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**0861-FSC2-2020**: Submit an immediate air request (CAS, UAS, Assault support)

**EVALUATION-CODED**: NO  **SUSTAINMENT INTERVAL**: 3 months

**DESCRIPTION**: AFATDS provides the ability to submit immediate air request to meet operational requirements.

**MOS PERFORMING**: 0861

**BILLETS**: Fire Support Marine
GRADES:  PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT, MSGT

INITIAL TRAINING SETTING:  MOJT

CONDITION:  Given a functional AFATDS workstation, a TAB G, a functional communications network where the MAW has interfaced AFATDS with TBMCS, and an Operations order.

STANDARD:  To facilitate timely requests for support in accordance with operational requirements.

PERFORMANCE STEPS:
1.  Initiate Target Workspace tool on the AFATDS Current menu bar.
2.  Initiate Current in the tree panel to the left.
4.  Identify the ASL name.
5.  Enter the starting date-time group of the ATO day.
6.  Enter the ending date-time group of the ATO day.
7.  Enter the two letter ATO day designator.
8.  Save ASL shell.
9.  Within the desired ASL displayed in the Target Workspace, initiate the Create New Mission tool.
10.  Identify the type of desire mission (CAS, Air Assault, and Reconnaissance for UAS).
11.  Enter pertinent mission data (time, location, target data, cargo, ordnances, etc).
12.  Initiate OK to save.
13.  Submit immediate to DASC/TACC.

REFERENCES:
1.  AFATDS FSCC JOB AIDS
2.  JobAid AFATDS Job Aid
3.  MCRP 3-16E Fire Support Systems for MAGTF Operations
4.  MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2021:  Merge ASLs of Subordinates

EVALUATION-CODED:  NO  SUSTAINMENT INTERVAL:  3 months

DESCRIPTION:  AFATDS provides the ability to merge subordinate air request and forward to higher or appropriate air agency.

MOS PERFORMING:  0861

BILLETS:  Fire Support Marine

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

INITIAL TRAINING SETTING:  MOJT
CONDITION: Given a functional AFATDS workstation, a TAB G, a functional communications network where the MAW has interfaced AFATDS with TBMCS, and an operations order.

STANDARD: To submit a consolidated list of air requests.

PERFORMANCE STEPS:
1. Upon receiving an ASL from a subordinate FSCC initiate the Target Workspace tool on the AFATDS Current menu bar.
2. Double-click on your ASL in the tree panel to the left.
3. Initiate on the ASL of the subordinate FSCC in the tree panel to the left.
4. Right-click on the subordinate’s ASL and select Merge.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2022: Manage CAS stack

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: AFATDS provides the ability to conduct CAS stack management.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, a TAB G, ATO, ACO a functional communications network where the MAW has interfaced AFATDS, CAC2S, and TBMCS, an operations order, and aircraft.

STANDARD: To coordinate use of on-station CAS platforms.

PERFORMANCE STEPS:
1. Establish Airspace Coordinating Measures (ACMs) for staging of aircraft.
2. Assign XCAS to appropriate ACM.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
**0861-FSC2-2023:** Request Air Support from DASC or TACC

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**DESCRIPTION:** AFATDS provides the ability to submit air request to appropriate air agency for servicing.

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Marine

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSgt, GYSgt, MSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a functional AFATDS workstation, a TAB G, ATO, ACO a functional communications network where the MAW has interfaced AFATDS, Cac2S, and TBMCS, and an operations order.

**STANDARD:** To provide timely air support in accordance with operational requirements.

**PERFORMANCE STEPS:**
1. Initiate the IP icon when it turns red.
2. Click the Air button at IP and a list of available air missions displays when the decision is made to employ air that is on station.
3. At the BN FSCC or REGT FSCC select the option for your next higher FSCC.
4. At Div FSCC, select the option for the DASC.
5. At the MEF/MEB FECC select the option for the TACC.

**REFERENCES:**
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

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**0861-FSC2-2024:** Query Targeting List from JTT (JTL, RTL, NSL)

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**DESCRIPTION:** AFATDS provides the ability to query different types of Targeting Lists in order to support the MAGTF deliberate targeting effort.

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Marine

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSgt, GYSgt, MSGT

**INITIAL TRAINING SETTING:** MOJT
**CONDITION:** Given a functional AFATDS workstation, approved targeting guidance, a functional communications network where the deliberate targeting cell at the AOC interfaced AFATDS and JTT.

**STANDARD:** To conduct queries to support the development of the MAGTF Target Nomination List (TNL) created by the MAGTF CE and its MSCs.

**PERFORMANCE STEPS:**
1. At the external services workspace determine which request criteria (i.e. single request, periodic request, and request by target list) needs to be checked.
2. Determine whether the target list will be requested by type or by name and initiate the select items tab.
3. If by type is selected, determine from a possible target lists option in the "available items" window the desired list(s) by type (JTL, RTL, and NOS for NSL).
4. If by name is selected, determine from a possible set of named target list options in the "available items" window the desired list(s) by the name.
5. Move desired list(s) to "selected items" window, highlight desired list and select "request data".
6. Once data has been requested, a medium level alert is received, and data is populated in the MIDB workspace at the DTC AFATDS, the DTC will disseminate data.

**REFERENCES:**
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

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**0861-FSC2-2025:** Query JDPI for a Target from MIDB workspace

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**DESCRIPTION:** AFATDS provides the ability to query JDPIs for specific targets on Targeting Lists in order to support the MAGTF deliberate targeting effort.

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Marine

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

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a functional AFATDS workstation, approved targeting guidance, a functional communications network where the deliberate targeting cell at the AOC interfaced AFATDS and JTT.

**STANDARD:** To conduct queries to support the development of the MAGTF Target Nomination List (TNL) created by the MAGTF CE and its MSCs.
PERFORMANCE STEPS:
1. At the MIDB facilities workspace under the targeting tab, the operator will select the desired target list to work from.
2. Determine what target(s) that the JDPIs are needed and request JDPIs from the option tab.
3. Check the JDPI tab under the desired target to ensure data has been received.
4. Once data has populated the JDPI tab at the DTC AFATDS, the DTC will disseminate data.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2026: Query JTT for a Target's Attachments or Imagery

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: AFATDS provides the ability to query from JTT ETFs Attachments or Imagery for specific targets on Targeting Lists in order to support the MAGTF deliberate targeting effort.

MOS PERFORMING: 0861
BILLETS: Fire Support Marine
GRADES: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT, MSGT
INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, approved targeting guidance, a functional communications network where the deliberate targeting cell at the AOC interfaced AFATDS and JTT.

STANDARD: To conduct queries to support the development of the MAGTF Target Nomination List (TNL) created by the MAGTF CE and its MSCs.

PERFORMANCE STEPS:
1. At the MIDB facilities workspace under the targeting tab, the operator will select the desired target list to work from.
2. Determine what target(s) that the attachments or imagery are needed and request (attachment or imagery) from the option tab.
3. Check for attachment or imagery under computer downloads to ensure data has been received.
4. Once data has received at the DTC AFATDS, the DTC will disseminate data.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
5. Unit Digital SOP for Fire Support C2 Systems

**0861-FSC2-2027:** Conduct TNL/ASL development

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**DESCRIPTION:** AFATDS provides the ability to develop a MAGTF TNL in order to support the MAGTF deliberate targeting effort.

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Marine

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

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a functional AFATDS workstation, approved targeting guidance, a functional communications network where the deliberate targeting cell at the AOC interfaced AFATDS and JTT.

**STANDARD:** To develop MAGTF Target Nomination List (TNL) to set conditions to meet the commander’s end-state.

**PERFORMANCE STEPS:**
1. MAGTF CE and MSCs will create ASL with the appropriate ATO Day and start and end time based on theater SOP.
2. Once ASL is created initiated TNL view and initiate create target.
3. From appropriate JTL search and select targets that meet deliberate targeting guidance and place on desired ASL.
4. For each target selected provide appropriate data. This would possibly include when, specific JDPIs shall be struck, desired effects, justification, any required attachment or imagery from ETFs.
5. If TNL received from subordinates, merge and check for duplicate targets.
6. At MAGTF CE change ranking placement on TNL as required.
7. Save list.

**REFERENCES:**
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

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**0861-FSC2-2028:** Create TNL sub-lists

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months
DESCRIPTION: AFATDS provides the ability to develop sub-list of the MAGTF TNL in order to identify targets that will be submitted to Direct Source ATO, Common Source ATO, Rocket Fire plans, or for Non-kinetic engagements.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, approved targeting guidance, a functional communications network where the deliberate targeting cell at the AOC interfaced AFATDS and JTT, and where the MAW has interface AFATDS to TBMCS.

STANDARD: To determine how to best resource each target and assign them to the appropriate sub-list.

PERFORMANCE STEPS:
1. At MAGTF CE and at the MSCs within target workspace under the list tab, the operator will create new sub-list through the manage ASL sub-list.
2. Provide the appropriate detail data to the sub-list (Name and whether to update when ATO received).
3. At the default list determine which targets need to be moved to a sub-list or need to be on multiple sub-list and take the appropriate actions.
4. Send each list to the appropriate command or agencies.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2029: Conduct Preplanned Air/ASL development

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: AFATDS provides the ability to develop preplanned air request.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT
CONDITION: Given a functional AFATDS workstation, Tab G, approved target list, a functional communications network where the MAW has an interface between AFATDS and TBMCS.

STANDARD: To submit to the TACC for preplanned air support inclusion on the direct source ATO.

PERFORMANCE STEPS:
1. Create the Air Support.
2. Add nominations to the ASL (XCAS request, UAS support, Air Assault Support) If subordinate FSCCs nominate ASLs, merge their ASLs with yours.
3. Nominate the ASL to higher.
4. Wait for the release of the ATO to update your ASL and those of your subordinates.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2030: Start JTCW/EMT Client

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: AFATDS support JTCW/EMT clients. EMT will support the exchange of data and support select AFATDS functionalities.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, A JTCW/EMT, a TAB G, and a functional communications network.

STANDARD: To establish the appropriate JTCW/EMT clients with the required permission to support planning, coordination, and execution of fire support.

PERFORMANCE STEPS:
1. Start C2PC.
2. Start EMT.
3. Input required host AFATDS information.
4. Log On to AFATDS.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2031: Create AFATDS JTT connection

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: AFATDS supports JTT interface.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a functional AFATDS workstation, a TAB G with relevant system configuration and network communications information, and a functional communications network, where deliberate targeting cell has the appropriate JTT role and responsibilities (RESPRODS) and login permission from the GCCS-J and JTT administrators.

STANDARD: To establish connection to JTT.

PERFORMANCE STEPS:
1. Load appropriate certificates loaded into your trust store to allow your AFATDS to connect to JTT via GCCS-J.
2. Access FDS application deployment tool and initiate JTT adapter.
3. Provide the required information in connection details window. This would include the IP address of the GCCS-J machine that hosts JTT, Username and password.
4. Enable JTT connection and monitor connection status indicator to ensure connection success.

REFERENCES:
1. AFATDS FSCC JOB AIDS
2. JobAid AFATDS Job Aid
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSC2-2032: Employ the operations planning tool

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months
DESCRIPTION: Used by all elements of the MAGTF, the Plans Application Extension (PAE) is a software extension of the Command and Control Personal Computer (C2PC) software application that resides on the Joint Tactical Common Operational Picture Workstation (JTCW) PAE; it assists the commander in creating operations orders, and is designed to walk the user through the Marine Corps Planning Process to include; Course of Action (COA) development/analysis, and war gaming, while collaborating with other members of the operational Planning Teams (OPT) at various echelons of command. PAE allows the user to define tasks, see the effect during a period of time, import various databases, share the plans with others using the Planning Injector feature, define multiple courses of action, display graphic control measures, and produce reports such as FRAGOs and annexes.

MOS PERFORMING: 0861

BILLETS: Current Fires Chief, FECC Chief, Fire Support Chief, Fires Plans Chief, Targeting Chief

GRADES: SSGT, GYSGT, MSGT, MGYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a computer with current version of JTCW software installed, a functioning network, an operations order, and commander's guidance.

STANDARD: To create a fully-developed course of action that satisfies the commander's decision-making requirements.

PERFORMANCE STEPS:
1. Activate the planning tool.
2. Identify main features of the planning tool.
3. Identify the tabs in the planning tool's workspace.
4. Access the planning tool's toolbars.
5. Configure the planning tool's options.
6. Create a mission file.
7. Build a reference task organization.
8. Create graphic control measures.
9. Establish routes.
10. Create basic unit tasks.
11. Plan an air assault.
12. Plan an expeditionary operation.
13. Collaborate with other OPT members.
14. Create storyboards.
15. Utilize the COA sketcher.
16. Utilize the COA browser.
17. Monitor the Marine Corps planning process with the planning assistant tool.
18. Generate reports.

REFERENCES:
1. ADP 1-02 Terms and Military Symbols
2. CM# 88216 User's Manual (UM) for Command and Control PC (C2PC)
3. MCDP 5 Planning
4. MCWP 5-10 Marine Corps Planning Process

MISCELLANEOUS:
ADMINISTRATIVE INSTRUCTIONS: This training can be executed at MAGTF Integrated Training Center (MISTC); units should contact the local MISTC to schedule training.

SPECIAL PERSONNEL CERTS: Students should have a valid course completion certificate for the C2PC Operator course offered at all MISTCs in order to complete this task.

0861-FSC2-2033: Configure the AFATDS Mobile Tactical Shelter (MTS) for operations

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: Operators and systems administrators of units owning the MTS must be familiar with the required processes to establish planned and ad-hoc communications networks within the fires C2 Systems configuration. Although planned networks and required data for each network should be addressed in the appropriate Exhibit within the Tab G; operators must understand the proper configuration, power management, and communications capabilities, (i.e., via combat net radios, EPLRS, LAN, and wire network communications) with the MTS to establish primary, secondary, and tertiary planned communications.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

GRADERS: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT, MSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given operational MTS, required communications equipment, fire support workstations, mission, tasks and objectives as a member of a Bn/Reg FSCC, Tab G (Marine Corps Fire Support Systems Plan), to Appendix 19 (Fire Support), to Annex C (Operations) to the Operations Order, commander’s guidance and references.

STANDARD: To ensure fires C2 systems connectivity is established to support planning, execution and coordination of fires with MTS.

PERFORMANCE STEPS:
1. Ensure MTS power grids are operational
2. Properly install required MTS equipment (i.e., communications equipment, power converter-conditioner, workstations, printer, etc.)
3. Coordinate with a Data Marine to configure the MTS digital switch for network operations within the COC network switch, and enable LAN ports 5 and 6 on the Tent Interface Panel (TIP).
4. Properly power-up the MTS.
5. Properly initialize communications equipment and workstations.
6. Implement and maintain primary communications networks.
7. Edit a planned communications configuration, as required.
8. Implement alternate communications configurations to support the operation, as required.
9. If required, react to failed communications.

REFERENCES:
1. MCRP 3-16E Fire Support Systems for MAGTF Operations
2. TB 11-7025-297-10 AFATDS Operators Notebook
4. Unit Digital SOP for Fire Support C2 Systems

0861-FSC2-2034: Utilize available geospatial visualization products (L/S)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: Various mapping applications (i.e., Open-Map, JMTK, Google Earth and Falcon View) can be used as a Geospatial visualization tool and can be used to support planning and coordination of fires.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a C2 workstation with the appropriate mapping tools, products, and an operations order.

STANDARD: To display appropriate map data in order to support planning, execution, and coordination of fires.

PERFORMANCE STEPS:
1. Load appropriate mapping products (i.e., CADRG, CIB, DTED, DPPDB, etc.).
2. Display appropriate map products.
3. Use appropriate map data, as required.

REFERENCES:
1. JADOCs version BC 10.x.x Joint Automated Deep Operations Coordination System USMC Job Aids
2. TM 11-7025-279-10-1 AFATDS Users Manual

SUPPORT REQUIREMENTS:

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17-31 Enclosure (1)
0861-FSC2-2035: Operate the Joint Tactical Cop Workstation (JTCW)/Command and Control Personal Computer (C2PC)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: JTCW (C2PC) is directed by Marine Corps System Command (MARCORSYSCOM) as the primary Common Tactical Picture (CTP) for the Marine Corps for units at the Regimental level and below. It provides a "Near Real-time" digital display of the CTP. JTCW can be used as a planning tool for Operational Planning Teams (OPT) through the ability to create and share Digital Overlays.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a computer with the current version of JTCW installed, a functional network and Common Tactical Picture (CTP)/Common Operational Picture (COP) architecture.

STANDARD: To receive, produce and display timely and accurate track data and geometries to support staff requirements for operations planning and execution.

PERFORMANCE STEPS:
1. Perform a role-based log in.
2. Apply the toolbar functions of C2PC/JTCW Client toolbars.
3. Configure the C2PC/JTCW gateway manager.
4. Configure the C2PC/JTCW Client.
5. Employ mapping products in C2PC/JTCW Client.
6. Apply the functions of the Routes Application Extension (AE).
7. Apply the functions of the Overlays AE.
8. Manipulate the Track plot AE.

REFERENCES:
1. JTCW Users Manual
2. MCRP 3-16E Fire Support Systems for MAGTF Operations

0861-FSC2-2036: Operate the Effects Management Tool (EMT)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months
DESCRIPTION: EMT allows AFATDS fires graphics and units to be synchronized with the Joint Tactical COP Workstation (JTCW) (maneuver) picture, providing one common C2 picture for the maneuver commander. This is done by rendering FSCMs and graphics from AFATDS into the JTCW overlay manager and provides a means to transfer JTCW overlays into the AFATDS database. EMT interoperability with JTCW enables position reports generated in AFATDS to pass to the JTCW, as well as JTCW tracks to transfer into AFATDS, via a data exchange handler. EMT also allows key decision makers within the COC to view and manage data within the AFATDS, such as target lists, geometries, and basic fire mission processing without having an in-depth knowledge of the complexity of the system.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given an AFATDS system and an EMT client, an operations order, and a communications network.

STANDARD: To provide a timely, accurate and detailed battlespace view for planning and coordination of fires.

PERFORMANCE STEPS:
1. Create EMT client within AFATDS.
2. Establish a connection and activate data exchange controller.
3. Apply the functions of the main menu bar.
4. Locate C2PC overlays.
5. Set up user preferences.
6. Load map products.
7. Filter unit data.

REFERENCES:
1. EMT 6.4 Effects Management Tool User Manual 6.4
2. JobAid AFATDS Job Aid
3. JTCW Users Manual
4. MCRP 3-16E Fire Support Systems for MAGTF Operations

0861-FSC2-2037: Operate Joint Automated Deep Operations Coordination System (JADOCS)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: JADOCS is a software application consisting of managers, databases, and tables that present and manipulate C4I information and communications interfaces to and from various C2 and C4I systems to obtain, coordinate, and disseminate this information. The JADOCS application can reside on any Commercial Off-the-Shelf (COTS) computer with a Windows OS and connected to the appropriate theater networks.
MOS PERFORMING: 0861

BILLIETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a computer with JADOCS installed, an operations order, and a communications network.

STANDARD: To provide a timely, accurate and detailed battlespace view for planning and coordination of fires.

PERFORMANCE STEPS:
1. Set user preferences within JADOCS.
2. Configure JADOCS View Options.
3. Manage JADOCS Overlays.
4. Apply the functions of Tools within JADOCS.
5. Employ Map functions.
6. Identify required JADOCS Managers to monitor.
7. Monitor JADOCS Managers.

REFERENCES:
1. JADOCS version BC 10.x.x Joint Automated Deep Operations Coordination System USMC Job Aids
2. MCRP 3-16E Fire Support Systems for MAGTF Operations

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: The JADOCS may be employed at various echelons within the MAGTF or GCE based on the operational environment.

0861-FSC2-2038: Operate the Joint Targeting Toolbox (JTT) in support of deliberate targeting

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: JTT is a set of web-based software applications, or segments specifically engineered to optimize joint targeting throughout the full spectrum of conflict. JTT provides automated support for targeting requirements at the national, theater, operational and tactical levels.

MOS PERFORMING: 0861

BILLIETS: Targeting Chief

GRADES: SSGT, GYSGT, MSGT

INITIAL TRAINING SETTING: MOJT
CONDITION: Provided access and appropriate permissions to the JTT Portal, mission, tasks and objectives as a member of a FSCC/FECC, a higher headquarters operations order, and commander's guidance.

STANDARD: To manage Joint target Lists, manage target folders, and create/edit targets and JDPIs.

PERFORMANCE STEPS:
1. Login to the JTT Web Portal through GCCS-J web interface.
2. Configure personal user properties.
3. Manage target folders via the Target Folder Manager.
4. Access the Target Data Matrix Layout Manager to assist in managing the tracking of target development, force application, and combat assessment phases.
5. Access the BDA Workspace Layout Manager to define how BDA Workspace matrices are displayed.
6. Operate the Overlay Editor, Target Query, and Target list functionalities.
7. Operate the JDPI Editor.
8. Operate the Weaponeering Editor.

REFERENCES: MCRP 3-16E Fire Support Systems for MAGTF Operations

0861-FSCC-2001: Supervise the establishment the fire support coordination center (FSCC)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The FSCC serves as the unit commander's principal section responsible for the overall planning and execution of fires throughout his area of operations.

MOS PERFORMING: 0861

BILLETS: FSCC Chief

GRADES: SSGT, GYSGT, MSGT, MGYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a higher headquarters order (warning or operations order), directive (mission or task), commander's guidance, references, and appropriate personnel, organic equipment as a member of the COC.

STANDARD: To organize personnel and equipment to ensure a responsive action is initiated for all incoming or outgoing requirements.

PERFORMANCE STEPS:
1. Identify physical space.
2. Task organize personnel.
3. Identify support requirements (systems, equipment, network architecture, etc.)
4. Request support requirements.
5. Coordinate support requirements.
6. Integrate enablers.
7. Integrate Liaison Officers (LNO).
8. Supervise the coordination of required actions and reports with higher, adjacent and supporting units.
9. Supervise the establish fire internal battle rhythm within the overall battle rhythm.

REFERENCES:
1. MCRP 3-16E Fire Support Systems for MAGTF Operations
2. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-FSCC-2002: Perform the duties of a fire support chief (L/S)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The Fires Support Chief is responsible for the efficient functioning of the Fires section to ensure that fires are planned coordinated and executed to support the commander's intent and guidance. The Fire Support Chief assists the Fires Support Officer in the performance of his duties. This task covers the duties of the Division, Regiment, and Battalion Fires Chiefs.

MOS PERFORMING: 0861

BILLETs: Fire Support Chief

GRADES: SSGT, GYSGT, MSGT, MGYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a higher headquarters order (warning/operations) or directive (mission/task), commander's guidance, references, and appropriate personnel, organic equipment as a member of the COC.

STANDARD: To ensure Fires Support Team is effectively planning and integrating kinetic and non-kinetic fires to accomplish the mission in support of commander’s intent.

PERFORMANCE STEPS:
1. Establish the Fire Support Coordination Center (FSCC).
2. Establish the watch rotation.
3. Supervise the actions of all subordinate personnel within the FSCC.
4. Support the fire support planning process.
5. Manage fire support products.
6. Synchronize the aviation integration process using communications equipment and C2 systems, as required.
7. Coordinate fire support, as required.
8. Support the integration of FSCC operations of w/ other related staff sections.
9. Advise the commander/staff on current capabilities, limitations and employment of fire support systems and assets.
10. Supervise the dissemination of products.
11. Supervise reporting of information requirements to Higher Headquarters.
12. Provide current inputs to the Common Tactical Picture (CTP).
13. Supervise the targeting process at the Division level.

REFERENCES:
1. JP 3-09 Joint Fire Support
2. JP 3-60 Joint Targeting
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
5. MCTP 3-30B Information Management
6. MCWP 3-23.1 Close Air Support
7. MCWP 3-31 Marine Air-Ground Task Force Fires
8. MCWP 5-10 Marine Corps Planning Process
9. USMC Battery FDC AFATDS Job Aids V6.3.2.0

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MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: As required performance steps will be performed at the appropriate echelon.

0861-MGTF-2001: Supervise the establishment of MAGTF CE FECC

EVALUATION-CODED: NO        SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The Fires Effect Coordination Center (FECC) serves as the MAGTF commander's principal staff section responsible for the overall planning and execution of fires throughout the MAGTF area of operations.

MOS PERFORMING: 0861

BILLET: FECC Chief

GRADES: MGYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a higher headquarters order (warning/operations) or directive (mission/task), commander's guidance, references, and appropriate personnel, organic equipment as a member of the MAGTF CE across the Range of Military Operations (ROMO).
STANDARD: To effectively organize personnel and equipment ensuring responsive action is initiated for all incoming/outgoing requirements that facilitates the integration of Joint and MAGTF fires in order to shape and set conditions for MSCs to support the concept of operation.

PERFORMANCE STEPS:
1. Identify physical space.
2. Task organize personnel.
3. Identify support requirements (systems, equipment, network architecture, etc.).
4. Request support requirements.
5. Coordinate support requirements.
6. Integrate enablers.
7. Integrate Liaison Officers (LNO).
8. Supervise the coordination of required actions and reports with higher, adjacent and supporting units.
9. Supervise the establish fire internal battle rhythm within the overall battle rhythm.

REFERENCES:
1. MCRP 3-16E Fire Support Systems for MAGTF Operations
2. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Utilize appropriate fire C2 Marine Corps and Joint programs of record.

0861-MGTF-2002: Perform the duties of the Fires and Effects Coordination Chief (L/S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The Fires Support Chief is responsible for the efficient functioning of the Fires section to ensure that fires are planned coordinated and executed to support the commander's intent and guidance. The FECC Chief assists the FECC Officer in the performance of his duties.

MOS PERFORMING: 0861

BILLETS: FECC Chief

GRADES: MGYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a higher headquarters order (warning or operations) or directive (mission or task), commander's guidance, references and appropriate personnel, organic equipment, and as a member of a MAGTF CE operating across the Range of Military Operations (ROMO).
STANDARD: To ensure FECC section is effectively planning and integrating kinetic and non-kinetic fires to accomplish the mission in support of the commander’s intent.

PERFORMANCE STEPS:
1. Establish the Fires and Effects Coordination Center (FECC).
2. Establish the watch rotation.
3. Supervise the actions of all subordinate personnel within the FECC.
4. Support the fire support planning process.
5. Manage fire support products.
6. Synchronize the aviation integration process using communications equipment and C2 systems, as required.
7. Coordinate fire support, as required.
8. Support the integration of FECC operations with other related staff sections.
9. Advise the commander/staff on current capabilities, limitations and employment of fire support systems and assets.
10. Supervise the dissemination of products.
11. Provide current inputs to the Common Tactical Picture (CTP).
12. Supervise the targeting process at the MAGTF level.
13. Supervise reporting of information requirements to Higher Headquarters.

REFERENCES:
1. JADOCS version BC 10.x.x Joint Automated Deep Operations Coordination System USMC Job Aids
2. JP 3-02 Amphibious Operations
3. JP 3-09 Joint Fire Support
4. JP 3-60 Joint Targeting
5. JTCW Users Manual
6. MCRP 3-16E Fire Support Systems for MAGTF Operations
7. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
8. MCTP 3-30B Information Management
9. MCWP 3-23.1 Close Air Support
10. MCWP 3-31 Marine Air-Ground Task Force Fires
11. MCWP 5-10 Marine Corps Planning Process

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0861-MGTF-2003: Perform the duties of Fires Plans Chief (L/S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The Fires Plans Chief supports the development of the Fire Support Plan to effectively integrate kinetic and non-kinetic fires into the commander's CONOPS. The Fires Plans Chief will assist in the preparations of orders development. The Fires Plans Chief assists the Force Fires Plans Officers in the performance of his duties.
MOS PERFORMING: 0861

BILLETS: Fires Plans Chief

GRADES: GYSGT, MSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a higher headquarters order (warning or operations) or
directive (mission or task), commander's guidance, appropriate personnel,
organic equipment, and as a member of a MAGTF CE operating across the Range
of Military Operations (ROMO).

STANDARD: To produce plans and orders to accomplish the mission in support
of the commander's intent.

PERFORMANCE STEPS:
1. Develop appropriate staff products for each step of the planning process
   and orders development.
2. Participate in appropriate daily boards, cells and working groups
   (Targeting WG/board, IO WG/board, Collection WG/board, G3 Air WG/board,
etc.).
3. Advise the MEF commander or MAGTF staff on capabilities, limitations and
   employment of fires assets and systems.

REFERENCES:
1. JADOCS version BC 10.x.x Joint Automated Deep Operations Coordination
   System USMC Job Aids
2. JTCW Users Manual
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCWP 5-10 Marine Corps Planning Process

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MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Utilize appropriate fire C2 Marine Corps and
Joint programs of record.

0861-MGTF-2004: Perform the duties of the Targeting Chief (L/S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months
DESCRIPTION: The Targeting Chief supports MAGTF targeting board and related events and activities, translates deliberate planning for fires into detailed targeting products that enable subordinate and supporting units to develop fires plans and the ATO. He supervises the sponsoring and hosting of the targeting board and chairing of the targeting guidance working group (TGWG). The Targeting Chiefs assists Targeting Officers in the performance of his duties.

MOS PERFORMING: 0861

BILLETS: Targeting Chief

GRADES: GYSGT, MSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given a higher headquarters order (warning, operations) or directive (mission, task), commander's guidance, references and appropriate fires C2 systems, and as a member of a MAGTF operating across the Range of Military Operations (ROMO).

STANDARD: To produce targeting products that facilitate shaping efforts, set conditions, support of the concept of operations, and achieve targeting objectives in support of commander's intent.

PERFORMANCE STEPS:
1. Ensure the Targeting Working Group and Targeting Working Board are synchronized within the CE battle rhythm, ATO cycle, and Higher Headquarters battle rhythm.
2. Assist in the development of targeting products.
3. Coordinate with the Intelligence Section to support the MAGTF targeting processes.
4. Participate in appropriate daily boards, cells and working groups (i.e., Targeting WG/board, OPT/JPG, IO WG/board, Collections WG/board, Air WG/board, etc.).
5. Advise the MAGTF commander or MAGTF staff on capabilities, limitations and employment of fires assets and systems.

REFERENCES:
1. JADOCS version BC 10.x.x Joint Automated Deep Operations Coordination System USMC Job Aids
2. JP 3-60 Joint Targeting
4. MCRP 3-16E Fire Support Systems for MAGTF Operations
5. MCWP 3-31 Marine Air-Ground Task Force Fires
6. MCWP 5-10 Marine Corps Planning Process

SUPPORT REQUIREMENTS:

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<th>SUITABILITY</th>
<th>SIMULATOR</th>
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**0861-MGTF-2006:** Perform the duties of the Current Fires Chief (L/S)

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 6 months

**DESCRIPTION:** The Current Fires Chief primary responsibility is to assist the current fires Officer in supervising the current fire section. The current fires section (CFS) operates in the MAGTF combat operations center (COC) in direct support of current operations. CFS duties are to track and assess fires related changes in the battlespace, make or recommend decisions to exploit opportunities arising from change, and conduct MAGTF-level coordination to render decisions into timely action.

**MOS PERFORMING:** 0861

**BILLETS:** Current Fires Chief

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an operations order, commander's guidance, appropriate C2 systems, and as a member of a MAGTF operating across the Range of Military Operations (ROMO).

**STANDARD:** To ensure the execution of organic, joint fires and the coordination with Higher, Adjacent, Subordinate, and supporting agencies.

**PERFORMANCE STEPS:**

1. Supervise training of LNOs and fires personnel in the current fires section on C2 systems, products and processes.
2. Supervise the establishment of the Current Fires watch floor.
3. Establish the watch rotation.
4. Supervise the flow of information within the fires section.
5. Ensure the MAGTF's fire support situation is displayed on the Common Tactical Picture (CTP).
6. Monitor the execution of the fire support plan
7. Adjust the fire support plan in keeping with the developing situation per the MAGTF commander's guidance.
8. Supervise the execution and coordination of fires in support of the deep fight.
9. Coordinate fires for the close and rear fight, as required.
10. Advise the MAGTF commander or MAGTF staff on current capabilities, limitations and employment of fires assets and systems.

**REFERENCES:**

1. JADOCS version BC 10.x.x Joint Automated Deep Operations Coordination System USMC Job Aids
2. JTCW Users Manual
3. MCWP 3-31 Marine Air-Ground Task Force Fires

**SUPPORT REQUIREMENTS:**

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<td>MTWS</td>
<td>Unit Hours</td>
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0861-OBS-2001: Conduct an abbreviated registration (S/L)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given the equipment organic to a Fire Support Marine, a designated registration point, a zone of observation, and an MTO initiating the abbreviated registration, and an artillery firing unit.

STANDARD: To provide refinements to the nearest 10 meters for range and deviation from the "add/drop 50" round that is spotted for the impact portion, and one air burst round is spotted and corrected to a 20 meter HOB for the time portion.

PERFORMANCE STEPS:
1. Initiate Abbreviated registration.
2. Determine and transmit subsequent corrections.
3. Record registration point and time registration point correctly.
4. Repeat Steps 2 and 3 as necessary.
5. Conduct End of Mission procedures.

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

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</table>

ORDNANCE:

DODIC            QUANTITY
D544 Proj, 155mm HE M107               9 projectiles per Marine
DA12 Charge, Propellant 155mm MACS M231 9 charges per Marine
N289 Fuze, Electronic Time M762        4 fuzes per Marine
N340 Fuze, Point Detonating M739/M739A1 5 fuzes per Marine
N523 Primer, Percussion M82            9 primers per Marine

RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Distance Learning Product(s): MarineNet 0861A, Basic Forward Observation Procedures
2. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

**0861-OBS-2002:** Conduct a high-burst or mean-point-of-impact (MPI) registration (S/L)

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Marine

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSgt

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given the equipment organic to a Fire Support Marine, (2) surveyed OPs, and orienting data, and an artillery firing unit.

**STANDARD:** To obtain accurate firing data.

**PERFORMANCE STEPS:**
1. Set up instruments.
2. Orient the instruments before the first round is fired, per the Fire Direction Center's (FDC) instructions.
3. Report to the Fire Direction Center (FDC) when ready to observe.
4. Measure and report the spotting of the impacts and/or bursts.
5. Reorient the instrument to the location of the first round only.
6. Continue observing until the Fire Direction Center (FDC) ends the mission.
7. Conduct End of Mission procedures.

**REFERENCES:** MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

**SUPPORT REQUIREMENTS:**

### SIMULATION EVALUATION:

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<td>3 projectiles per Marine</td>
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<td>DA12 Charge, Propellant 155mm MACS M231</td>
<td>3 charges per Marine</td>
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<td>N289 Fuze, Electronic Time M762</td>
<td>3 fuzes per Marine</td>
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<tr>
<td>N340 Fuze, Point Detonating M739/M739A1</td>
<td>3 fuzes per Marine</td>
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<tr>
<td>N523 Primer, Percussion M82</td>
<td>3 cartridges per Marine</td>
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</table>
RANGE/TRAINING AREA:
Facility Code 17430 Impact Area Dudded

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Distance Learning Product(s): MarineNet 0861A, Basic Forward Observation Procedures.

0861-OBS-2003: Conduct a mortar precision registration (L/S)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given the equipment organic to a Fire Support Marine, a designated registration point, a LASER range finder (if so equipped), and a mortar firing unit.

STANDARD: To obtain accurate firing data with spottings of one round over and one round short with the last round 50 meters from the target, and refinements are sent to the FDC to the nearest 25 meters.

PERFORMANCE STEPS:
1. Transmit the call for fire.
2. Determine and transmit subsequent corrections.
3. Adjust the sheaf, if necessary.
4. Repeat Steps 2 and 3, as necessary.
5. Conduct End of Mission procedures.

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Distance Learning Product(s): MarineNet 0861A Basic Forward Observation Procedures.
2. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).
3. Either 60mm or 81mm mortars can be used to meet this requirement.

**0861-OBS-2004:** Conduct a FASCAM mission (S)

**EVALUATION-CODED:** NO \hspace{1cm} **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Marine

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

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given equipment organic to a Fire Support Marine and the FASCAM template, and an artillery firing unit.

**STANDARD:** To properly emplace a FASCAM minefield to support the scheme of maneuver.

**PERFORMANCE STEPS:**
1. Conduct target location.
2. Obtain approval from the approval authority to fire FASCAM.
3. Transmit the Call For Fire (CFF) to initiate a FASCAM minefield.
4. Conduct an adjust fire mission to refine the target location, if possible.
5. Request FASCAM in the Method of Engagement.
6. Initiate FFE once the 200 meter bracket has been broken.
7. Conduct End of Mission procedures.

**REFERENCES:**
1. FM 6-20-5 Family of Scatterable Mines (FASCAM)
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

**SUPPORT REQUIREMENTS:**

**SIMULATION EVALUATION:**

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<td>S</td>
<td>CACCTUS</td>
<td>Unit Hours</td>
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**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. This event will be conducted utilizing appropriate fire C2 and manual methods.
2. Distance Learning Product(s): MarineNet 0861A, Basic Forward Observation Procedures.
**0861-OBS-2005:** Conduct an ICM mission (S/L)

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

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Marine

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

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given equipment organic to a Fire Support Marine and artillery firing unit.

**STANDARD:** To obtain the desired effects and entering the FFE once the 200m bracket has been broken.

**PERFORMANCE STEPS:**
1. Conduct target location.
2. Obtain approval from the approval authority to fire ICM.
3. Transmit the Call For Fire (CFF) to initiate a ICM mission.
4. Conduct an adjust fire mission as required.
5. Conduct End of Mission procedures.

**REFERENCES:** MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

**SUPPORT REQUIREMENTS:**

**SIMULATION EVALUATION:**

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**ORDNANCE:**

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<td>D563</td>
<td>6 projectiles per Marine</td>
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<td>DA12</td>
<td>8 charges per Marine</td>
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<td>N289</td>
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<td>N340</td>
<td>2 fuzes per Marine</td>
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<td>N523</td>
<td>8 cartridges per Marine</td>
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**RANGE/TRAINING AREA:**

Facility Code 17430 Impact Area Dudded

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. This event will be conducted utilizing appropriate fire C2 and manual methods.
2. Distance Learning Product(s): MarineNet 0861A, Basic Forward Observation Procedures
0861-OBS-2006: Conduct Target Mensuration Only (TMO) procedures

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0861

BILLETS: Fire Support Chief, Fire Support Marine

GRADES: LCPL, CPL, SGT, SSGT, GYSGT, MSGT, MGYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given communications with higher, adjacent and supporting units, and an automated system with National Geospatial-Intelligence Agency (NGA) validated TMO software.

STANDARD: Determining target location within specifications listed in the Marine Corps TMO CONOPS.

PERFORMANCE STEPS:
1. Ensure NGA validated mensuration software is properly installed on an automated system.
2. Ensure the most up to date imagery is available on the automated system.
3. Receive a grid and target description from an observer.
4. Mensurate the reported grid with automated system.

REFERENCES: CJCSI 3505.01C Target Coordinate Mensuration Certification and Program Accreditation

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: This event must be conducted by a TMO operator certified on approved software.

0861-OBS-2007: Perform crater analysis

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 0861

BILLETS: Fire Support Chief, Fire Support Marine

GRADES: PFC, LCPL, CPL, SGT, SSGT, GYSGT, MSGT, MGYSGT

INITIAL TRAINING SETTING: MOJT

CONDITION: Given communications with higher, adjacent and supporting units, and an automated system with National Geospatial-Intelligence Agency (NGA) validated TMO software.

STANDARD: To determine the direction of enemy fire within a reasonable accuracy.

PERFORMANCE STEPS:
1. Locate a suitable crater.
2. Determine its location.
3. Determine the direction to hostile weapon using fuze furrow, side spray, splint groove, main access, fuze tunnel, or ricochet method.
4. Conduct crater analysis in accordance with the reference.
5. Determine the direction to hostile weapon.
6. Collect usable shell fragments to determine type of munition.
7. Send shell fragments to the appropriate agencies, as required.
8. Develop shell report for submission to appropriate agencies, as required.

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller
1. NOTE: If the FDC is AFATDS equipped, only the center weapon is adjusted onto the center grid of the FPF and the adjustment is then terminated. Manual gunnery requires that all guns be adjusted into the FPF. A CLRF equipped observer may lasse specific aimpoints for each gun in the firing element. Each gun will then be aimed at that point. This TTP can be used to cover smaller areas of dead space where a linear sheaf would not be appropriate.

2. Distance Learning Product(s): MarineNet 0861A, Basic Forward Observation Procedures.

0861-OBS-2009: Conduct a destruction mission (S)

EVALUATION-CODED: NO         SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: MOJT

CONDITION: Given equipment organic to a Fire Support Marine.

STANDARD: To successfully destroy a target in support of commander’s intent.

PERFORMANCE STEPS:
1. Locate the target.
2. Transmit call for fire ensuring "Destruction" is used as type of adjustment.
3. Adjust rounds to the target utilizing precision registration procedures.
4. Continue to fire rounds at the target.
5. Make corrections, as necessary (normally after every third round).
6. Fire until the target is destroyed.
7. Transmit refinement data (if any), Record as Target (if desired), End of Mission (required), and surveillance (required).

REFERENCES: MCTP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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<td>S</td>
<td>CACCTUS</td>
<td>Unit Hours</td>
<td>1</td>
<td>N</td>
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</table>

MISCELLANEOUS:
ADMINISTRATIVE INSTRUCTIONS: NOTE: Destruction puts a target out of action permanently. Exact percentages to define "destruction" vary and are determined by the commander based on the situation.

0861-PLAN-2001: Develop fires products during MCPP

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: MCPP is designed to promote understanding among the commander, his staff, and subordinate commanders regarding the nature of a given problem and the options for solving it. It is a six-step process comprising problem framing, course of action (COA) development, COA wargaming, COA comparison, and decision, orders development, and transition.

MOS PERFORMING: 0861

BILLETS: Fire Support Chief, Fires Plans Chief

GRADES: SGT, SSGT, GYSGT, MSGT, MGYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an operations order, commander's guidance, an HPTL, references, and communications plan as a member of a COC operating across the Range of Military Operations (ROMO).

STANDARD: To support the development of the operations order, branches, sequels and FRAGOs that accomplish the mission in support of commanders intent.

PERFORMANCE STEPS:
1. Analyze higher HQ's order.
2. Participate in IPB to identify HVT.
3. Assist with CCIR development.
4. Identify assumptions, limitations, specified tasks, shortfalls, critical requirements, ROE and how to exploit enemy COG and CV.
5. Develop, brief and post "Problem Framing/ Mission Analysis" brief and fires product to support follow on steps.
6. Receive commander's guidance.
7. Develop fires portion of initial warning to subordinate elements.
8. Develop fires products during the problem framing step.
10. Develop fires products during wargaming.
11. Develop fires products during course of action comparison.
12. Develop fires products during orders development.
13. Develop and refine fires products during transition.

REFERENCES:
1. MCRP 3-16E Fire Support Systems for MAGTF Operations
2. MCWP 3-31 Marine Air-Ground Task Force Fires
3. MCWP 5-10 Marine Corps Planning Process
MISCELLANEOUS:

**ADMINISTRATIVE INSTRUCTIONS:** This event will be conducted utilizing appropriate fire C2 and collaborative tools.

0861-PLAN-2002: Produce the Fire Support Execution Matrix (FSEM)

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 6 months

**DESCRIPTION:** The FSEM is a concise planning and execution tool which graphically displays the fire support plan to facilitate execution. It assists the FSCs, observers, supporting assets, and the maneuver commander in understanding how the fire support plan supports the commander's intent. It is a valuable planning and execution tool for both offense and defense. The matrix explains the portions of the fire support plan that each FSC, FO, and maneuver commander is responsible for executing. When approved by the maneuver commander, the matrix becomes the primary execution tool for the FSC and maneuver commanders.

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Chief

**GRADES:** SSGT, GYSGT, MSGT, MGYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an operations order, commander's guidance, an HPTL, references, and communications plan as a member of a COC operating across the Range of Military Operations (ROMO).

**STANDARD:** To facilitate timely and effective execution of the fire support plan.

**PERFORMANCE STEPS:**
1. Identify all requirements to successfully execute fire support plan.
2. Identify phases of the operation or how the commander plans to execute.
3. Identify maneuver units, including Reconnaissance, STA, and LAR.
4. Identify supporting assets.
5. Establish instructions and critical information essential to executing the plan (i.e., Tgts, fire plans, POF, positioning, ammunition allocation, FSCM, etc.).
6. Identify primary and alternate executors of targets.
7. Add any additional remarks or coordinating instructions which help clarify information or requirements.
8. Disseminate to appropriate agencies.

**REFERENCES:** MCTP 3-10F Fire Support Coordination in the Ground Combat Element

0861-TGT-2001: Develop High Pay-Off Target List (HPTL)

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 6 months
**DESCRIPTION:** A high-payoff target list (HPTL) is the prioritized list of HPTs established and used by targeting personnel and Other fires personnel to develop other targeting tools (BSM, AGM, Target precedence list, DCM), execute dynamic targeting.

**MOS PERFORMING:** 0861

**BILLETS:** FECC Chief, Fire Support Chief, Fires Plans Chief, Targeting Chief

**GRADES:** GYSGT, MSGT, MGYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an operations order, commander's guidance, an HPTL, references, and communications plan as a member of a COC operating across the Range of Military Operations (ROMO).

**STANDARD:** To produce a HPTL which support the prioritization for rapid engagement of targets.

**PERFORMANCE STEPS:**
1. Support intelligence preparation of the battlefield and support initial target value analysis.
2. Receive, during the problem framing step of MCPP, commander's guidance that supports deliberate targeting.
3. Provide a relative ranking of target sets (or categories) based on enemy characteristics within most likely and most dangerous enemy COAs.
4. Identify High value targets in priority of assets that the enemy commander needs to successfully complete a specific COA.
5. Conduct TVA during COA development in order to convert HVT to HPTs.
6. Identify initial draft High pay-off targets (HPTs).
7. Validate draft High pay-off targets.
8. Finalize draft HPTL for commander’s approval.
9. Disseminate approved HPTL to appropriate agencies.

**REFERENCES:**
1. JP 3-60 Joint Targeting
2. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
3. MCWP 3-31 Marine Air-Ground Task Force Fires

**MISCELLANEOUS:**

**Administrative Instructions:**
Consideration for converting HVTs to HPTs:
   a. Can collection assets acquire the HVT. Identifying primary and alternate means of target acquisition.
   b. Can the HVT be attacked with lethal or non-lethal assets.
   c. Is the HVT a "Critical Node," one that will immediately degrade or prevent the enemy from achieving his goal if engaged. Establishing required effects for friendly COA success.
   d. Is the attack of the HVT necessary to the success of the friendly COA. Identify primary and alternate means of target engagement. Then identify required type and number of ordnance to achieve require effects.
0861-TGT-2002: Develop a Battlespace Shaping Matrix (BSM)

EVALUATION-CODED: NO       SUSTAINMENT INTERVAL: 6 months

DESCRIPTION: The FECC Chief, Fire Support Chief, or Targeting Chief supports the development of the BSM. The BSM represents the prioritization of the targeting objectives to include target sets. This document serves as the tool utilized for the prioritization of target nominations and the basis for the development of the Reactive Attack Guidance Matrix, both of which will be used in dynamic targeting by current fires. The BSM is developed for each ATO and will change based on a phase, stage and part of an operation. The initial draft of the BSM each day of the ATO is developed in the Targeting Working Group by fires (Kinetic and non-kinetic) planners in coordination with G-3 and G-2 planners.

MOS PERFORMING: 0861

BILlets: FECC Chief, Fire Support Chief, Targeting Chief

GRADES: GYSGT, MSGT, MGYSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an operations order, commander's guidance, an HPTL, references, and communications plan as a member of a COC operating across the Range of Military Operations (ROMO).

STANDARD: To produce a BSM which supports the MAGTF and GCE submission of target nominations, and current fires prioritization for rapid engagement of targets.

PERFORMANCE STEPS:
1. At the Targeting Working Group, support the identification of BSM data (i.e., Targeting objective, Critical formations, Time and Conditions Estimate, Target sets and subsets and desired effects, non-kinetic requirements to support each objective).
2. At the Targeting Working Group, support the prioritizing of objectives and target sets and across all objectives.
3. Validate the draft BSM at the TGWG.
4. Brief MAGTF targeting board Chairman on draft BSM for approval, and or modification.
5. Disseminate to facilitate MAGTF and GCE target nominations.
6. Update 12 to 6 hours prior to ATO execution and disseminate to appropriate staff sections.

REFERENCES:
1. JP 3-60 Joint Targeting
2. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
3. MCWP 3-31 Marine Air-Ground Task Force Fires

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Utilize appropriate fire C2 Marine Corps and Joint programs of record.
**0861-TGT-2003**: Support development of Damage Criteria Matrix (DCM)

**EVALUATION-CODED**: NO  
**SUSTAINMENT INTERVAL**: 6 months

**DESCRIPTION**: The DCM is a deliberate targeting tool FSCs can use to evaluate the effectiveness of targeting objectives against enemy strengths/capabilities and the desired targeting effects. It can also help anticipate future fire support requirements and reallocate fire support assets. This matrix is designed to be a 'big picture' guide and will change periodically (probably between phases of the battle). This tool is used primarily by the MEF but could be used within the GCE.

**MOS PERFORMING**: 0861

**BILLETS**: Targeting Chief

**GRADES**: GYSGT, MSGT

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given an operations order, commander's guidance, an HPTL, references, and communications plan as a member of a COC operating across the Range of Military Operations (ROMO).

**STANDARD**: To produce a matrix which measures and assesses effectiveness of previous shaping to match current enemy strengths and capabilities vs. the BSM desired effect, and to anticipate future fire support requirements.

**PERFORMANCE STEPS**:
1. Support identification of required target sets and subsets.
2. Support defining the endstate for destruction and neutralization for each target subsets.
3. Support the development of required measures of effectiveness (MOE).
4. Support development of required notes that clarify information contained in the DCM (i.e., JMEMS solutions).
5. Review DCM at appropriate boards, cells and working groups and update as required.
6. Post/disseminate DCM on required website.

**REFERENCES**:
1. MCRP 3-16E Fire Support Systems for MAGTF Operations
2. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
3. MCWP 3-31 Marine Air-Ground Task Force Fires

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**0861-TGT-2004**: Produce an Attack Guidance Matrix (AGM)

**EVALUATION-CODED**: NO  
**SUSTAINMENT INTERVAL**: 6 months
DESCRIPTION: AGM is a GCE level/tactical (not MAGTF) document that tells how, when, and to what effect an HPT will be engaged. The AGM is incorporated into the maneuver and fire support plans. It is the commanders attack guidance and is designed to support his plan. An AGM that supports the division commander's plan may not support a regiment or battalion commander's plan. There are several variation to AGM formats.

MOS PERFORMING: 0861

BILLets: Fire Support Chief

GRADES: GYSGT, MSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an operations order, commander's guidance, an HPTL, references, and communications plan as a member of a COC operating across the Range of Military Operations (ROMO).

STANDARD: To summarize commander’s guidance on the prioritized rapid engagement of targets.

PERFORMANCE STEPS:
1. Identify the prioritized list of HPTs by phase.
2. Identify the time the target should be engaged (planned, immediate, or as acquired).
3. Identify attack systems to be used for engagement.
4. Identify desired effects on target or target system.
5. Identify remarks.
6. Input data into matrix format.
7. Disseminate to appropriate agencies.
8. Repeat process as required to support the commander's concept of operations and the scheme of maneuver.

REFERENCES:
1. JobAid AFATDS Job Aid
2. JTCW Users Manual
3. MCRP 3-16E Fire Support Systems for MAGTF Operations
4. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

17004. INDEX OF 0861 1000-LEVEL INDIVIDUAL EVENTS

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<th>E-Coded</th>
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<th>Page</th>
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<td>Conduct a naval surface fire support (NSFS) mission (L/S)</td>
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<td>0861-NSFS-1008</td>
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<td>Conduct a naval surface fire support (NSFS) suppression of enemy air defense (SEAD) mission (L/S)</td>
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<td>0861-NSFS-1009</td>
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<td>Refire a recorded target with naval surface fire support (NSFS) (L/S)</td>
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<td>0861-OBS-1001</td>
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<td>Locate data to a point on a map (S/L)</td>
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<td>Perform self location via two-point resection</td>
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<tr>
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<td>Prepare a terrain sketch (L/S)</td>
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<tr>
<td>0861-OBS-1015</td>
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<td>0861-OBS-1016</td>
<td>NO</td>
<td>Conduct fire mission on irregularly shaped targets (L/S)</td>
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<td>0861-OBS-1017</td>
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<td>Conduct an immediate suppression mission (L/S)</td>
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<td>0861-OBS-1018</td>
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<td>Conduct an immediate smoke mission (L/S)</td>
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<td>Conduct a quick smoke mission (L/S)</td>
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<td>Conduct a fire mission on a moving target (S)</td>
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<td>0861-OBS-1021</td>
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<td>Conduct a precision registration, quick and time (S/L)</td>
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<tr>
<td>0861-OBS-1022</td>
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<tr>
<td>0861-OBS-1023</td>
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<td>Conduct a suppression of enemy air defense (SEAD) fire mission (L/S)</td>
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<tr>
<td>0861-OBS-1024</td>
<td>NO</td>
<td>Submit a list of targets</td>
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<td>0861-OBS-1025</td>
<td>NO</td>
<td>Perform GPS aided land navigation</td>
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<tr>
<td>0861-OBS-1026</td>
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<td>Operate the Target Hand-Off System (L/S)</td>
<td>17-97</td>
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**17005. 0861 1000-LEVEL INDIVIDUAL EVENTS**
0861-NSFS-1001: Conduct a naval surface fire support (NSFS) mission (L/S)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILlets: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Fire Support Marine, a fire support ship, and communications with the ship.

STANDARD: To engage target(s) by initiating the call for fire within 60 seconds of target identification, ensuring target location is within 200 meters of the actual target; altitude to within 5 meters of the actual elevation or vertical angle (VA).

PERFORMANCE STEPS:
1. Determine target location.
2. Transmit the Naval Surface Fire Support (NSFS) Call For Fire (CFF).
3. Make subsequent corrections transmitted within 15 seconds of round impact.
4. Enter the Fire for Effect phase when Fire For Effect criteria is achieved.
5. Conduct End of Mission (EOM) procedures.

REFERENCES:
1. ATP-04 Allied Naval Fire Support Edition (F) Version (2)
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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<th>UNIT OF MEASURE</th>
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ORNDAINCE NOTES:
D339 5-INCH/54 HE FUZE PD Qty: 8 UOM: MARINE
NOTE: The ammunition for NSFS events will not consumed by the Artillery community.

RANGE/TRaining AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. This event will be conducted utilizing appropriate fire C2 and manual methods.
2. DISTANCE LEARNING PRODUCT(S): MCI MarineNet 0861A, Basic Forward Observation Procedures
3. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

**0861-NSFS-1002:** Conduct a fresh target shift mission with naval surface fire support (NSFS) (L/S)

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Marine

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

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given equipment organic to a Fire Support Marine, a fire support ship, and communications with the ship.

**STANDARD:** To effectively engage a target of higher priority without ending original mission.

**PERFORMANCE STEPS:**
1. Identify a higher priority target.
2. Begin the new abbreviated Transmit Fresh Target Shift call for fire (CFF) within 45 seconds.
3. Make subsequent corrections transmitted within 15 seconds of round impact.
4. Complete the mission.
5. Re-engage original target.
6. Transmit EOM and surveillance on both targets.

**REFERENCES:**
1. ATP 4 (E) CH 7 Allied Naval Gunfire Support
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

**SUPPORT REQUIREMENTS:**

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**ORDNANCE NOTES:** D339 5-INCH/54 HE FUZE PD 8 EA

**RANGE/TRAINING AREA:** Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**
ADMINISTRATIVE INSTRUCTIONS:
1. This event will be conducted utilizing appropriate fire C2 and manual methods.
Event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

0861-NSFS-1003: Conduct a new target shift mission with naval surface fire support (NSFS) (L/S)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Fire Support Marine, and a new target is identified that requires simultaneous fire, a fire support ship with the MK 160 aboard and two operational gun mounts, communications with the ship.

STANDARD: To effectively engage both targets simultaneously; the targets must be identified within 200 meters of its actual location; altitude to within 5 meters of the actual elevation or vertical angle (VA).

PERFORMANCE STEPS:
1. Transmit the call for fire (CFF) on the first target.
2. Initiate the CFF on the second target using fresh target shift procedures within 45 seconds identify the target.
3. Transmit the words "NEW TARGET, target number and appropriate target location data in a single transmission.
4. Follow simultaneous target mission procedures.
5. Transmit sequence of subsequent corrections within 15 seconds of impact.
6. Enter the Fire for Effect phase when Fire For Effect criteria is achieved.
7. Conduct End of Mission (EOM) procedures.

REFERENCES:
1. ATP 4 (E) CH 7 Allied Naval Gunfire Support
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

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ORDNANCE NOTES: D339 5-INCH/54 HE FUZE PD 10 EA

RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

0861-NSFS-1004: Conduct simultaneous missions with naval surface fire support (NSFS) (L/S)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Fire Support Marine, and two targets are identified that require simultaneous fire, a fire support ship with the MK 160 aboard and two operational gun mounts, communications with the ship.

STANDARD: To effectively engage both targets simultaneously; the targets must be identified within 200 meters of its actual location; altitude to within 5 meters of the actual elevation or vertical angle (VA).

PERFORMANCE STEPS:
1. Transmit the call for fire (CFF) on the first target within 2 minutes.
2. Transmit the second CFF when the mission is ready.
3. Preface all subsequent transmissions with the last two digits of the target number to which the transmission applies.
4. Transmit sequence of subsequent corrections within 15 seconds of impact.
5. Follow simultaneous target mission procedures.
6. Enter the Fire for Effect phase when Fire For Effect criteria is achieved.
7. Conduct End of Mission (EOM) procedures.

REFERENCES:
1. ATP 4 (E) CH 7 Allied Naval Gunfire Support
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

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ORDNANCE NOTES: D339 5-INCH/54 HE FUZE PD 16 EA

RANGE/TRAINING AREA: Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

0861-NSFS-1005: Conduct an illumination mission with naval surface fire support (NSFS) (L/S)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Fire Support Marine, a fire support ship, and communications with the ship.

STANDARD: To illuminate the desired target area within 200 meters of the target area, altitude within 5 meters of elevation or vertical angle, and Height of Burst within 500 meters transmitting initial Call for Fire transmitted within 60 seconds of target identification.

PERFORMANCE STEPS:
1. Determine suspected location of the target.
2. Transmit the CFF.
3. Make illumination corrections as required.
4. Announce "RIPPED CHUTE" or "DARK STAR" as required.
5. Conduct End of Mission (EOM) procedures.

REFERENCES:
1. ATP 4 (E) CH 7 Allied Naval Gunfire Support
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

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<td>Team Hours</td>
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<td>Unit Hours</td>
<td>1</td>
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</table>
ORDNANCE NOTES: D353 5-INCH/54 ILLUM 3 EA

RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

0861-NSFS-1006: Conduct a coordinated illumination mission with naval surface fire support (NSFS) (L/S)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Fire Support Marine, a fire support ship, and communications with the ship.

STANDARD: To illuminate the desired target area within 200 meters of the target area, altitude within 5 meters of elevation or vertical angle, and Height of Burst within 500 meters transmitting initial Call for Fire transmitted within 60 seconds of target identification.

PERFORMANCE STEPS:
1. Transmit the complete illumination call for fire, in proper sequence.
2. Transmit illumination corrections.
3. Once the target is illuminated, determine location of the target within 60 seconds.
4. Transmit "MARK Illumination" when target is illuminated.
5. Transmit the coordinated illumination call for fire.
6. Transmit subsequent corrections within 15 seconds of HE round impact.
7. Enter the Fire for Effect phase when Fire For Effect criteria is achieved.

REFERENCES:
1. ATP 4 (E) CH 7 Allied Naval Gunfire Support
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

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<th>SIMULATION EVALUATION:</th>
<th>SIMULATED</th>
<th>SUITABILITY</th>
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ORDNANCE NOTES:
D326 5-INCH/54 HE FUZE QUICK  8 EA
D353 5-INCH/54 ILLUM   7 EA

RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. NOTE: The Mk 88 Illumination (D353) is for training and requires reduced charge; Mk 91 Illumination is for war time use only.
3. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

0861-NSFS-1007: Conduct a danger close fire mission with naval surface fire support (NSFS) (S)

EVALUATION-CODED: NO    SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Fire Support Marine, a fire support ship, and communications with the ship.

STANDARD: To engage target(s) within 750 meters of friendly units by initiating the call for fire within 60 seconds of target identification, ensuring target location is within 200 meters of the target, and altitude to within 5 meters of the elevation or vertical angle (VA).

PERFORMANCE STEPS:
1. Determine First Salvo offset requirements.
2. Transmit the call for fire (CFF).
3. Conduct the mission utilizing creeping fires.

REFERENCES:
1. ATP 4 (E) CH 7 Allied Naval Gunfire Support
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:
**SIMULATION EVALUATION:**

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**RANGE/TRAINING AREA:**
Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** DISTANCE LEARNING PRODUCT(S): MarineNet 0861A, Basic Forward Observation Procedures

**0861-NSFS-1008:** Conduct a naval surface fire support (NSFS) suppression of enemy air defense (SEAD) mission (L/S)

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Marine

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

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given equipment organic to a Fire Support Marine and the need to suppress enemy air defenses in the vicinity of the target area on ingress and egress routes, commander's guidance, communications with a fire support ship and the NGF liaison officer, a fire support ship with two operational gun mounts (if mission is both a mark and suppress), access to the Forward Air Controller (FAC)/ Joint Terminal Attack Controller (JTAC) or Joint Fires Observer (JFO).

**STANDARD:** To neutralize, destroy or temporarily degrade surface based enemy air defenses by destructive or disruptive means to allow safe maneuver of aircraft in-and-out of target area. Suppression must be within 200 meters of the air threat, and ensure the marking round impacts 45 seconds (for illumination on deck) before the aircraft's bombs impact on the target, and the marking round is within 300 meters of the target.

**PERFORMANCE STEPS:**
1. Identify surface enemy air threat defense location(s) and location to mark.
2. Identify which SEAD timeline which best supports the tactical situation (Continuous, Interrupted or Non-standard).
3. Transmit the appropriate SEAD Call For Fire (CFF).

**REFERENCES:**
1. ATP 4 (E) CH 7 Allied Naval Gunfire Support
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller
SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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<th>SIMULATED</th>
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<tr>
<td>Yes</td>
<td>L/S</td>
<td>SAVT</td>
<td>Team Hours</td>
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<td>CACCTUS</td>
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</table>

ORDNANCE NOTES:

D295 5-INCH/54 HE FUZE CVT 13 EA
5-INCH/54 ILLUM1

RANGE/TRAINING AREA:

Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:

1. This event will be conducted utilizing appropriate fire C2 and manual methods.
2. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

0861-NSFS-1009: Refire a recorded target with naval surface fire support (NSFS) (L/S)

EVALUATION-CODED: NO          SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a tactical scenario that requires fire on a recorded target, equipment organic to a Fire Support Marine, a fire support ship, and communications with the ship.

STANDARD: To effectively re-engage a recorded target.

PERFORMANCE STEPS:

1. Identify the target and corresponding target number.
2. Transmit the abbreviated CFF in one transmission.
3. Announce "FIRE MISSION, FIRE TARGET NUMBER, DIRECTION", and any changes to the Method of Engagement or Method of Control.
4. Complete the mission.
5. Conduct End of Mission procedures.

REFERENCES: ATP 4 (E) CH 7 Allied Naval Gunfire Support
SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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<th>SIMULATED</th>
<th>SUITABILITY</th>
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RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

0861-OBS-1001: Locate data to a point on a map (S/L)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

GRADES: PFC, LCPL, CPL, SGT, SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a topographical map, protractor, and a map pen.

STANDARD: Determine the 8 digit grid in the correct MGRS format to within 100 meters and elevation to within half the contour interval.

PERFORMANCE STEPS:
1. Determine map datum.
2. Determine grid zone, grid zone designator, 100,000 meter square identifier and eight-digit coordinates to the point on the map.
3. Determine the elevation to the point on the map.

REFERENCES: TC 3-25.26 Map Reading and Land Navigation

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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<th>SIMULATED</th>
<th>SUITABILITY</th>
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RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces

17-67 Enclosure (1)
0861-OBS-1002: Perform self-location via two-point resection

EVALUATION-CODED: NO          SUSTAINMENT INTERVAL: 6 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

GRADES: PFC, LCPL, CPL, SGT, SSGT

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a topographical map, LASER, protractor, a compass, a map pen and individual load bearing equipment.

STANDARD: To determine the observers position to within 100 meters using manual methods.

PERFORMANCE STEPS:
1. Orient the map.
2. Identify reference points on the map.
3. Determine grid azimuths to reference points or HE burst.
4. Plot back azimuths.
5. Determine self-location via one point resection.
6. Determine self-location via two point resection.
7. Verify Self location data via the inspection method.

REFERENCES: TC 3-25.26 Map Reading and Land Navigation

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17412 Land Navigation Course

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
Distance Learning Product(s): MarineNet EPME4240AA, Tactical Tools
MarineNet EPME5240AA, Tactical Tools

0861-OBS-1003: Perform land navigation

EVALUATION-CODED: NO          SUSTAINMENT INTERVAL: 6 months
MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Fire Support Marine (excluding items I and J) individual field equipment, and a designated set of points to navigate to during day and night.

STANDARD: In order to traverse the course locating five of seven designated points during the day and locating three of four designated points during the night.

PERFORMANCE STEPS:
1. Determine pace count.
2. Determine routing information (designated point location, azimuth, and distance).
3. Navigate using map and compass.
4. Perform a deliberate offset, as required.
5. Maintain awareness of location at all times.
6. Perform one-point or two-point resection, as required.

REFERENCES:
1. GTA 5-2-12 Protractor with Coordinate Scale
2. TC 3-25.26 Map Reading and Land Navigation

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17412 Land Navigation Course

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Each designated land navigation point to be used should be located to at least an eight-digit grid coordinate.
2. The location of each designated land navigation point should be verified prior to use in initial or sustainment training.
3. Terrain and training area dependent, the day course should be no less than 4,000 meters in length.
4. Terrain and training area dependent, the night course should be no less than 1,500 meters in length.
5. Distance Learning Product(s): MarineNet EPME4240AA, Tactical Tools MarineNet EPME5240AA, Tactical Tools

0861-OBS-1004: Prepare a terrain sketch (L/S)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 6 months
MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to the Fire Support Marine, and an information sheet containing a zone of observation and responsibility.

STANDARD: To accurately depict the zone of responsibility with appropriate labels.

PERFORMANCE STEPS:
1. Draw the skyline (horizon), and prominent objects or features.
2. Identify the Center Reference Point (CRP).
3. Identify additional reference points.
4. Employ labeling Ts to depict direction, distance, altitude, and Grid to prominent objects or features.

REFERENCES:
1. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller
2. MCTP 3-10F Fire Support Coordination in the Ground Combat Element

SIMULATION REQUIREMENTS:

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<td>Unit Hours</td>
<td>1</td>
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RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: Distance Learning Product(s): MCI 028, Introduction to Combat Intelligence, 0332, Reconnaissance Marine, and 0861, Basic Forward Observation Procedures.

0861-OBS-1005: Conduct an adjust fire polar mission (L/S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL
CONDITION: Given the equipment organic to the Fire Support Marine, and a terrain sketch.

STANDARD: To engage target(s) by initiating the call for fire within 60 seconds of target identification, ensuring target location is within 200 meters of the actual target.

PERFORMANCE STEPS:
1. Announce "Adjust Fire Polar" in the warning order.
2. Transmit the direction to the nearest 10 mils.
3. Transmit distance to the nearest 100 meters.
4. Transmit vertical difference to the nearest 5 meters but no less than 35 meters.
5. Transmit subsequent corrections in the proper sequence within 15 seconds of previous round impact.
6. Enter the Fire for Effect phase when Fire For Effect criteria is achieved.
7. Conduct End of Mission procedures.

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

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<tr>
<td>D529  Projectile, 155mm High Explosive M795</td>
<td>9 rounds per Marine</td>
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<tr>
<td>DA12 Charge, Propellant 155mm MACS M231</td>
<td>8 charges per Marine</td>
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<tr>
<td>N340 Fuze, Point Detonating M739/M739A1</td>
<td>9 fuzes per Marine</td>
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<tr>
<td>N523 Primer, Percussion M82</td>
<td>9 cartridges per Marine</td>
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RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
This event will be conducted utilizing appropriate fire C2 and manual methods.

Adjust fires procedures:
1. If the PE in range is greater than or equal to 38 meters, the observer may call FFE when a 200 meter bracket is split. Distance Learning Product(s): MarineNet 0861A, Basic Forward Observation Procedures.
2. Round count based off of 200 meter successive bracketing with a single volley 6-gun FFE.
3. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).
**0861-OBS-1006**: Conduct an adjust fire grid mission (L/S)

**EVALUATION-CODED**: NO  **SUSTAINMENT INTERVAL**: 3 months

**MOS PERFORMING**: 0861

**BILLETS**: Fire Support Marine

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

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given the equipment organic to the Fire Support Marine and a firing agency.

**STANDARD**: To engage target(s) by initiating the call for fire within 60 seconds of target identification, ensuring target location is within 200 meters of the actual target.

**PERFORMANCE STEPS**:
1. Announce 'Adjust Fire' in the warning order.
2. Transmit a 6 or 8 digit grid as target location.
3. Transmit subsequent corrections in the proper sequence within 15 seconds of previous round impact.
4. Enter the Fire for Effect phase when Fire For Effect criteria is achieved.
5. Conduct End of Mission procedures.

**REFERENCES**: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

**SUPPORT REQUIREMENTS**:

**SIMULATION EVALUATION**:

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<th>SIMULATED</th>
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<td>L/S</td>
<td>DVTE</td>
<td>Marine Hours</td>
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<td>Y</td>
</tr>
<tr>
<td>Yes</td>
<td>L/S</td>
<td>SAVT</td>
<td>Team Hours</td>
<td>1</td>
<td>N</td>
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<tr>
<td>Yes</td>
<td>L/S</td>
<td>CACCTUS</td>
<td>Unit Hours</td>
<td>1</td>
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**ORDNANCE**:

- DODIC 529 Projectile, 155mm High Explosive M795 9 rounds per Marine
- DA12 Charge, Propellant 155mm MACS M231 9 charges per Marine
- N340 Fuze, Point Detonating M739/M739A1 9 fuzes per Marine
- N523 Primer, Percussion M82 9 primers per Marine

**RANGE/TRAINING AREA**:
Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS**:

**ADMINISTRATIVE INSTRUCTIONS**:
This event will be conducted utilizing appropriate fire C2 and manual methods.
Adjust fires procedures:
1. If the PE in range is greater than or equal to 38 meters, the observer may call FFE when a 200 meter bracket is split.
Distance Learning Product(s): MarineNet 0861A, Basic Forward Observation Procedures.
2. Round count based off of 200 meter successive bracketing with a single volley 6-gun FFE.
3. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

**0861-OBS-1007**: Conduct an adjust fire shift from known point mission (L/S)

**EVALUATION-CODED**: NO  
**SUSTAINMENT INTERVAL**: 3 months

**MOS PERFORMING**: 0861

**BILLETS**: Fire Support Marine

**GRADES**: PVT, PFC, LCPL, CPL, SGT, SSgt

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given the equipment organic to the Fire Support Marine and a firing agency.

**STANDARD**: To engage target(s) by initiating the call for fire within 60 seconds of target identification, ensuring target location is within 200 meters of the actual target.

**PERFORMANCE STEPS**:
1. Transmit 'Adjust Fire Shift from Known Point.'
2. Transmit the direction to the nearest 10 mils.
3. Transmit Lateral shift to the nearest 10 meters.
4. Transmit Range shift to the nearest 100 meters.
5. Transmit vertical difference to the nearest 5 meters but no less than 35 meters.
6. Transmit subsequent corrections in the proper sequence within 15 seconds of previous round impact.
7. Enter the Fire for Effect phase when Fire For Effect criteria is achieved.

**REFERENCES**: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

**SUPPORT REQUIREMENTS**:

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<tr>
<th>SIMULATED</th>
<th>SUITABILITY</th>
<th>SIMULATOR</th>
<th>UNIT OF MEASURE</th>
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<tr>
<td>Yes</td>
<td>L/S</td>
<td>DVTE</td>
<td>Marine Hours</td>
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<td>Y</td>
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<td>Yes</td>
<td>L/S</td>
<td>SAVT</td>
<td>Team Hours</td>
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<tr>
<td>Yes</td>
<td>L/S</td>
<td>CACCTUS</td>
<td>Unit Hours</td>
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**ORDNANCE**:

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<th>DODIC</th>
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<tr>
<td>D529</td>
<td>9 rounds per Marine</td>
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17-73 Enclosure (1)
DA12 Charge, Propellant 155mm MACS M231 9 charges per Marine
N340 Fuze, Point Detonating M739/M739A1 9 fuzes per Marine
N523 Primer, Percussion M82 9 primers per Marine

RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
This event will be conducted utilizing appropriate fire C2 and manual methods.
Adjust fires procedures:
1. If the PE in range is greater than or equal to 38 meters, the observer may call FFE when a 200 meter bracket is split.
   Distance Learning Product(s): MarineNet 0861A, Basic Forward Observation Procedures.
2. Round count based off of 200 meter successive bracketing with a single volley 6-gun FFE.
3. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).
SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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<tr>
<td>D529 Projectile, 155mm High Explosive M795</td>
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<td>DA12 Charge, Propellant 155mm MACS M231</td>
<td>6 charges per Marine</td>
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<tr>
<td>N340 Fuze, Point Detonating M739/M739A1</td>
<td>6 fuzes per Marine</td>
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<td>N523 Primer, Percussion M82</td>
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RANGE/TRAINING AREA:

Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:

1. This event will be conducted utilizing appropriate fire C2 and manual methods.
   Distance Learning Product(s): MarineNet 0861A, Basic Forward Observation Procedures.
2. Round count based off of 200 meter successive bracketing with a single volley 6-gun FFE.
3. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

0861-OBS-1009: Conduct a Fire for Effect Grid mission (L/S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given the equipment organic to the Fire Support Marine and a firing agency.

STANDARD: To engage target(s) by initiating the call for fire within 60 seconds of target identification, ensuring target location is within 200 meters of the actual target.

PERFORMANCE STEPS:

1. Transmit ‘Fire for Effect’ in the warning order.
2. Transmit a 6 or 8 digit grid as target location.
REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

**SIMULATION EVALUATION:**

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<td>N340 Fuze, Point Detonating M739/M739A1</td>
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<td>N523 Primer, Percussion M82</td>
<td>6 primers per Marine</td>
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**RANGE/TRAINING AREA:**

Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
This event will be conducted utilizing appropriate fire C2 and manual methods.
Adjust fires procedures:
1. If the PE in range is greater than or equal to 38 meters, the observer may call FFE when a 200 meter bracket is split.
Distance Learning Product(s): MarineNet 0861A, Basic Forward Observation Procedures.
2. Round count based off of 200 meter successive bracketing with a single volley 6-gun FFE.
3. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

**0861-OBS-1010:** Conduct an Fire for Effect Shift from Known Point mission (L/S)

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Marine

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

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given the equipment organic to the Fire Support Marine and a firing agency.
STANDARD: To engage target(s) by initiating the call for fire within 60 seconds of target identification, ensuring target location is within 200 meters of the actual target.

PERFORMANCE STEPS:
1. Transmit 'Fire for Effect Shift from Known Point'.
2. Transmit the direction to the nearest 10 mils.
3. Transmit Lateral shift to the nearest 10 meters.
4. Transmit Range shift to the nearest 100 meters.
5. Transmit vertical difference to the nearest 5 meters but no less than 35 meters.

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

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ORDNANCE:

DODIC QUANTITY
- D529 Projectile, 155mm High Explosive M795 6 rounds per Marine
- DA12 Charge, Propellant 155mm MACS M231 6 charges per Marine
- N340 Fuze, Point Detonating M739/M739A1 6 fuzes per Marine
- N523 Primer, Percussion M82 6 primers per Marine

RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
This event will be conducted utilizing appropriate fire C2 and manual methods.
Distance Learning Product(s): MarineNet 0861A, Basic Forward Observation Procedures.
2. Round count based off of 200 meter successive bracketing with a single volley 6-gun FFE.
3. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

0861-OBS-1011: Conduct a Fire for Effect LASER Polar mission (L/S)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861
**BILLETs:** Fire Support Marine

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

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given the equipment organic to the Fire Support Marine and a firing agency.

**STANDARD:** To engage target(s) by initiating the call for fire within 60 seconds of target identification, ensuring target location is within 50 meters of the actual target.

**PERFORMANCE STEPS:**
1. Perform pre-operations checks on LASER Range Finder.
2. Conduct a compass compensation.
3. Obtain the target location data from the LASER range finder.
4. Transmit the Direction to the nearest 1 mil.
5. Transmit the Distance to the nearest 10 meters.
6. Transmit the vertical angle to the nearest 1 mil.
7. Conduct End of Mission procedures.

**REFERENCES:**
1. Operators Manual TM for Laser Range Finder
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

**SUPPORT REQUIREMENTS:**

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<td>DA12 Charge, Propellant 155mm MACS M231</td>
<td>6 charges per Marine</td>
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<td>N340 Fuze, Point Detonating M739/M739A1</td>
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<td>N523 Primer, Percussion M82</td>
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**RANGE/TRAINING AREA:**
Facility Code 17671 Field Artillery Indirect Fire Range

**EQUIPMENT:** SL-3 complete LASER range finder with applicable technical manuals.

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
This event will be conducted utilizing appropriate fires C2 systems and manual methods.
1. Distance Learning Product(s): MarineNet 0861A, Basic Forward Observation Procedures.
2. Round count based off of 200 meter successive bracketing with a single volley 6-gun FFE.
3. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

**0861-OBS-1012:** Conduct an illumination mission (L/S)

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Marine

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

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given the equipment organic to the Fire Support Marine and a firing agency.

**STANDARD:** To adequately illuminate the target area.

**PERFORMANCE STEPS:**
1. Locate the target.
2. Transmit the complete illumination call for fire, in proper sequence.
5. Conduct End of Mission procedures.

**REFERENCES:**
1. FM 6-30 Tactics, Techniques, and Procedures for Observed Fire
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

**SUPPORT REQUIREMENTS:**

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<tr>
<th>SIMULATION EVALUATION:</th>
<th>SIMULATOR</th>
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<td>CACCTUS</td>
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**ORDNANCE:**

- **DODIC**
  - D505 Projectile, 155mm Illuminating M485A2: 3 projectiles per Marine
  - DA12 Charge, Propellant 155mm MACS M231: 3 charges per Marine
  - N285 Fuze, MTSQ M577/M577A1 without Booster Sub f/NA17: 3 fuze per Marine
  - N523 Primer, Percussion M82: 3 primers per Marine

**RANGE/TRAINING AREA:**
Facility Code 17671 Field Artillery Indirect Fire Range
**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. This event will be conducted utilizing appropriate fire C2 and manual methods.
2. Distance Learning Product(s): MCI 0861, Basic Forward Observation Procedures.
3. Simulation Support: This event may also be supplemented by the use of a Category I or II simulation devices and a simulation device operator. However the preferred method is to conduct this event live fire.

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**0861-OBS-1013:** Conduct a coordinated illumination mission (L/S)

**EVALUATION-CODED:** NO  
**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Marine

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSgt

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given the equipment organic to the Fire Support Marine, a firing agency, and an illuminated enemy.

**STANDARD:** To engage the target with effective fires and obtain desired effects within 60 seconds of identifying the target and initial HE round is within 200 meters of the target.

**PERFORMANCE STEPS:**
1. Transmit ‘illumination mark’ when the illumination round best illuminates the target.
2. Transmit ‘coordinated illumination.’
3. Transmit a Call for Fire (CFF).
4. Determine and transmit subsequent corrections within 15 seconds of previous High Explosive (HE) round impact.
5. Enter the Fire for Effect (FFE) phase.

**REFERENCES:**
1. FM 6-30 Tactics, Techniques, and Procedures for Observed Fire
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

**SUPPORT REQUIREMENTS:**

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<tr>
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<tbody>
<tr>
<td>D505 Projectile, 155mm Illuminating M485A2</td>
<td>5 projectiles per Marine</td>
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</table>

17-80  Enclosure (1)
D529 Projectile, 155mm High Explosive M795  9 projectiles per Marine
DA12 Charge, Propellant 155mm MACS M231  14 charges per Marine
N289 Fuze, Electronic Time M762  5 fuzes per Marine
N340 Fuze, Point Detonating M739/M739A1  9 fuzes per Marine
N523 Primer, Percussion M82  14 primers per Marine

RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. This event will be conducted utilizing appropriate fire C2 and manual methods.
2. Distance Learning Product(s): MarineNet 0861A, Basic Forward Observation Procedures.
3. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).
4. Round count based off of 200 meter successive bracketing with a single volley 6-gun FFE.

0861-OBS-1014: Conduct a danger close fire mission (S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Fire Support Marine and a firing agency.

STANDARD: To bring effective fires on a target located within 600 meters or less of a friendly position.

PERFORMANCE STEPS:
1. Determine the target location.
2. Determine offset requirements.
3. Transmit the Call For Fire (CFF).
5. Determine and transmit subsequent corrections within 15 seconds of burst.
6. Adjust fires using creeping fire techniques.
7. Request Fire for Effect (FFE).

REFERENCES: FM 6-30 Tactics, Techniques, and Procedures for Observed Fire
SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. This event will be conducted utilizing appropriate fire C2 and manual methods.
2. Distance Learning Product(s): MarineNet 0861A, Basic Forward Observation Procedures

0861-OBS-1015: Conduct two fire missions simultaneously (L/S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Fire Support Marine and a firing agency.

STANDARD: To engage multiple targets, transmitting both Calls For Fire (CFF) within 2 minutes of identification of the last target with target locations within 200 meters of the actual target.

PERFORMANCE STEPS:
1. Determine location of the targets.
2. Transmit both Calls For Fire (CFFs), in the proper sequence.
3. Precede corrections with, "TARGET NUMBER."
4. Request Fire For Effect (FFE).
5. Conduct End of Mission procedures.

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

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RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. This event will be conducted utilizing appropriate fire C2 and manual methods.
2. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).
3. This event is intended to be conducted in conjunction with previous 1000-level T&R events.

0861-OBS-1016: Conduct fire mission on irregularly shaped targets (L/S)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Fire Support Marine and an irregularly shaped target.

STANDARD: To achieve the desired effects, center grids are within 200 meter of actual target location and attitude is sent to the nearest 100 mils.

PERFORMANCE STEPS:
1. Transmit complete Call for Fire (CFF), in proper sequence, within 2 minutes of target identification.
2. Transmit three or more grids to locate a target, as required.
3. Determine and transmit subsequent corrections.
4. Send all subsequent corrections within 15 seconds of HE burst.
5. Enter fire for effect phase when effects on target is achieved.

REFERENCES:
1. FM 6-30 Tactics, Techniques, and Procedures for Observed Fire
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

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RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
Target Types
- Linear Target: a center grid with length and attitude, as required
- Rectangular Target: Transmit center grid, length, width and attitude, as required
- Circular Target: Transmit a center grid with a radius, as required.

1. This event will be conducted utilizing appropriate fire C2 and manual methods.
2. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).
3. This event is intended to be conducted in conjunction with previous 1000-level T&R events.

0861-OBS-1017: Conduct an immediate suppression mission (L/S)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Fire Support Marine and a firing agency.

STANDARD: To suppress an enemy, ensure the initial target location is within 300 meters of the target, and the Call for Fire (CFF) is transmitted within 30 seconds of target identification.

PERFORMANCE STEPS:
1. Determine the location of the target.
2. Transmit the complete Call for Fire (CFF) in the proper sequence.
3. Conduct end of mission procedures.

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

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</tr>
<tr>
<td>PM</td>
<td>Yes</td>
<td>L/S</td>
<td>CACCTUS</td>
<td>Unit Hours</td>
<td>1</td>
<td>N</td>
</tr>
</tbody>
</table>
ORDNANCE:

DODIC | QUANTITY
----- |---------
D529 Projectile, 155mm High Explosive M795 | 4 rounds per Marine
DA12 Charge, Propellant 155mm MACS M231 | 4 charges per Marine
N291 Fuze, Prox M732A2 | 2 fuzes per Marine
N340 Fuze, Point Detonating M739/M739A1 | 2 fuzes per Marine
N523 Primer, Percussion M82 | 4 primers per Marine

RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. This event will be conducted utilizing appropriate fire C2 and manual methods.
2. Distance Learning Product(s): MarineNet 0861A, Basic Forward Observation Procedures
3. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

0861-OBS-1018: Conduct an immediate smoke mission (L/S)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Fire Support Marine and a firing agency.

STANDARD: To obscure the target ensure the initial target location is within 300 meters of the target, and the Call for Fire (CFF) is transmitted within 30 seconds of target location.

PERFORMANCE STEPS:
1. Determine the location of the target.
2. Transmit the complete Call for Fire (CFF) in the proper sequence.
3. Conduct end of mission procedures.

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

<table>
<thead>
<tr>
<th>SIMULATED</th>
<th>SUITABILITY</th>
<th>SIMULATOR</th>
<th>UNIT OF MEASURE</th>
<th>HOURS</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>L/S</td>
<td>DVTE</td>
<td>Marine Hours</td>
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Enclosure (1)
ORDNANCE:

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</thead>
<tbody>
<tr>
<td>D528 Projectile, 155mm Smoke White Phosphorus</td>
<td>4 projectiles per Marine</td>
</tr>
<tr>
<td>M825</td>
<td></td>
</tr>
<tr>
<td>DA12 Charge, Propellant 155mm MACS M231</td>
<td>4 charges per Marine</td>
</tr>
<tr>
<td>N340 Fuze, Point Detonating M739/M739A1</td>
<td>4 fuzes per Marine</td>
</tr>
<tr>
<td>N523 Primer, Percussion M82</td>
<td>4 cartridges per Marine</td>
</tr>
</tbody>
</table>

RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. This event will be conducted utilizing appropriate fire C2 and manual methods.
2. Distance Learning Product(s): MarineNet 0861A, Basic Forward Observation Procedures
3. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

0861-OBS-1019: Conduct a quick smoke mission (L/S)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Fire Support Marine and a firing agency.

STANDARD: To successfully deny enemy observation using smoke munitions, ensure initial target location is within 200 meters of the target, the Call for Fire (CFF) must be transmitted within 90 seconds of target identification.

PERFORMANCE STEPS:
1. Determine the size of the area to be obscured or screened.
2. Determine the maneuver-target line.
3. Determine the wind direction in relation to the maneuver-target line.
4. Determine the desired duration of smoke.
5. Determine the adjusting point.
6. Transmit Call for Fire (CFF).
7. Request 'smoke in effect' in method of engagement in CFF.
8. Transmit subsequent corrections.
9. Send all subsequent corrections within 15 seconds of HE burst.
10. Request FFE when a 200-meter bracket is split.

REFERENCES: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

<table>
<thead>
<tr>
<th>SIMULATED</th>
<th>SUITABILITY</th>
<th>SIMULATOR</th>
<th>UNIT OF MEASURE</th>
<th>HOURS</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>L/S</td>
<td>SAVT</td>
<td>Team Hours</td>
<td>1</td>
<td>N</td>
</tr>
<tr>
<td>Yes</td>
<td>L/S</td>
<td>CACCTUS</td>
<td>Unit Hours</td>
<td>1</td>
<td>N</td>
</tr>
<tr>
<td>Yes</td>
<td>L/S</td>
<td>DVTE</td>
<td>Marine Hours</td>
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ORDNANCE:

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<thead>
<tr>
<th>DODIC</th>
<th>QUANTITY</th>
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<tbody>
<tr>
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<td>6 projectiles per Marine</td>
</tr>
<tr>
<td>D529 Projectile, 155mm High Explosive M795</td>
<td>2 projectiles per Marine</td>
</tr>
<tr>
<td>DA12 Charge, Propellant 155mm MACS M231</td>
<td>8 charges per Marine</td>
</tr>
<tr>
<td>N289 Fuze, Electronic Time M762</td>
<td>6 fuzes per Marine</td>
</tr>
<tr>
<td>N340 Fuze, Point Detonating M739/M739A1</td>
<td>2 fuzes per Marine</td>
</tr>
<tr>
<td>N523 Primer, Percussion M82</td>
<td>8 cartridges per Marine</td>
</tr>
</tbody>
</table>

RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
*If target is located by grid coordinate, transmit the OT direction before or with the first correction.*
1. This event will be conducted utilizing appropriate fire C2 and manual methods.
2. NOTE:
   a. If the M825 round is used, no HOB adjustment is necessary.
   b. Standard should be observed under ideal weather conditions.
3. Distance Learning Product(s): MarineNet 0861A, Basic Forward Observation Procedures
4. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

0861-OBS-1020: Conduct a fire mission on a moving target (S)
EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months
MOS PERFORMING: 0861
**BILLET**: Fire Support Marine

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

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given equipment organic to a Fire Support Marine and a firing agency.

**STANDARD**: To engage target(s) by initiating the call for fire, ensuring target location is within 200 meters of the actual target.

**PERFORMANCE STEPS**:  
1. Identify a moving target.  
2. Select an Intercept Point (IP) along the target's likely route of march as the target location.  
3. Transmit a Call For Fire (CFF).  
4. State the target is moving in your target description portion of the call for fire.  
5. State AMC in the "Method of Control" portion of the call for fire.  
6. Determine a trigger point.  
7. Transmit 'fire' when target reaches the trigger point.  
8. Adjust the fire mission, as required.  

**REFERENCES**: MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

**SUPPORT REQUIREMENTS**:

**SIMULATION EVALUATION**:

<table>
<thead>
<tr>
<th>SIMULATED</th>
<th>SUITABILITY</th>
<th>SIMULATOR</th>
<th>UNIT OF MEASURE</th>
<th>HOURS</th>
<th>PM</th>
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<tr>
<td>Yes</td>
<td>S</td>
<td>DVTE</td>
<td>Marine Hours</td>
<td>1</td>
<td>Y</td>
</tr>
<tr>
<td>Yes</td>
<td>S</td>
<td>SAVT</td>
<td>Team Hours</td>
<td>1</td>
<td>N</td>
</tr>
<tr>
<td>Yes</td>
<td>S</td>
<td>CACCTUS</td>
<td>Unit Hours</td>
<td>1</td>
<td>N</td>
</tr>
</tbody>
</table>

**RANGE/TRAINING AREA**:  
Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS**:

**ADMINISTRATIVE INSTRUCTIONS**:  
1. This event will be conducted utilizing appropriate fire C2 and manual methods.  
2. NOTE: Adjust rounds to Intercept Point if possible. This will improve first round accuracy and increase the damage to the target.

**0861-OBS-1021**: Conduct a precision registration, quick and time (S/L)

**EVALUATION-CODED**: NO  
**SUSTAINMENT INTERVAL**: 3 months

**MOS PERFORMING**: 0861
**BILLETs:** Fire Support Marine

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

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given equipment organic to a Fire Support Marine, an MTO from the FDO initiating the precision registration, and a firing agency.

**STANDARD:** To determine refinement data to obtain spottings of (2) rounds over and (2) rounds short within 25 meters (impact portion of the registration mission), and correct the mean height of burst of 4 time-fuzed rounds with the same data to 20 meters above the registration point.

**PERFORMANCE STEPS:**

1. Determine the OT factor.
2. Draw a diagram of the impact of all rounds, recording the spottings to the nearest mil.
3. Split the 100-meter bracket by requesting, "ADD/DROP 50."
4. Spot the next round. Split the 50-meter bracket by requesting, "2 ROUNDS, ADD/DROP 25", as appropriate, to obtain an opposite spotting.
5. Request, "1 ROUND, ADD/DROP 25", as appropriate, if these rounds are spotted opposite that of the previous spotting, to make the next round impact opposite the last 2 rounds.
6. Transmit the range and deviation refinement data to the nearest 10 meters.
7. Transmit, "RECORD AS REGISTRATION POINT, TIME REPEAT, OVER."
8. Request, "3 ROUNDS, REPEAT", once a measurable airburst is obtained.
9. Record the spotting of each round.
10. Determine the appropriate mean HOB correction of the 4 rounds to achieve a 20-meter HOB.
11. Transmit HOB refinement--"HOB CORRECTION, RECORD AS TIME REGISTRATION POINT, END OF MISSION."

**REFERENCES:** MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

**SUPPORT REQUIREMENTS:**

<table>
<thead>
<tr>
<th>SIMULATED</th>
<th>SUITABILITY</th>
<th>SIMULATOR</th>
<th>UNIT OF MEASURE</th>
<th>HOURS</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>S/L</td>
<td>DVTE</td>
<td>Marine Hours</td>
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<td>Y</td>
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<tr>
<td>Yes</td>
<td>S/L</td>
<td>CACCTUS</td>
<td>Unit Hours</td>
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<td>N</td>
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<tr>
<td>Yes</td>
<td>S/L</td>
<td>SAVT</td>
<td>Team Hours</td>
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**ORDNANCE:**

<table>
<thead>
<tr>
<th>DODIC</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>D529</td>
<td>11 projectiles per Marine</td>
</tr>
<tr>
<td>DA12</td>
<td>11 charges per Marine</td>
</tr>
<tr>
<td>N289</td>
<td>4 fuzes per Marine</td>
</tr>
<tr>
<td>N340</td>
<td>7 fuzes per Marine</td>
</tr>
<tr>
<td>N523</td>
<td>11 primers per Marine</td>
</tr>
</tbody>
</table>

**RANGE/TRAINING AREA:** Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

17-89 Enclosure (1)
**ADMINISTRATIVE INSTRUCTIONS:**
1. Distance Learning Product(s): 0861, Basic Forward Observation Procedures
2. Sustainment rate accounts for this event to be performed live every 6 months with the intermediate sustainment interval conducted in the simulator (2 SIM, 2 Live equals round count and simulator time annually).

---

**0861-OBS-1022:** Identify the information contained in the CAS 9-line

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Marine

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

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given equipment organic to a Fire Support Marine

**STANDARD:** To clearly and effectively state the 9 lines of the CAS brief in order.

**PERFORMANCE STEPS:**
1. Identify the information required for a CAS attack gameplan.
2. Identify lines 1 ‑ 9 of the CAS brief.
3. Identify the information contained in the remarks section of the CAS brief.

**REFERENCES:**
1. JP 3-09.3 Close Air Support
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller

---

**0861-OBS-1023:** Conduct a suppression of enemy air defense (SEAD) fire mission (L/S)

**EVALUATION-CODED:** NO  **SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0861

**BILLETS:** Fire Support Marine

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

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given equipment organic to a Fire Support Marine and a firing agency.
STANDARD: To successfully degrade or neutralize enemy air defenses to allow safe maneuver of aircraft in-and-out of target area.

PERFORMANCE STEPS:
1. Identify enemy air threat locations
2. Identify location to mark.
3. Identify which SEAD timeline best supports tactical situation (Continuous, Interrupted or Non-standard).
4. Transmit the appropriate Call For Fire (CFF).
5. Conduct End of Mission procedures.

REFERENCES:
1. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller
2. MCRP 3-31.2 Suppression of Enemy Air Defenses (SEAD)

SUPPORT REQUIREMENTS:

SIMULATION EVALUATION:

<table>
<thead>
<tr>
<th>SIMULATED</th>
<th>SUITABILITY</th>
<th>SIMULATOR</th>
<th>UNIT OF MEASURE</th>
<th>HOURS</th>
<th>PM</th>
</tr>
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<tbody>
<tr>
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<td>L/S</td>
<td>CACCTUS</td>
<td>Unit Hours</td>
<td>1</td>
<td>N</td>
</tr>
<tr>
<td>Yes</td>
<td>L/S</td>
<td>SAVT</td>
<td>Team Hours</td>
<td>1</td>
<td>N</td>
</tr>
<tr>
<td>Yes</td>
<td>L/S</td>
<td>DVTE</td>
<td>Marine Hours</td>
<td>1</td>
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</tr>
</tbody>
</table>

ORDNANCE:

DODIC QUANTITY

- D528 Projectile, 155mm Smoke White Phosphorus 1 projectiles per Marine
- D529 Projectile, 155mm High Explosive M795 10 projectiles per Marine
- DA12 Charge, Propellant 155mm MACS M231 11 charges per Marine
- N289 Fuze, Electronic Time M762 10 fuzes per Marine
- N340 Fuze, Point Detonating M739/M739A1 1 fuzes per Marine
- N523 Primer, Percussion M82 11 primers per Marine

RANGE/TRAINING AREA:
Facility Code 17671 Field Artillery Indirect Fire Range

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. This event will be conducted utilizing appropriate fire C2 and manual methods.
2. Ammunition requirement is based on one continuous and one interrupted SEAD mission per observer for proficiency, per iteration, and the total for annual sustainment.
3. SIMULATION SUPPORT: This event may be supplemented with the use of a Category I or II simulation devices and a simulation device operator. However the preferred method is to conduct this event live fire.

0861-OBS-1024: Submit a list of targets

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 3 months
MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given equipment organic to a Fire Support Marine.

STANDARD: To support a scheme of maneuver.

PERFORMANCE STEPS:
1. Locate the targets.
2. Record target information on DA Form 4655-R.
3. Transmit list of targets to higher, adjacent, and supporting units as required.

REFERENCES:
1. DA FORM 4655-R Target List Worksheet
2. MCRP 3-10F.2 Supporting Arms Observer, Spotter and Controller
3. MCRP 3-16E Fire Support Systems for MAGTF Operations

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: This event will be conducted utilizing appropriate fire C2 and manual methods.

0861-OBS-1025: Perform GPS aided land navigation

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

MOS PERFORMING: 0861

BILLETS: Fire Support Chief, Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a known location on the ground, a topographical map, a GPS device, a map pen, individual field equipment, and a designated set of points to navigate to during day and night.

STANDARD: In order to traverse the course locating all designated points during day or night.

PERFORMANCE STEPS:
1. Conduct pre-operational installation procedures for appropriate automated navigational equipment.
2. Input waypoint/route information into appropriate automated navigational equipment.
3. Navigate using appropriate automated navigational equipment.
4. Maintain awareness of location.
5. Troubleshoot problems, as required.
6. Navigate via manual methods if automated navigational equipment becomes faulty and operator echelon troubleshooting and maintenance procedures fail to fix the problem (as required).

REFERENCES:
1. TC 3-25.26 Map Reading and Land Navigation
2. TM 09880C-OR DAGR Operator's Pocket Guide

SUPPORT REQUIREMENTS:

RANGE/TRAINING AREA:
Facility Code 17410 Maneuver/Training Area, Light Forces
Facility Code 17412 Land Navigation Course

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS:
1. Each designated land navigation point to be used should be located to at least an eight-digit grid coordinate.
2. The location of each designated land navigation point should be verified prior to use in initial or sustainment training.
3. Terrain and training area dependent, the day course should be no less than 4,000 meters in length.
4. Terrain and training area dependent, the night course should be no less than 1,500 meters in length.
Distance Learning Product(s): MarineNet EPME 4240AA Tactical Tools, MarineNet EPME 5240AA Tactical Tools

0861-OBS-1026: Operate the Target Hand-Off System (L/S)

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 3 months

DESCRIPTION: The Target Hand-Off System (THS) is a modular Observer Digital Terminal (ODT), man-portable equipment suite. THS provides operators the ability to acquire targets quickly in day, night, and near-all-weather visibility conditions via interface with tactical data systems using fielded communications equipment.

MOS PERFORMING: 0861

BILLETS: Fire Support Marine

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

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given an operational THS with software loaded, a TAB G with relevant system configuration and network communications information, and a functional communications network.
STANDARD: In order to determine the observer’s location and that of a target, generate precision coordinates, and hand-off data to supporting arms elements.

PERFORMANCE STEPS:
1. Load map data.
2. Create communications configuration (current and planned).
3. Input target block (IAW TAB G).
4. Input ASR block (IAW TAB G).
5. Enter information routing.
6. Enter geometries, as required.
7. Enter units, as required.
8. Transmit missions to the proper agencies.

REFERENCES:
1. MCRP 3-16E Fire Support Systems for MAGTF Operations
2. TM 10938B/10938C-OR Target Location Design and hand-off system AN/PSQ-19A/B

SUPPORT REQUIREMENTS:

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<thead>
<tr>
<th>SIMULATION EVALUATION:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIMULATED</td>
</tr>
<tr>
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</table>

SIMULATED SUITABILITY SIMULATOR UNIT OF MEASURE HOURS PM
Yes L/S CACCTUS Unit Hours 4 Y
# ARTILLERY T&R MANUAL

## CHAPTER 18

### MOS 08XX COMMON MOS INDIVIDUAL EVENTS

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<td>EVENT CODING</td>
<td>18-2</td>
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<td>INDEX OF 08XX INDIVIDUAL EVENTS</td>
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<tr>
<td>08XX EVENTS</td>
<td>18-3</td>
</tr>
</tbody>
</table>
18000. PURPOSE. This chapter details the individual events that pertain to a Operations Officer and Operations Chief. 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-XXXX. This chapter utilizes the following methodology:

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

      | Code | Description |
      |------|-------------|
      | ARTY | Artillery   |

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

      | Code | Description       |
      |------|-------------------|
      | COND | Conditioning      |
      | OPS  | Operations        |
      | PLAN | Planning          |
      | 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 levels:

      | Code | Description |
      |------|-------------|
      | 2000 | Core Plus Skills |

18002. INDEX OF 08XX INDIVIDUAL EVENTS

<table>
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<tr>
<th>Event Code</th>
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<th>Page</th>
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<tbody>
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<td>Conduct a forced march</td>
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<tr>
<td>08XX-MED-1001</td>
<td>Conduct a ground MEDEVAC</td>
<td>18-3</td>
</tr>
<tr>
<td>08XX-OPS-2501</td>
<td>Conduct Combat Operation Center (COC) operations</td>
<td>18-4</td>
</tr>
<tr>
<td>08XX-OPS-2502</td>
<td>Conduct deliberate planning</td>
<td>18-5</td>
</tr>
<tr>
<td>08XX-PLAN-2501</td>
<td>Apply the six warfighting functions</td>
<td>18-6</td>
</tr>
<tr>
<td>08XX-PLAN-2502</td>
<td>Coordinate the actions of the Operational Planning Team (OPT)</td>
<td>18-7</td>
</tr>
<tr>
<td>08XX-TRNG-2501</td>
<td>Develop a unit exercise</td>
<td>18-8</td>
</tr>
<tr>
<td>08XX-TRNG-2502</td>
<td>Develop a training plan</td>
<td>18-9</td>
</tr>
<tr>
<td>08XX-TRNG-2503</td>
<td>Manage a Unit Readiness Program (URP)</td>
<td>18-9</td>
</tr>
</tbody>
</table>
18003. **08XX EVENTS**

**08XX-COND-1001**: Conduct a forced march

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

**GRADES**: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT, 1STSGT, MSGT, SGTMAJ, MGYSGT, WO-1, CWO-2, CWO-3, CWO-4, 2NDLT, 1STLT, CAPT, MAJ, LTCOL, COL

**INITIAL TRAINING SETTING**: MOJT

**CONDITION**: Given a fighting load of 55 pounds (+/- 10%), assigned weapon and mission essential equipment.

**STANDARD**: To move 15 kilometers in under 4 hours

**PERFORMANCE STEPS**:
1. Conduct Pre-Combat Checks (PCCs).
2. Participate in Pre-Combat Inspections (PCIs).
3. Execute the march.
4. Conduct follow-on actions.

**REFERENCES**: MCRP 8-10B.4 Marine Physical Readiness Training for Combat

**MISCELLANEOUS**:  

**ADMINISTRATIVE INSTRUCTIONS**: 1. This event is an MOS-specific Physical Standard for Non-Infantry GCE MOSs. See NAVMC 3500.44 Infantry Training & Readiness Manual, Appendix F for further detail. 2. The defined loads and weights in the tables provided in NAVMC 3500.44 Infantry Training & Readiness Manual, Appendix E are to be used in training as a benchmark standard as they reflect the most likely sets of items, and their associated weight, carried in actual combat operations. In the event that the items in the table are not available for training, items of similar weight may be substituted in order to meet the event standard. The unit commander still retains the authority to modify the actual load requirements based on their assessment of the situation. 3. Sustainment interval is set at 0, however a Marine will be expected to conduct this task, as a member of a GCE unit, during the unit's Marine Corps Combat Readiness Evaluation.

**08XX-MED-1001**: Conduct a ground MEDEVAC

**EVALUATION-CODED**: NO  
**SUSTAINMENT INTERVAL**: 6 months
MOS PERFORMING: 0802, 0811, 0842, 0844, 0847, 0861

BILLETS: Cannoneer

GRADES: PVT, PFC, LCPL

INITIAL TRAINING SETTING: FORMAL

CONDITION: Given a tactical vehicle, associated equipment, and crew.

STANDARD: To transport casualties for medical treatment to prevent further injury or death.

PERFORMANCE STEPS:
1. Establish security
2. Report casualty to next highest echelon
3. Provide required triage/casualty care
4. Prepare casualty for transport to extraction point
5. Evacuate injured personnel

REFERENCES:
1. FM 8-10-6 Medical Evacuation in a Theater of Operations
2. JP 4-02 Health Service Support
3. MCTP 3-10E Artillery Operations
4. Pre-hospital Trauma Life Support (PHTLS) Pre-hospital Trauma Life Support (PHTLS)

SUPPORT REQUIREMENTS:

MSPS EVENTS SUPPORTED:

<table>
<thead>
<tr>
<th>DESIGNATION</th>
<th>MSPS EVENT NAME</th>
<th>MINIMUM STANDARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSPS0012</td>
<td>Vehicle CASEVAC</td>
<td>Pass/Fail</td>
</tr>
</tbody>
</table>

MISCELLANEOUS:

ADMINISTRATIVE INSTRUCTIONS: See Appendix G for further detail.

08XX-OPS-2501: Conduct Combat Operation Center (COC) operations

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 0802, 0848

BILLETS: Operations Chief, Operations Officer

GRADES: SSGT, GYSGT, MSGT, MGYSGT, CAPT, MAJ, LTCOL

INITIAL TRAINING SETTING: MOJT
CONDITION: Given all the elements of a Ground Combat Operations Center operating within a MAGTG/Joint/Combined/Interagency environment, necessary resources, higher headquarters order, commanders guidance and reference.

STANDARD: To ensure the integration of systems, personnel, and processes to effectively command and control ground combat operations.

PERFORMANCE STEPS:
1. Supervise the emplacement and displacement of the Combat Operations Center (COC).
2. Supervise layout, integration of systems and information exchange requirements throughout the Combat Operations Center (COC) to support integrated staff operations.
3. Establish a watch section.
4. Establish Combat Operations Center (COC) procedures.
5. Organize C4ISR assets in the command operations center.
6. Maintain communications with higher, adjacent, supporting units and organizations.
7. Implement the information management plan.
8. Maintain the Common Operational Picture (COP)
9. Maintain the Common Tactical Picture (CTP).
10. Supervise the accuracy and timely submission of messages and reports.
11. Assist in the preparation of products in support of operations.
12. Conduct battle rhythm.
13. Transition control of operations to the appropriate echelon.
14. Support the synchronization of intelligence, fires, maneuver, and logistics to achieve combined arms effects against the threat.
15. Enforce Force Protection (FP) procedures.

REFERENCES:
1. FM 3-0 Operations
2. MCDP 3-10 Tactics
3. MCTP 3-10F Fire Support Coordination in the Ground Combat Element
4. MCWP 3-10 MAGTF Ground Operations
5. MCWP 5-10 Marine Corps Planning Process

08XX-OPS-2502: Conduct deliberate planning

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 0802, 0848

BILLETs: Operations Chief, Operations Officer

GRADES: SSGT, GYSGT, MSGT, MGYSGT, CAPT, MAJ, LTCOL

INITIAL TRAINING SETTING: MOJT

CONDITION: As a member of a Ground Combat Element planning staff operating within a MAGTF/Joint/Combined/Interagency environment, higher headquarters order, commander's guidance and references.
STANDARD: To ensure support to the accomplishment of the mission.

PERFORMANCE STEPS:
2. Develop courses of action.
3. Wargame courses of action.
4. Present courses of action and wargame products for Commanders’ comparison and decision.
5. Develop order.
7. Supervise assessment throughout the process.

REFERENCES:
1. FM 3-06 Urban Operations
2. FM 3-07 Stability Operations
3. MCDP 1 Warfighting
4. MCDP 1-0 Marine Corps Operations
5. MCDP 1-3 Tactics
6. MCDP 2 Intelligence
7. MCDP 4 Logistics
8. MCDP 5 Planning
9. MCDP 6 Command and Control
10. MCWP 3-10 MAGTF Ground Operations
11. MCWP 5-10 Marine Corps Planning Process

08XX-PLAN-2501: Apply the six warfighting functions

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

DESCRIPTION: This event covers the application of the six warfighting functions within the artillery community core METS.

MOS PERFORMING: 0802, 0848

BILLETS: Operations Chief, Operations Officer

GRADES: SSGT, GYSGT, MSGT, MGYSGT, CAPT, MAJ, LTCOL

INITIAL TRAINING SETTING: MOJT

CONDITION: As a member of a Ground Combat Element planning staff operating within a MAGTF/Joint/Combined/Interagency environment, higher headquarters order, commander's guidance and references.

STANDARD: To achieve the desired effects in support of the mission.

PERFORMANCE STEPS:
1. Integrate intelligence into ground combat operations.
2. Integrate fires and effects into ground combat operations.
3. Integrate logistics into ground combat operations.
4. Facilitate Command and Control (C2) in support of ground combat operations.
5. Integrate Force Protection in support of ground combat operations.
REFERENCES:
1. FM 3-06 Urban Operations
2. FM 3-07 Stability Operations
3. MCDP 1 Warfighting
4. MCDP 1-0 Marine Corps Operations
5. MCDP 2 Intelligence
6. MCDP 3-10 Tactics
7. MCDP 4 Logistics
8. MCDP 5 Planning
9. MCDP 6 Command and Control
10. MCWP 3-10 MAGTF Ground Operations
11. MCWP 5-10 Marine Corps Planning Process

08XX-PLAN-2502: Coordinate the actions of the Operational Planning Team (OPT)

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 0802, 0848

BILLETs: Operations Chief, Operations Officer

GRADES: SSGT, GYSGT, MSGT, MGYSGT, CAPT, MAJ, LTCOL

INITIAL TRAINING SETTING: MOJT

CONDITION: As a member of a Ground Combat Element planning staff operating within a MAGTF/Joint/Combined/Interagency environment, higher headquarters order, commander's guidance and references.

STANDARD: To support the accomplishment of the mission and Commanders guidance.

PERFORMANCE STEPS:
1. Determine the type of planning team.
2. Determine composition, roles, and responsibilities of OPT members.
3. Review commander's orientation.
4. Ensure development/review/update of Intelligence Preparation of the Battlefield (IPB).
5. Ensure warfighting functions and/or lines of operation plans are organized into the Commanders single battle effort.
6. Ensure planning and execution assessment measures and mechanisms are developed.
7. Ensure information management procedures are incorporated throughout the plan.

REFERENCES:
1. FM 3-06 Urban Operations
2. FM 3-07 Stability Operations
3. MCDP 1 Warfighting
4. MCDP 1-0 Marine Corps Operations
5. MCDP 1-3 Tactics
6. MCDP 2 Intelligence
Develop a unit exercise

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

**MOS PERFORMING:** 0802, 0848

**BILLETS:** Operations Chief, Operations Officer

**GRADES:** SSGT, GYSGT, MSGT, MGYSGT, CAPT, MAJ, LTCOL

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an approved Mission Essential Task List (METL), and commanders training guidance.

**STANDARD:** That ensures the unit achieves METL proficiency.

**PERFORMANCE STEPS:**
1. Identify collective and individual training events from applicable T&R manuals.
2. Identify live, virtual, and constructive training venues.
3. Identify resource requirements and limitations.
4. Develop a scheme of maneuver.
5. Develop opposing force plan.

**REFERENCES:**
1. FM 3-06 Urban Operations
2. FM 3-07 Stability Operations
3. MCDP 1 Warfighting
4. MCDP 1-0 Marine Corps Operations
5. MCDP 1-3 Tactics
6. MCDP 2 Intelligence
7. MCDP 4 Logistics
8. MCDP 5 Planning
9. MCDP 6 Command and Control
10. MCTP 8-10A Unit Training Management Guide
11. MCTP 8-10B How to Conduct Training
12. MCWP 3-10 MAGTF Ground Operations
13. MCWP 5-10 Marine Corps Planning Process

**MISCELLANEOUS:**
**ADMINISTRATIVE INSTRUCTIONS:** This event can be trained/augmented through the use of the following enablers: LIVE ‘ TVCS

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**08XX-TRNG-2502:** Develop a training plan

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

**MOS PERFORMING:** 0802, 0848

**BILLETS:** Operations Chief, Operations Officer

**GRADES:** SSGT, GYSGT, MSGT, MGYSGT, CAPT, MAJ, LTCOL

**INITIAL TRAINING SETTINGS:** MOJT

**CONDITION:** Given an approved Mission Essential Task List (METL), mission statement, and higher headquarters long range training plan, commanders’ unit assessment, and commanders training guidance.

**STANDARD:** That ensures the unit achieves METL proficiency.

**PERFORMANCE STEPS:**
1. Review the METL.
2. Review commanders training guidance.
4. Review higher headquarters long range training plan.
5. Review previous training plans.
6. Coordinate with higher, adjacent and subordinate units.
7. Create the mid-range training plan.
8. Disseminate the mid-range training plan.

**REFERENCES:**
1. MCTP 8-10A Unit Training Management Guide
2. MCTP 8-10B How to Conduct Training

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**08XX-TRNG-2503:** Manage a Unit Readiness Program (URP)

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

**MOS PERFORMING:** 0802, 0848

**BILLETS:** Operations Chief, Operations Officer

**GRADES:** SSGT, GYSGT, MSGT, MGYSGT, CAPT, MAJ, LTCOL

**INITIAL TRAINING SETTINGS:** MOJT

**CONDITION:** Given a mid-range training plan and emerging technologies.
STANDARD: To ensure the unit has achieved Mission Essential Task List (METL) proficiency.

PERFORMANCE STEPS:
1. Manage the Training Exercise and Employment Plan (TEEP).
2. Manage readiness reporting.
3. Manage annual training requirements.
4. Manage Professional Military Education (PME) training requirements.
5. Manage ancillary training requirements.
6. Manage mission essential training requirements.

REFERENCES:
1. MCTP 8-10A Unit Training Management Guide
2. MCTP 8-10B How to Conduct Training

08XX-TRNG-2505: Execute the Unit Readiness Plan

EVALUATION-CODED: NO SUSTAINMENT INTERVAL: 12 months

MOS PERFORMING: 0802, 0848

BILLETS: Operations Chief, Operations Officer

GRADES: SSGT, GYSGT, MSGT, MGYSGT, CAPT, MAJ, LTCOL

INITIAL TRAINING SETTING: MOJT

CONDITION: Given an approved training plan, all elements of a Ground Combat Element operating in the contemporary environment within a MAGTF/Joint/Multi-National/Interagency Command and Control architecture, necessary resources, higher headquarters order, and Commanders guidance.

STANDARD: To ensure the unit is able to accomplish assigned tasks and meet manpower and equipment requirements.

PERFORMANCE STEPS:
1. Develop schedule encompassing training, maintenance, and operations.
2. Develop Letters of Instruction and briefs.
3. Provide instructional material.
5. Assign instructors.
6. Assign evaluators for E-Coded and commander designated events.
7. Prioritize, allocate and schedule resources.
8. Adjust training plan based upon assessment.
10. Maintain unit training statistics.

REFERENCES:
1. MCTP 8-10A Unit Training Management Guide
2. MCTP 8-10B How to Conduct Training

MISCELLANEOUS:
ADMINISTRATIVE INSTRUCTIONS: 1. Training Schedule should include operations, maintenance, and training. 2. Assigned tasks consists of core METS as published by T&R Manual, additional assigned METs and Commander determined METs which determine the units METL.

08XX-TRNG-2506: Assess developed training and operational plans

EVALUATION-CODED: NO  SUSTAINMENT INTERVAL: 24 months

MOS PERFORMING: 0802, 0848

BILLETS: Operations Chief, Operations Officer

GRADES: SSGT, GYSGT, MSGT, MGYSGT, CAPT, MAJ, LTCOL

INITIAL TRAINING SETTING: MOJT

CONDITION: Given developed plans, all elements of a Ground Combat Element operating in the contemporary environment within a MAGTF/Joint/Multi-National/Interagency Command and Control architecture, necessary resources, higher headquarters order, and Commanders guidance.

STANDARD: To ensure the development of metrics and a framework of measuring the progression towards mission accomplishment and/or solving identified problem.

PERFORMANCE STEPS:
1. Determine which objectives to assess.
2. Determine necessary conditions which equate to objective completion.
3. Develop an assessment framework.
4. Nest assessment with Higher, adjacent, supporting/supported units.
5. Develop criteria to assess changes in system behavior, capability, or operational environment to measure mission accomplishment. (MOE)
6. Develop criteria to assess friendly actions to measure task accomplishment. (MOP)
7. Develop metrics for each criteria.
8. Collect metric data and observations.
9. Synthesize metric data and observations.
10. Analyze metric data and observations.
12. Measure effectiveness towards assigned mission accomplishment.
13. Determine if plan is valid.
14. Adjust actions as necessary.

REFERENCES:
1. MCTP 8-10A Unit Training Management Guide
2. MCTP 8-10B How to Conduct Training

MISCELLANEOUS:
**ADMINISTRATIVE INSTRUCTIONS:** Assessment framework entails a method and process to assess particular tasks, activities, or effects and the criteria to be used. It specifically delineates the staff member who is primarily responsible for assessing a particular area. And, it promulgates information requirements needed each particular assessment. Assessment criteria and metrics should have the following characteristics: measurable, discrete, relevant, responsive.

**08XX-TRNG-2507:** Develop Unit Standard Operating Procedures and Policies

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

**MOS PERFORMING:** 0802, 0848

**BILLETs:** Operations Chief, Operations Officer

**GRADES:** SSGT, GYSGT, MSGT, MGYSGT, CAPT, MAJ, LTCOL

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given all elements of a Ground Combat Element operating in the contemporary environment, commanders and other relevant guidance, orders, and procedures.

**STANDARD:** To ensure a unit demonstrates interoperability with other units/organizations while accomplishing assigned tasks through adaptation to changing environments.

**PERFORMANCE STEPS:**
1. Analyze doctrine, best practices and lessons learned.
2. Determine best practices and lessons learned for incorporation.
3. Develop unit TTPs by warfighting functions based upon doctrine, selected best practices, and lessons learned.
4. Develop units methods and tenets of standardization and interoperability (SOP and policies).
5. Validate units SOP and policies.
6. Refine units SOP and policies.
7. Publish units SOP and policies.
8. Maintain contact with appropriate organizations to ensure learning continues (give and take best practices and lessons learned).
9. Update units SOP and policies as required.
10. Submit best practices, lessons observed, and lessons learned to appropriate organizations.

**REFERENCES:**
1. MCTP 8-10A Unit Training Management Guide
2. MCTP 8-10B How to Conduct Training
ARTILLERY T&R MANUAL

APPENDIX A

ACRONYMS

AAV - amphibious assault vehicle
ACP - automated commissioning package
ACT - accuracy completeness time sequence
ACTS - Assignment, Classification, and Travel Systems
AIRS - Automated Inspection Reporting System
AO - area of operations
APTS - advanced presentation and training skills
AR - Active Reserve
ASTB-E - Aviation Selection Test Battery Series-E
AT4C - advanced tool for coaching
BIC - billet information code
CAPT - Captain
CAR - commander's attainment report
CBRN - chemical, biological, radiological, and nuclear
CBT - computer-based training
CG - commanding general
CMC - Commandant of the Marine Corps
CMR - consolidated memorandum receipt
CO - commanding officer
COA - course of action
CONPLAN - contingency plan
CONUS - continental United States
COT - consecutive overseas tours
CPL - Corporal
CRP - combat readiness percentage; command recruiting program
CSR - consolidated strength report
CWO - chief warrant officer
DEP - delayed entry program
DL - distance learning
DOD - Department of Defense
DoDFMR - Department of Defense Financial Management Regulation
DON - Department of the Navy
DRRS - Defense Readiness Reporting System
EAD - extended active duty
ECFC - enlisted career force controls
ECS - effective communication skills
EFMP - Exceptional Family Member Program
ENLPRM - enlisted promotions
EPM - enlistment processing manual
1STLT - First Lieutenant
FAI - functional area inspection
FLC - formal learning center
FMF - fleet Marine force
FY - fiscal year
GOV - government owned vehicle
GSA - Government Services Administration
GYSGT - Gunnery Sergeant
HOTAS - hands-on throttle and stick
HQMC - Headquarters, Marine Corps
IAW - in accordance with
IGMC - Inspector General of the Marine Corps
IIADT - incremental initial active duty training
IMI - individual multimedia instruction
IPOCT - in place consecutive overseas tours
IRAM - Individual Records Administration Manual
IRR - Individual Ready Reserve
IRT - Itinerant Recruiting Trip
JPIC - Joint Package Inspection Checklist
LATMOV - lateral move
LCPL - Lance Corporal
LDO - limited duty officer; line of duty
LOI - letter of instruction
LSL - lump sum leave
MAJ - Major
MARADMIN - Marine Administrative Message
MARCORPROMMAN - Marine Corps Promotion Manual
MARCORSEPMAN - Marine Corps Separation and Retirement Manual
MARFORRES - Marine Corps Forces Reserve
MASP - military academic skills program
MC2 - Marine Corps Communication and Consulting
MC3 - Marine Corps Communication, Coaching, and Counseling
MC4 - Marine Corps Communication, Consulting, Coaching, and Counseling
MCC - monitored command code
MCEOB - Marine Corps Enlisted Opportunities Book
MCI - Marine Corps Institute
MCMEDS - Marine Corps Medical Entitlements Data System
MCMP - Marine Corps mentoring program
MCO - Marine Corps order
MCOOB - Marine Corps Officer Opportunity Book
MCP3 - Marine Corps Performance, Programming and Philosophy
MCPS - Marine Corps Presentation Skills
MCRAMM - Marine Corps Reserve Administrative Management Manual
MCRC - Marine Corps Recruiting Command
MCRD - Marine Corps Recruit Depot
MCRISS - Marine Corps Recruiting Information Support System
MCRISS-OS - Marine Corps Recruiting Information Support System-Officer Selection Station
MCRISS-PS - Marine Corps Recruiting Information Support System-Prior Service Recruiting Station
MCRISS-PSRSS - Marine Corps Recruiting Information Support System-Prior Service Recruiting Substation
MCRISS-RS - Marine Corps Recruiting Information Support System-Recruiting Station
MCROB - Marine Corps Reserve Opportunity Book
MCT - Marine Corps Task
MCTFSPRIM - Marine Corps Total Force Reporting Instructions Manual
MCTIMS - Marine Corps Training Information Management System
MCTL - Marine Corps Task List
MECEP - Marine Corps Enlisted Commissioning Education Program
MEPCOM - Military Entrance Processing Command
MEPS - Military Entrance Processing Station
MET - mission essential task
METL - mission essential task list
MGIB-R - Montgomery GI Bill-Reserve
MGYSST - Master Gunnery Sergeant
MIRS - USMEPCOM Integrated Resource System
MISSO - Manpower Information Systems Support Officer
MOJT - Marine on-the-job training
MOL - Marine online
MOS - military occupational specialty
MSC - major subordinate command
MSGT - Master Sergeant
MUD - Merkel Unit Designator
NAMI - Naval Aerial Medical Institute
NAVMC - Navy Marine Corps
NIDT - Non-Instrumented Drug Test
NMCI - Navy Marine Corps Communication Information
NWA - new working applicant
OCHF - Operations Chief
OCM - Officer Commissioning Manual
OCONUS - outside the continental United States
OIC - officer in charge
OPFOR - operating forces; opposing force; opposition force
OPLAN - operational plan
OPNAV - Office of the Chief of Naval Operations
OPNAVINST Chief of Naval Operations instruction
OPS - operations
OPSO - operations officer
ORM - operational risk management
OSO - officer selection officer
OSS - officer selection station
OST - officer selection team
PAC - prospect applicant card
PADD - projected active duty date
PAR - Performance and Review
PFC - Private First Class
PSEP - prior service enlistment program
PSF - public speaking forum
PSR - prior service recruiter
PSRS - prior service recruiting station
PSRSS - prior service recruiting substation
PTAD - permissive temporary additional duty
PVT - Private
QC - quality control
QCIS - quality control SITREP
QSN - quota serial number
RAV - Retention Assist Visit
RECLP - Reserve Enlisted Commissioning Program
RELM - Reenlistment Extension Lateral Move
RI - Recruiter Instructor
ROEP - Reserve Option Enlistment Program
RS - Recruiting Station
RSCE - Recruiting Station Command Element
RSS - Recruiting Substation
RTF - recruiter training file
RUC - reporting unit code
S&R - Schedule and Results
SAT - Systems Approach to Training
SAV - staff assist visit
SDA - special duty assignment
SECNAVINST - Secretary of the Navy instruction
SGT - Sergeant
SGTMAJ - Sergeant Major
SITREP situation report
SMB - SNCOIC Management Book
SMCR - select Marine Corps reserve
SME - subject matter expert
SMOS - supplementary MOS
SNCO - staff noncommissioned officer
SNCOIC - staff noncommissioned officer in charge
SOP - standing operating procedure
SOS - statement of service
SOU - statement of understanding
SRB - selective reenlistment bonus
SRI - Systematic Recruiting Inspection
SRIP - Selected Reserve Incentive Program
SSGT - Staff Sergeant
T&R - training and readiness
T/O - table of organization
TECOM - Training and Education Command
TIP - training input plan
TMS - Training Management System
UMIS - Unit Manpower Information Sheet
UTM - unit training management
WO - Warrant Officer
XO - executive officer
ARTILLERY T&R 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 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.

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

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.

Operational Readiness (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.

Prerequisite Event. Prerequisites are the academic training and/or T&R events that must be completed prior to attempting the event.
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.

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.

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 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).

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.

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.

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.
1. Listed in this appendix are applicable simulators/simulations available to improve training for both individual Marines and unit training. Simulators and simulations provide the capability to develop and hone core and core plus competencies and capabilities. Accordingly, the use of training modeling and simulation systems for appropriate T&R events can help maintain valuable combat resources while reducing training time, cost, and risk. For more information regarding training Modeling & Simulation (M&S) Systems, review website: https://ehgmc.usmc.mil/org/mccdc/TECOM/directorates/MTSB/Internal/default.aspx

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 on 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 command and control 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
7. Live, Virtual and Constructive (LVC) 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 DL delivery systems (i.e., MarineNet) where the students and instructors are separated by time and/or location.

1. The identification of an event as suitable for simulation requires unit personnel to schedule training within a respective simulation center, approved by CG TECOM.

2. CG TECOM simulation centers will provide unit commanders with official correspondence for any instance in which an approved simulation center cannot accommodate unit training requests. If a commander receives such notification, he or she can elect to conduct live set training. Listed below are applicable systems:

   a. Supporting Arms Virtual Trainer (SAVT) is a fixed-site, partial dome (260 X 60 degree), virtual immersive training environment for Joint Terminal Attack Controller (JTACs), Forward Air Controllers (FACs), and Joint Forward Observers (JFOs). SAVT provides a "hands-on," immersive, mission-based, combined arms training environment. Personnel shall use training scenarios that require placement of tactical ordnance on selected targets using Joint Close Air Support (JCAS) procedures and observed fire procedures for Naval Surface Fire Support (NSFS), Artillery and Mortar fire. SAVT will provide a briefing and after action room for a group of students to monitor, review mission-based training events, and conduct after-action discussions. SAVT trains Marines to approved standards of training and readiness (T&R) tasks.

   b. Indoor Simulated Marksmanship Trainer (ISMT) is an interactive three dimensional audio/video weapons simulator that provides enhanced small arms training in marksmanship, weapons employment, indirect fire, and tactical decision-making for Marines. The ISMT simulates range firing for basic infantry weapons, tactical employment training, call for fire, and shoot/no shoots decision-making drills. The ISMT can be utilized to train individuals, fire teams, and squads effectively and efficiently to the approved standards of combat skills and readiness.

   c. Combat Convoy Simulator (CCS) is an interactive immersive training environment for convoy operations during combat, focusing on command and control. Other training capabilities include call for fire, call for close air support, mounted patrols, logistics support, high target extraction, MEDEVAC, and procedures for use of weapons in compliance with rules of engagement (ROE) and local TTPs. A single CCS suite of six vehicles provides for individual, crew, and platoon level training (up to 30 Marines at a time). The CCS trains Marines to approved standards of combat skills and readiness.

   d. Deployable Virtual Training Environment (DVTE) is a deployable laptop PC based simulation system capable of emulating organic and supporting Infantry Battalion weapons systems and training scenarios to facilitate T&R
based training. DVTE provides each installation and deployed Marine Forces with MAGTF (MEU level) Staff training, individual and collective skills sustainment, rapid planning, and almost spontaneous mission rehearsal capability. DVTE increases training of individual and unit core skills enhancing a rapid, innovative and interactive small-unit leader decision making, and increased combined arms Training and pre-certification capability. The following is a list of the DVTE training applications/capabilities:

e. Virtual Battlespace 2 (VBS2) is an interactive, three-dimensional synthetic environment in which small unit tactics may be practiced among team members. Photo-realistic terrain, user created mission scenarios, and variable environmental conditions enhance the team training experience. Mission planning and mission rehearsal can be executed from squad to platoon level. VBS2 can be used to support Fire Support Training, convoy operations and tactical guided discussions.

f. Recognition of Combatants (ROC) a series consisting of applications covering Improvised Explosive Device (ROC-IED), Suicide Bomber (ROC-SB), Vehicle (ROC-V), and Aerial (ROC-Aerial) are self-paced computer based training tools designed to improve awareness and recognition of various combatant capabilities and functional considerations.

g. Operational and Tactical Language and Cultural Training System (OTCLTS) is a self-paced language and cultural training application that allows the user to learn Iraqi Arabic, Indonesian, Pashto, Dari, and French languages along with cultural considerations.

h. Forward Observer PC Simulator (FOPCSIM) is an individual Fires trainer which provides training on the basic concepts of fire support. FOPCSIM is a procedural trainer for artillery and mortar Call for Fire. FOPCSIM is also the forward observer component of the Deployable Virtual Training Environment (DVTE) Combined Arms Network (CAN) that provides a training tool for integration of artillery and close air support with maneuver forces.

i. Combined Arms Planning Tool (CAPT) is a standalone tool that can be used to enter and test all elements of your fire support plan. Doctrinal rules have been incorporated into the program, so that once the fire support plan is entered, CAPT runs a "rules based" test on the plan to identify potential trouble areas.

j. Combined Arms Network (CAN) is a computer based training tool that provides standard based training for individual Forward Observers, Forward Air Controllers and Joint Terminal Attack Controllers (JTAC) as well as team training for company fire support teams (FiST). CAN currently supports JTAC/JFO certification training under the TACP T&R Manual.

k. Combined Arms Command and Control Trainer Upgrade System (CACCTUS) provides an institutional means to effectively train Marine staffs and units in all aspects of effectively integrating combined arms assets. The CACCTUS capability provides the full range of combined arms staff training and provides state of the art modeling and simulation networking technology to provide realistic Combined Arms Fire Support for the Marine air-ground task force (MAGTF). The high resolution combat simulation provides the ability to provide ground truth in the exercise, stimulate organic C2 Systems, visually display the impact of supporting arms fires and realistically portray the
coordinated actions of friendly forces and the action/reaction of the enemy maneuver forces. The automated communication system replicates tactical communication nets required for command and control of exercising units allowing the training audience to communicate normal warfighting communications and process orders and other information/questions to response cell controllers. CACCTUS provides an automated after action review capability for live and simulated training thereby allowing the Marine Corps to meet its service training requirements.

2. For more information on current simulations, contact your local Simulation Centers. The following is the contact information:

   a. Battle Simulation Centers (Scheduling Office)

      (1) I MEF: (760) 725-2385
      (2) II MEF: (910) 451-5435
      (3) III MEF:

         • MCB Camp Butler: 011-81-611-722-7219/ DSN 315 622-7219/7516
         • MCB Hawaii: Simulators & Trainers must be scheduled via RFMSS. 3MAR Simulations Center: (808) 257-2440/ DSN 457-2440 POC Sgt Brannan

      (4) MAGTF TC: (760) 830-1366/1382

   b. Ground Training Simulators (Scheduling Office)

      (1) MCB Camp Lejeune: (910) 451-7392
      (2) MCB Camp Pendleton: Simulators & Trainers can be scheduled via RFMSS. Training Support Division Help Desk/Ref Desk (760) 725-4444.
      (5) MAGTF-TC: DVTE (760) 830-5622; SAVT (760) 362-2324; CACCTUS (760) 830-1382; CCS (760) 830-4192 & ISMT (760) 830–4187. Schedule ODS and HMMWV Egress Assistance Trainer via RFMSS.

3. The table listed below identifies simulation requirements, identified by each specific simulation asset.

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<th>SIM code</th>
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<th>Reps</th>
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1. The Class V ammunition requirements listed in this appendix are the aggregated totals required to meet the measurable training standards for all collective and individual training events.

2. The table below identifies yearly evaluation coded ammunition requirements, separated by each department of defense identification code (DODIC) for operating forces (OPFOR) allocations.

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3. The table listed below identifies ammunition requirements for each T&R event as they pertain to all identified DODIC’s. The calculated totals are determined by analyzing the event quantities (QTY) of ammunition required to train one evolution of the T&R event; unit of measure (UOM) per Marine, section, battery etc.; unit of measure quantity (UOM QTY) determining the quantity issued per unit of measure; event ammunition requirement (EAR) multiplied by the yearly training occurrences per the sustainment interval; annual frequency interval (A-FRQ) defining how many times the event is trained each year; individual allocation (IA) ammunition expended within an individual event; table of organization (T/O) defines number of personnel within a specific MOS; annual authorized training requirements (AATR) equaling the total yearly amounts required to meet the standard; and the additive (ADT) training amounts, ammunition that would enhance training beyond meeting the measurable standard.
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**DA12 Charge, Propellant 155mm MACS M231**

**N289 Fuze, Electronic Time M762**

**N340 Fuze, Point Detonating M739/M739A1**

**N523 Primer, Percussion M82**

**0861-OBS-2002**

**0861-OBS-2005**

**0861-OBS-1005**

**0861-OBS-1006**

**D529 Projectile, 155mm High Explosive M795**

**D529 Projectile, 155mm High Explosive M795**

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**D529 Projectile, 155mm High Explosive M795**

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<td>N</td>
<td>N340 Fuze, Point Detonating M739/M739A1</td>
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<td>0861-OBS-1018</td>
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<td>N523 Primer, Percussion M82</td>
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<td>MARINE</td>
<td>1</td>
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<td>DA12 Charge, Propellant 155mm MACS M231</td>
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<td></td>
<td>N289 Fuze, Electronic Time M762</td>
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<td>N340 Fuze, Point Detonating M739/M739A1</td>
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<td>4</td>
<td>2</td>
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<td>N523 Primer, Percussion M82</td>
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<td>MARINE</td>
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<td>0861-OBS-1021</td>
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<td>DA12 Charge, Propellant 155mm MACS M231</td>
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<td>MARINE</td>
<td>1</td>
<td>11</td>
<td>2</td>
<td>22</td>
<td>250</td>
<td>5500</td>
<td>0</td>
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<tr>
<td></td>
<td></td>
<td>N289 Fuze, Electronic Time M762</td>
<td>6</td>
<td>MARINE</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>12</td>
<td>250</td>
<td>3000</td>
<td>0</td>
</tr>
<tr>
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<td>N340 Fuze, Point Detonating M739/M739A1</td>
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<td>7</td>
<td>2</td>
<td>14</td>
<td>250</td>
<td>3500</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>N523 Primer, Percussion M82</td>
<td>11</td>
<td>MARINE</td>
<td>1</td>
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<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>250</td>
<td>500</td>
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<td>D529 Projectile, 155mm High Explosive M795</td>
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<td>MARINE</td>
<td>1</td>
<td>11</td>
<td>2</td>
<td>22</td>
<td>250</td>
<td>5500</td>
<td>0</td>
</tr>
<tr>
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<td></td>
<td>DA12 Charge, Propellant 155mm MACS M231</td>
<td>11</td>
<td>MARINE</td>
<td>1</td>
<td>11</td>
<td>2</td>
<td>22</td>
<td>250</td>
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<td>N289 Fuze, Electronic Time M762</td>
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<td>MARINE</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>12</td>
<td>250</td>
<td>3000</td>
<td>0</td>
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<tr>
<td></td>
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<td>N340 Fuze, Point Detonating M739/M739A1</td>
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<td>MARINE</td>
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<td>7</td>
<td>2</td>
<td>14</td>
<td>250</td>
<td>3500</td>
<td>0</td>
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<tr>
<td></td>
<td></td>
<td>N523 Primer, Percussion M82</td>
<td>11</td>
<td>MARINE</td>
<td>1</td>
<td>11</td>
<td>2</td>
<td>22</td>
<td>250</td>
<td>5500</td>
<td>0</td>
</tr>
</tbody>
</table>
The standard loads are defined with respect to operational need, human factors and levels of sustainment. Terms in this appendix are subject to change as applicable orders and directives are revised. Terms established by Marine Corps orders or directives take precedence.

The defined loads and weights are to be used in training events to standard as they indicate the most likely conditions to be experienced in actual combat operations. The unit commander still retains the authority to modify the actual load requirements based on their assessment of the situation.

**Fighting Load.** Definition: The fighting load consists of items of clothing, equipment, weapons, and ammunition that are carried by, and essential to, the effectiveness of the combat Marine and the accomplishment of the immediate mission.

The commander must ensure that all fighting loads be stripped to the bare minimum. The addition of small, light-weight items in excess of the limit should not be tolerated, since cumulatively, these items will take a toll in energy. Every extra pound a Marine must carry decreases combat effectiveness.

**Assault Load.** Definition: The load that is needed during the actual conduct of the assault. It includes minimal equipment beyond water and ammunition.

From the human factors perspective, the maximum assault load weight will be such that an average infantry Marine will be able to conduct combat operations with minimal degradation in combat effectiveness.

**Approach March Load.** Definition: The load necessary for the prosecution of combat operations for extended periods with access to daily re-supply. The approach march load is intended to provide the individual Marine with the necessities of existence for an extended period of combat.

**Sustainment Load.** Definition: The load taken from the point of origin into the assembly area. The sustainment load will be intended to support the individual from their pack when immediate re-supply is impossible.

The sustainment load will be such that the average infantry Marine will be able to conduct limited movement within the confines of Naval shipping embark and debark aircraft or amphibious craft, and limited marching from the landing zone into a secured area.
## Fighting Load

<table>
<thead>
<tr>
<th>Clothing Worn &amp; Packed</th>
<th>Weight (lbs.)</th>
<th>Quantity</th>
<th>Total Weight (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine Corps Combat Utility, Blouse and Trouser (Seasonal)</td>
<td>2.97</td>
<td>1</td>
<td>2.97</td>
</tr>
<tr>
<td>Uniform, Utility, Belt</td>
<td>0.30</td>
<td>1</td>
<td>0.30</td>
</tr>
<tr>
<td>Ballistic Eye Pro (Day/Night)</td>
<td>0.31</td>
<td>1</td>
<td>0.31</td>
</tr>
<tr>
<td>M50 Mask (include twin filters) w/ Carrier</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Gloves</td>
<td>0.30</td>
<td>1pr</td>
<td>0.30</td>
</tr>
<tr>
<td>T-Shirt, Green</td>
<td>0.18</td>
<td>1</td>
<td>0.18</td>
</tr>
<tr>
<td>Undershorts</td>
<td>0.25</td>
<td>1</td>
<td>0.25</td>
</tr>
<tr>
<td>Marine Corps Combat Boots w/ Laces</td>
<td>3.12</td>
<td>1</td>
<td>3.12</td>
</tr>
<tr>
<td>Socks</td>
<td>0.16</td>
<td>1</td>
<td>0.16</td>
</tr>
<tr>
<td>Watch, Wrist</td>
<td>0.10</td>
<td>1</td>
<td>0.10</td>
</tr>
<tr>
<td>Card, ID</td>
<td>0.03</td>
<td>1</td>
<td>0.03</td>
</tr>
<tr>
<td>Tags, ID</td>
<td>0.10</td>
<td>1</td>
<td>0.10</td>
</tr>
<tr>
<td>Helmet w/ Cover, Band, and NVG Base Plate</td>
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<td>3.5</td>
</tr>
<tr>
<td>Plate Carrier w/ Soft Armor</td>
<td>9</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>SAPI Plates (Front, Back, and 2x side)</td>
<td>19</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>Pouches (1-dump, 3-Magazine, 2 grenade)</td>
<td>2</td>
<td>1/3/2002</td>
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<tr>
<td>IFAK 'A1 First Aid Kit</td>
<td>2.1</td>
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<td>2.1</td>
</tr>
<tr>
<td>AN/PVS-14 w/ Elbow/Rhino Mount</td>
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<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hydration System, CamelBak (Full)</td>
<td>6.91</td>
<td>1</td>
<td>6.91</td>
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<tr>
<td><strong>Total Fighting Load Weight (Not including weapon, SL-3, and MOS-specific equipment)</strong></td>
<td></td>
<td></td>
<td><strong>54.35</strong></td>
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</tbody>
</table>

**Note:** For MOS-specific Physical Standards purposes, when the Fighting Load is prescribed, each Marine will carry their assigned personal weapon (M4, M-16A4, or IAR) and appropriate SL-3 [seven (7) magazines (twenty-two (22) magazines for IAR w/ assault pack), combat assault sling, PEQ-15/16, RCO, Bayonet, weapons cleaning gear, and M203 or M32 (if assigned)].

***The following table is an example Assault Load, not including weapons, MOS-specific equipment, and other mission essential gear.***

## Assault Load

<table>
<thead>
<tr>
<th>Clothing Worn &amp; Packed</th>
<th>Weight (lbs.)</th>
<th>Quantity</th>
<th>Total Weight (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine Corps Combat Utility, Blouse and Trouser (Seasonal)</td>
<td>2.97</td>
<td>1</td>
<td>2.97</td>
</tr>
<tr>
<td>Uniform, Utility, Belt</td>
<td>0.30</td>
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E-2 Enclosure (1)
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<th>Item</th>
<th>Weight</th>
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<tbody>
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<td>Ballistic Eye Pro(Day/Night)</td>
<td>0.31</td>
<td>1</td>
<td>0.31</td>
</tr>
<tr>
<td>M50 Mask(include twin filters) w/ Carrier</td>
<td>3.00</td>
<td>1</td>
<td>3.00</td>
</tr>
<tr>
<td>Gloves</td>
<td>0.30</td>
<td>1pr</td>
<td>0.30</td>
</tr>
<tr>
<td>T-Shirt, Green</td>
<td>0.18</td>
<td>1</td>
<td>0.18</td>
</tr>
<tr>
<td>Undershorts</td>
<td>0.25</td>
<td>1</td>
<td>0.25</td>
</tr>
<tr>
<td>Marine Corps Combat Boots w/ Laces</td>
<td>3.12</td>
<td>1</td>
<td>3.12</td>
</tr>
<tr>
<td>Socks</td>
<td>0.16</td>
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<td>0.16</td>
</tr>
<tr>
<td>Watch, Wrist</td>
<td>0.10</td>
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<td>0.10</td>
</tr>
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<td>0.03</td>
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<tr>
<td>Tags, ID</td>
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<td>0.10</td>
</tr>
<tr>
<td>Helmet w/ Cover, Band, and NVG Base Plate</td>
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<td>3.50</td>
</tr>
<tr>
<td>Plate Carrier w/ Soft Armor</td>
<td>9.00</td>
<td>1</td>
<td>9.00</td>
</tr>
<tr>
<td>SAPI Plates (Front, Back, and 2x side)</td>
<td>19.00</td>
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<td>19.00</td>
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<tr>
<td>Pouches (1-dump, 3-Magazine, 2 grenade)</td>
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<td>IFAK 'A1 First Aid Kit</td>
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<td>AN/PVS-14 w/ Elbow/Rhino Mount</td>
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<td>Hydration System, CamelBak (Full)</td>
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<td><strong>Total Assault Load Weight (Not including weapon, SL-3, and MOS-specific equipment)</strong></td>
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<td></td>
<td><strong>70.06</strong></td>
</tr>
</tbody>
</table>

**Note:** For MOS-specific Physical Standards purposes, when the Assault Load is prescribed, the following additional equipment will be carried:

(a) MOS 0302 will carry: M4 w/ seven (7) magazines; combat assault sling; PEQ-15/16; RCO mounted; Bayonet stowed; and cleaning gear.

(b) MOS 0311 will carry: either M-16A4, M4, or M27 (IAR) w/ seven (7) (twenty-two (22) for IAR) magazines; combat assault sling; PEQ-15/16; RCO; Bayonet stowed; cleaning gear; and M203 or M32 (if assigned).

(c) The machinegun team (MOS 0331) will carry: M240B w/ appropriate day and night optics; A-bag and cleaning gear; M3 tripod; and, personal weapons with SL-3. The weight will be evenly distributed amongst the team and rotated, periodically and as necessary, during the conduct of the 20km march under load.

(d) The mortar squad (MOS 0341) will carry: 60mm mortar system with A-bag; aiming stakes; plotting board; and, personal weapons with appropriate SL-3. The weight will be evenly distributed amongst the squad, and the mortar components will be rotated, periodically and as necessary, during the conduct of the 20km march under load.
(e) The assault team (MOS 0351) will carry a SMAW with appropriate day/night optics; A-bag; and, personal weapons with SL-3. The weight will be evenly distributed, and the components will be rotated, periodically and as necessary, during the conduct of the 20km march under load.

(f) The anti-tank squad (MOS 0352) will carry a Javelin MSR with personal weapons and SL-3.

***The following table is an example Approach March Load, not including weapons, MOS-specific equipment, and other mission essential gear.

<table>
<thead>
<tr>
<th>Clothing Worn &amp; Packed</th>
<th>Weight (lbs.)</th>
<th>Quantity</th>
<th>Total Weight (lbs.)</th>
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</thead>
<tbody>
<tr>
<td>Ballistic Eye Pro (Day/Night)</td>
<td>0.31</td>
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<td>0.31</td>
</tr>
<tr>
<td>Marine Corps Combat Utility, Blouse and Trouser (Seasonal)</td>
<td>2.97</td>
<td>1</td>
<td>2.97</td>
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<tr>
<td>Uniform, Utility, Belt</td>
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<td>1</td>
<td>0.30</td>
</tr>
<tr>
<td>T-Shirt, Green</td>
<td>0.18</td>
<td>1</td>
<td>0.18</td>
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<td>Undershorts</td>
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<tr>
<td>Marine Corps Combat Boots w/ Laces</td>
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<td>1</td>
<td>3.12</td>
</tr>
<tr>
<td>Socks</td>
<td>0.16</td>
<td>1</td>
<td>0.16</td>
</tr>
<tr>
<td>Watch, Wrist</td>
<td>0.10</td>
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<td>0.10</td>
</tr>
<tr>
<td>Card, ID</td>
<td>0.03</td>
<td>1</td>
<td>0.03</td>
</tr>
<tr>
<td>Tags, ID</td>
<td>0.10</td>
<td>1</td>
<td>0.10</td>
</tr>
<tr>
<td>Uniform, Utility, Cover (Boonie)</td>
<td>0.22</td>
<td>1</td>
<td>0.22</td>
</tr>
<tr>
<td>Gloves</td>
<td>0.30</td>
<td>1pr</td>
<td>0.30</td>
</tr>
<tr>
<td>Helmet w/ Cover, Band, and NVG Base Plate</td>
<td>3.50</td>
<td>1</td>
<td>3.50</td>
</tr>
<tr>
<td>Plate Carrier w/ Soft Armor</td>
<td>9.00</td>
<td>1</td>
<td>9.00</td>
</tr>
<tr>
<td>SAPI Plates (Front, Back, and 2x side)</td>
<td>19.00</td>
<td>1</td>
<td>19.00</td>
</tr>
<tr>
<td>M50 mask (including twin filters) W/Carrier</td>
<td>3.00</td>
<td>1</td>
<td>3.00</td>
</tr>
<tr>
<td>Pouches (1-dump, 3-Magazine, 2 grenade)</td>
<td>2.00</td>
<td>1/3/2</td>
<td>2.00</td>
</tr>
<tr>
<td>IFAK 'A1 First Aid Kit</td>
<td>2.10</td>
<td>1</td>
<td>2.10</td>
</tr>
<tr>
<td>AN/PVS-14 w/ Elbow/Rhino Mount</td>
<td>1.00</td>
<td>1</td>
<td>1.00</td>
</tr>
<tr>
<td>Hydration System, CamelBak (Full)</td>
<td>6.91</td>
<td>1</td>
<td>6.91</td>
</tr>
<tr>
<td>Flashlight w/ red lens</td>
<td>0.31</td>
<td>1</td>
<td>0.31</td>
</tr>
<tr>
<td>MRE</td>
<td>1.30</td>
<td>3</td>
<td>3.90</td>
</tr>
<tr>
<td>Tool, Entrenching w/Case</td>
<td>2.70</td>
<td>1</td>
<td>2.70</td>
</tr>
<tr>
<td>Main Pack</td>
<td>9.00</td>
<td>1</td>
<td>9.00</td>
</tr>
<tr>
<td>Assault Pack</td>
<td>5.51</td>
<td>1</td>
<td>5.51</td>
</tr>
<tr>
<td>Extra Socks</td>
<td>0.16</td>
<td>2</td>
<td>0.32</td>
</tr>
<tr>
<td>Tarpaulin</td>
<td>2.30</td>
<td>1</td>
<td>2.30</td>
</tr>
<tr>
<td>Poncho Liner</td>
<td>1.60</td>
<td>1</td>
<td>1.60</td>
</tr>
<tr>
<td>Canteen w/ MOLLE pouch (full)</td>
<td>2.86</td>
<td>2</td>
<td>5.72</td>
</tr>
<tr>
<td>ISO sleeping mat</td>
<td>1.50</td>
<td>1</td>
<td>1.50</td>
</tr>
</tbody>
</table>
The following table is an example Sustainment Load, not including weapons, MOS-specific equipment, and other mission essential gear.

<table>
<thead>
<tr>
<th>Clothing Worn &amp; Packed</th>
<th>Weight (lbs.)</th>
<th>Quantity</th>
<th>Total Weight (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleeping bag w/ bivy cover</td>
<td>5.90</td>
<td>1</td>
<td>5.90</td>
</tr>
<tr>
<td>Hygiene gear (razor, shaving cream, toothbrush, toothpaste, field hygiene towel)</td>
<td>2.00</td>
<td>1ea</td>
<td>2.00</td>
</tr>
<tr>
<td><strong>Total Approach March Load Weight</strong>&lt;br&gt;(Not including weapon, SL-3, and MOS-specific equipment)</td>
<td></td>
<td></td>
<td><strong>94.34</strong></td>
</tr>
</tbody>
</table>
### Poncho Liner

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poncho Liner</td>
<td>1.60</td>
<td>1</td>
<td>1.60</td>
</tr>
</tbody>
</table>

### Canteen w/ MOLLE pouch (full)

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canteen w/ MOLLE pouch (full)</td>
<td>2.86</td>
<td>2</td>
<td>5.72</td>
</tr>
</tbody>
</table>

### ISO sleeping mat

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO sleeping mat</td>
<td>1.50</td>
<td>1</td>
<td>1.50</td>
</tr>
</tbody>
</table>

### Sleeping bag w/ bivy cover

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleeping bag w/ bivy cover</td>
<td>5.90</td>
<td>1</td>
<td>5.90</td>
</tr>
</tbody>
</table>

### Extra boots

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra boots</td>
<td>3.12</td>
<td>1pr</td>
<td>3.12</td>
</tr>
</tbody>
</table>

### Extra Utilities, blouse and trouser (seasonal)

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra Utilities, blouse and trouser (seasonal)</td>
<td>2.97</td>
<td>1</td>
<td>2.97</td>
</tr>
</tbody>
</table>

### Hygiene gear (razor, shaving cream, toothbrush, toothpaste, field hygiene towel)

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hygiene gear (razor, shaving cream, toothbrush, toothpaste, field hygiene towel)</td>
<td>2.00</td>
<td>1ea</td>
<td>2.00</td>
</tr>
</tbody>
</table>

### Pullover, Grid Fleece, Flame Resistant

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pullover, Grid Fleece, Flame Resistant</td>
<td>0.70</td>
<td>1</td>
<td>0.70</td>
</tr>
</tbody>
</table>

### Drawers, Grid Fleece, Flame Resistant

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawers, Grid Fleece, Flame Resistant</td>
<td>0.70</td>
<td>1</td>
<td>0.70</td>
</tr>
</tbody>
</table>

### Undershirt, Cold Weather, Flame Resistant

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undershirt, Cold Weather, Flame Resistant</td>
<td>1.00</td>
<td>2</td>
<td>2.00</td>
</tr>
</tbody>
</table>

### Drawers, Cold Weather, Flame Resistant

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawers, Cold Weather, Flame Resistant</td>
<td>1.00</td>
<td>2</td>
<td>2.00</td>
</tr>
</tbody>
</table>

### Cold Weather Gloves And Mittens

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold Weather Gloves And Mittens</td>
<td>1.325</td>
<td>1</td>
<td>1.33</td>
</tr>
</tbody>
</table>

### Cap, Coyote, Micro Fleece

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cap, Coyote, Micro Fleece</td>
<td>0.12</td>
<td>1</td>
<td>0.12</td>
</tr>
</tbody>
</table>

### Canteen, plastic w/cap 1 Qt

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canteen, plastic w/cap 1 Qt</td>
<td>2.30</td>
<td>2</td>
<td>4.60</td>
</tr>
</tbody>
</table>

### Pouch, Canteen, MOLLE (Coyote)

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pouch, Canteen, MOLLE (Coyote)</td>
<td>0.56</td>
<td>2</td>
<td>1.12</td>
</tr>
</tbody>
</table>

### Cup, Canteen

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cup, Canteen</td>
<td>0.80</td>
<td>1</td>
<td>0.80</td>
</tr>
</tbody>
</table>

### Stand, Canteen Cup

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stand, Canteen Cup</td>
<td>0.18</td>
<td>1</td>
<td>0.18</td>
</tr>
</tbody>
</table>

### Hygiene Gear, Towel, Face Cloth

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hygiene Gear, Towel, Face Cloth</td>
<td>2.00</td>
<td>1</td>
<td>2.00</td>
</tr>
</tbody>
</table>

### Insect Repellent

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
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<tbody>
<tr>
<td>Insect Repellent</td>
<td>0.75</td>
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</table>

### Sewing Kit

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Sewing Kit</td>
<td>0.10</td>
<td>1</td>
<td>0.10</td>
</tr>
</tbody>
</table>

### Mat, Improved Sleeping (ISM)

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mat, Improved Sleeping (ISM)</td>
<td>1.50</td>
<td>1</td>
<td>1.50</td>
</tr>
</tbody>
</table>

### 3S Sleeping Bag w/BIVY Cover 2d Gen

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>3S Sleeping Bag w/BIVY Cover 2d Gen</td>
<td>5.90</td>
<td>1</td>
<td>5.90</td>
</tr>
</tbody>
</table>

### Two Man Tent

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two Man Tent</td>
<td>8.50</td>
<td>1</td>
<td>8.50</td>
</tr>
</tbody>
</table>

### JLIST Suit Complete With Boots And Gloves (MOPP/CPOG)

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>JLIST Suit Complete With Boots And Gloves (MOPP/CPOG)</td>
<td>10.00</td>
<td>1</td>
<td>10.00</td>
</tr>
</tbody>
</table>

### Total Sustainment Load Weight

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sustainment Load Weight</td>
<td></td>
<td></td>
<td>152.87</td>
</tr>
</tbody>
</table>

(Not including weapon, SL-3, and MOS-specific equipment)

---

*** The weights indicated in the table above are based on an individual issue, size medium. ***

### References:

- MCTP 8-10A Marine Physical Readiness Training for Combat
- Marine Corps System Command: 2009 Basic Combat Load
- Marine Corps Combat Development Command: 2003 Combat Load Study
- Naval Research Advisory Committee Report: 2007 "Lightening the Load"
- 2013 Individual Combat Clothing and Equipment Issue
## MOS-SPECIFIC PHYSICAL STANDARDS

<table>
<thead>
<tr>
<th>Paragraph</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURPOSE</td>
<td>1000</td>
</tr>
<tr>
<td>EVALUATION</td>
<td>1001</td>
</tr>
<tr>
<td>REQUIREMENTS</td>
<td>1002</td>
</tr>
<tr>
<td>EVALUATION SEQUENCING</td>
<td>1003</td>
</tr>
</tbody>
</table>
ARTILLERY T&R MANUAL

APPENDIX F

MOS-SPECIFIC PHYSICAL STANDARDS

1. Purpose. This appendix identifies MOS-specific physical standards and describes the execution of assessments designed to evaluate a Marine's physical capabilities, in order to provide Commanders reasonable assurance a Marine has the physical capacity to perform the regularly assigned and recurrent duties of the MOS.

2. Evaluation. Marines must either 'pass' or 'fail' event or performance step assessments to the standards set forth within this manual.

3. Requirements. The following events are to be performed to the standard contained in this appendix during entry level training in order to receive initial MOS qualification

a. For the 0802 MOS:

0811-GUNS-1014, Performance step 2, Place projectile on loading tray
0811-GUNS-1021, Prepare ammunition for displacement
0811-MED-1030, Performance step 4, Prepare casualty for transport to extraction point
0300-TVEH-1001, Mount a MK19 HMG on an appropriate tactical vehicle (See NAVMC 3500.44B Infantry T&R Manual)
0300-MED-1001, Performance Step 1, Ensure that you and the casualty are no longer under direct enemy fire (See NAVMC 3500.44B Infantry T&R Manual)

b. For the 0811 MOS:

0811-GUNS-1014, Performance step 2, Place projectile on loading tray
0811-GUNS-1021, Prepare ammunition for displacement
0811-MED-1030, Performance step 4, Prepare casualty for transport to extraction point
0300-TVEH-1001, Mount a MK19 HMG on an appropriate tactical vehicle (See NAVMC 3500.44B Infantry T&R Manual)
0300-MED-1001, Performance Step 1, Ensure that you and the casualty are no longer under direct enemy fire (See NAVMC 3500.44B Infantry T&R Manual)

c. For the 0842 MOS:

0811-MED-1030, Performance step 4, Prepare casualty for transport to extraction point
0300-TVEH-1001, Mount a MK19 HMG on an appropriate tactical vehicle (See NAVMC 3500.44B Infantry T&R Manual)
0300-MED-1001, Performance Step 1, Ensure that you and the casualty are no longer under direct enemy fire (See NAVMC 3500.44B Infantry T&R Manual)

d. For the 0844 MOS:
0811-MED-1030, Performance step 4, Prepare casualty for transport to extraction point
0300-TVEH-1001, Mount a MK19 HMG on an appropriate tactical vehicle
(See NAVMC 3500.44B Infantry T&R Manual)
0300-MED-1001, Performance Step 1, Ensure that you and the casualty are no longer under direct enemy fire (See NAVMC 3500.44B Infantry T&R Manual)

e. For the 0847 MOS:

0811-MED-1030, Performance step 4, Prepare casualty for transport to extraction point.
0300-TVEH-1001, Mount a MK19 HMG on an appropriate tactical vehicle
(See NAVMC 3500.44B Infantry T&R Manual)
0300-MED-1001, Performance Step 1, Ensure that you and the casualty are no longer under direct enemy fire (See NAVMC 3500.44B Infantry T&R Manual)

f. For the 0861 MOS:

0811-MED-1030, Performance step 4, Prepare casualty for transport to extraction point
0300-TVEH-1001, Mount a MK19 HMG on an appropriate tactical vehicle
(See NAVMC 3500.44B Infantry T&R Manual)
0300-MED-1001, Performance Step 1, Ensure that you and the casualty are no longer under direct enemy fire (See NAVMC 3500.44B Infantry T&R Manual)

4. Evaluation Sequencing. The MOS-specific physical standards events are not intended to be conducted in a single, continuous session. However, if the Commander schedules these events to occur in sequence within a 24-hour period, adequate transition between events should permit Marines the opportunity to recover, stretch, hydrate, and prepare for the next event. Total rest permitted between events is determined at the Commander's discretion.

5. Uniform and Equipment

   a. Fighting Load. See NAVMC 3500.44_ (Infantry T&R Manual) Appendix F for the Fighting Load gear list. This load will be worn/carried by MOSs listed within paragraph 3.a. when executing the following events:

0300-MED-1001, Performance step 1, Ensure that you and the casualty are no longer under direct enemy fire (See NAVMC 3500.44B Infantry T&R Manual)
0300-TVEH-1001, Mount a MK19 HMG on an appropriate tactical vehicle (See NAVMC 3500.44B Infantry T&R Manual).

   b. Utility Uniform with blouse removed. The Utility Uniform with blouse removed will be worn by MOSs listed within paragraph 3.a. when executing the following events.

0811-MED-1030, Performance step 4, Prepare casualty for transport to extraction point.
c. Crew Uniform with Personal Protective Equipment (PPE). The Crew Uniform with PPE is depicted in Table E-1. This load will be worn by MOSs listed within paragraph 3.a. when executing the following events:

0811-GUNS-1014, Performance step 2, Place projectile on loading tray
0811-GUNS-1021, Prepare ammunition for displacement

<table>
<thead>
<tr>
<th>CREW UNIFORM WITH PPE</th>
<th>Weight (lbs.)</th>
<th>Quantity</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level I (On the body)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marine Corps Combat Utility, Blouse and Trouser</td>
<td>2.97</td>
<td>1</td>
<td>2.97</td>
</tr>
<tr>
<td>T-Shirt, Green</td>
<td>0.18</td>
<td>1</td>
<td>0.18</td>
</tr>
<tr>
<td>Marine Corps Combat Boots, Combat with Laces</td>
<td>3.12</td>
<td>1 pr</td>
<td>3.12</td>
</tr>
<tr>
<td>Socks</td>
<td>0.16</td>
<td>1 pr</td>
<td>0.16</td>
</tr>
<tr>
<td>Card, ID</td>
<td>0.028</td>
<td>1</td>
<td>0.028</td>
</tr>
<tr>
<td>Tags, ID</td>
<td>0.10</td>
<td>1</td>
<td>0.10</td>
</tr>
<tr>
<td>Helmet</td>
<td>3.45</td>
<td>1</td>
<td>3.45</td>
</tr>
<tr>
<td>Glove Shells w/ Inserts</td>
<td>0.30</td>
<td>1 pr</td>
<td>0.30</td>
</tr>
<tr>
<td>Glasses, ESS</td>
<td>0.15</td>
<td>1</td>
<td>0.15</td>
</tr>
<tr>
<td>Ear Plugs with case</td>
<td>0.10</td>
<td>1</td>
<td>0.10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13.538</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level II (LBE)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scalable Plate Carrier with Soft Armor Inserted</td>
<td>5.50</td>
<td>1</td>
<td>5.50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5.50</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CREW UNIFORM WITH PPE TOATL (Level I-II)</strong></td>
<td><strong>19.038</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table E-1. Crew Uniform with PPE

d. Substituting Equipment. Marines may substitute surrogate items to replicate the weight of equipment which is unavailable. The total weight of the equipment carried will be within 10% of the total prescribed pack weight.

6. Events Assessed. The following paragraphs outline the expected conduct of assessments, in support of a factor of either MOS assignment or sustainment.

a. 0811-GUNS-1014, Performance Step 2, Place projectile on loading tray.

(1) Description. This assessment consists of a lift, carry, and placement of a 155mm projectile on a M777 loading tray.

(2) Environment. This assessment may be conducted either indoors or outdoors, on a generally level and firm surface.

(3) Standard. Lift, carry for 5 meters, and load the projectile onto the M777A2 loading tray. The Marine will conduct this 5 times within a time limit of 1 minute 15 seconds.

(4) Required Equipment:
(a) A timepiece (digital or stopwatch) that accurately measures time to the second.

(b) M777A2 Howitzer.

(c) Measuring tape

(d) Surrogate or dummy projectiles

(5) Execution

(a) Marine will begin at the ammunition storage pit, 5 meters away from the back of the howitzer. The Marine will lift the projectile to waist height.

(b) The Marine will transport the round to the back of the Howitzer and in a controlled manner, properly place the round on the loading tray. They will then return to the ammunition storage pit to repeat this process.

(c) Marines are encouraged to 'use-their-legs,' in order to lift the projectile, and to avoid 'lifting-with-their-back.'

(d) Assessment is completed once the Marine had placed (5) projectiles on the howitzer's loading tray.

b. 0811-GUNS-1021, Prepare ammunition for displacement.

(1) Description. The functional movement for this assessment is similar to a clean and press. The clean and press will be a single repetition lift, carry, and press of a 155mm projectile.

(2) Environment. This assessment may be conducted either indoors or outdoors, on a generally level and firm surface.

(3) Standard. Lift, carry for 50 meters, and press the projectile onto the MTVR bed. The Marine will conduct this 5 times within a time limit of 4 minutes 56 seconds.

(4) Required Equipment:

(a) A timepiece (digital or stopwatch) that accurately measures time to the second.

(b) (5) Surrogate or dummy projectiles

(c) (1) MTVR 7-Ton

(d) Personnel on MTVR to receive ammunition

(e) 100 feet of Measuring tape

(5) Execution

(a) The Marine will begin at the ammunition storage point, 50 meters away from the MTVR. The Marine will lift a projectile to waist height and then should height.
(b) The Marine will safely transport the round to the back of the MTVR and in a controlled manner, press the round onto the bed for the personnel on the bed to take positive control of the projectile. They will then return to the ammunition storage pit to repeat this process.

(c) Marines are encouraged to 'use-their-legs,' in order to lift the projectile, and to avoid 'lifting-with-their-back.'

(d) Assessment is completed when the Marine has transported and pressed (5) projectiles onto the bed of the MTVR.

c. 0811-MED-1030, Performance Step 4, Prepare casualty for transport to extraction point.

(1) **Description.** The functional movement for this assessment is similar to a clean-and-press to simulate lifting a casualty into the bed of an MTVR. The clean-and-press will be a single repetition lift of an Olympic bar with a total weight of 115 lbs.

(2) **Environment.** This assessment may be conducted either indoors or outdoors, on a generally level and firm surface.

(3) **Standard.** Perform a single clean and press of 115lbs wherein the elbows are momentarily locked out.

(4) **Required Equipment:**

(a) (1) 45lb Barbell

(b) (2) 35lb weights

(5) **Execution**

(a) The Marine will begin with feet shoulder width apart or under the hips. The bar should be above the bootlaces at the start. Only the overhand grip can be used in this lift.

(b) While the clean-and-press occurs in a fluid motion, the first move of the lift is the clean. The clean begins by lifting the bar with arms locked, and the bar close to the body. The cleaning motion ends when the shoulders are fully shrugged and the hips, knees, and ankles are extended. At this point, drop underneath the bar to catch the weight at shoulder level. The next motion of the lift is the press. Dip by slightly breaking at the hips and knees, and then drive upward with the hips and shoulders until the arms are locked out and the upper arm is next to the ear.

(c) Marines are encouraged to 'use-their-legs,' in order to lift the Olympic bar, and to avoid 'lifting-with-their-back.' However, no penalty will be assessed if Marine chooses not to use their legs.

(d) Once elbow lock-out has occurred, the Olympic bar will be lowered in a fluid, controlled motion from shoulder-height, then to the deck, and neither thrown nor dropped.

(e) Assessment is completed when the Marine has conducted the proper clean and press and returned the bar to the ground.
d. 0300-TVEH-1001, Mount a Mk19 Heavy Machinegun on an appropriate tactical vehicle.

   (1) **Description.** The functional movement for this assessment is similar to a clean-and-press.

   (2) Refer to NAVMC 3500.44B Infantry T&R Manual Appendix F for follow on instruction in the conduct of the Mk 19 Lift.

e. 0300-MED-1001, Performance Step 1, Ensure that you and the casualty are no longer under direct enemy fire.

   (1) **Description.** This is a 50 meter movement, simulating moving from a covered and concealed position, to a casualty's position, and dragging that casualty out of direct fire to a safe position.

   (2) Refer to NAVMC 3500.44B Infantry T&R Manual Appendix F for follow on instruction in the conduct of the Casualty Drag.

7. **Performance.** Marines must complete the minimum performance requirements in each event to demonstrate that they have the physical capability to perform in the particular artillery MOS.