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From: Commandant of the Marine Corps  
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Subj: ARTILLERY TRAINING AND READINESS MANUAL

Encl: (1) New page iii insert to NAVMC 3500.7B  
(2) New Chapter 1 insert to NAVMC 3500.7B  
(3) New Chapter 12 insert to NAVMC 3500.7B  
(4) New Appendix E insert to NAVMC 3500.7B

1. Purpose. To transmit new page, chapters, and appendix inserts to the basic manual.
2. Scope Remove page iii and chapters 1 and 12 and replace with corresponding enclosures. Add Appendix E at the end of the Manual.
3. Information
  - a. This change is the result of an out-of-cycle Training and Readiness Manual review conducted by Training and Education Command (TECOM); Deputy Commandant for Plans, Policies, and Operations (PP&O); and the Operating Forces.
  - b. National Defense Authorization Act FY 15 directs the services to develop gender-neutral occupational standards, which accurately predict performance of actual, regular, and recurring duties of a military occupation, and are applied equitably to measure individual capabilities. TECOM, in coordination with the OCCFLD Advocates, the Operating Forces, and the Supporting Establishments, developed Military Occupational Specialty (MOS)-specific physical standards, which were approved on 20 August 2015.
  - c. A new paragraph has been inserted within Chapter 1 describing MOS-specific physical standards, which are found within the administrative instructions pertaining to particular

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distribution is unlimited.

Chapter 12 Events. These MOS-specific physical standards are described in detail within Appendix E, and must be demonstrated in order to achieve MOS qualification.

4. Filing Instructions. This change transmittal will be filed immediately following the signature page of the basic manual.

  
J.W. LUKEMAN  
By direction

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RECORD OF CHANGES

Log completed change action as indicated.

Change Number	Date of Change	Date Entered	Signature of Person Incorporating the Change

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ARTILLERY T&R MANUAL

CHAPTER 1

OVERVIEW

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ARTILLERY T&R MANUAL

CHAPTER 1

OVERVIEW

**1000. INTRODUCTION**

1. The T&R program is the Corps' primary tool for planning, conducting and evaluating training and assessing training readiness. The T&R manual is designed for use by unit commanders to determine performance requirements in preparation for training; for unit leaders to develop and execute training and to assess individual and unit proficiency; and for formal schools and training detachments to create programs of instruction.

2. This T&R manual is built around the Marine Corps tasks (MCTs) that are supported by the artillery occupational field/performed by artillery regiments. All events contained in this manual relate directly to these MCTs. Linkage of T&R events to the MCTL enables objective assessment of training readiness in the Defense Readiness Reporting System (DRRS) in accordance with MCO 3500.10 and MCO 3000.13.

3. The T&R manual contains the individual and collective training requirements to prepare units to accomplish their mission. The T&R manual identifies the minimum standards that Marines must be able to perform in a combat environment. Using this tool, leaders can construct and execute an effective training plan that supports the unit's MCTs and the mission-essential task list (METL). The Ground T&R Program helps to ensure that training remains focused on mission accomplishment and that training readiness reported is tied to the unit's METL. More detailed information on the Marine Corps Ground T&R Program is found in reference (a).

**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.

2. Commanders at all levels will ensure that all training is focused on achieving proficiency in the unit METL. The T&R manual is a tool to help develop the unit's training plan based on the unit METL.

**1002. UNIT TRAINING MANAGEMENT**

1. Effective Unit Training Management (UTM) focuses the overall organization on development of training plans based on the unit METL and standards-based community T&R events. This is accomplished in a manner that maximizes training results and focuses the training priorities of the unit in preparation for the conduct of its mission.

2. UTM techniques, described in references (b) and (c), 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. Guidance for UTM and the process for establishing effective programs are contained in references (b), (c) and (d).

#### **1003. SUSTAINMENT AND EVALUATION OF TRAINING**

1. Marines are expected to maintain proficiency in the training events for their MOS at the appropriate grade and billet to which assigned. Leaders are responsible for recording the training achievements of their Marines. Whether it involves individual or collective training events, they must ensure proficiency is sustained by requiring retraining of each event at or before expiration of the designated sustainment interval.

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 training 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. References (b) and (d) provide further guidance on the conduct of informal and formal evaluations using the Marine Corps Ground T&R Program.

**1004. ORGANIZATION.** The Artillery T&R Manual is comprised of 20 chapters and 4 appendices. Chapter 1 is an overview of the Ground T&R Program. Chapter 2 lists the core METs/Marine Corps tasks supported by the artillery community, which are used as part of the DRRS. Chapter 3 contains collective events. Chapters 4 through 20 contain individual events specific to a particular MOS and/or billet, as noted. Appendix A contains acronyms; Appendix B contains terms and definitions; Appendix X contains X.

#### **1005. T&R EVENT COMPOSITION**

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



```

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

EVALUATION CODED: NO           SUSTAINMENT INTERVAL: 12 months

DESCRIPTION: Text

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

GRADES: XXX, XXX

INITIAL TRAINING SETTING: XXX

CONDITION: Text

STANDARD: Text

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

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

RELATED EVENTS:
XXXX-XXXX-####           XXXX-XXXX-####

REFERENCES:
1. Reference
2. Reference
3. Reference

SUPPORT REQUIREMENTS:

EQUIPMENT: XXX

MISCELLANEOUS: XXX

ADMINISTRATIVE INSTRUCTIONS: XXX
  
```

Figure 1-2: Example of an Individual T&R Event

2. Event Code. The event code consists of three sets of characters as shown in figure 1-3:

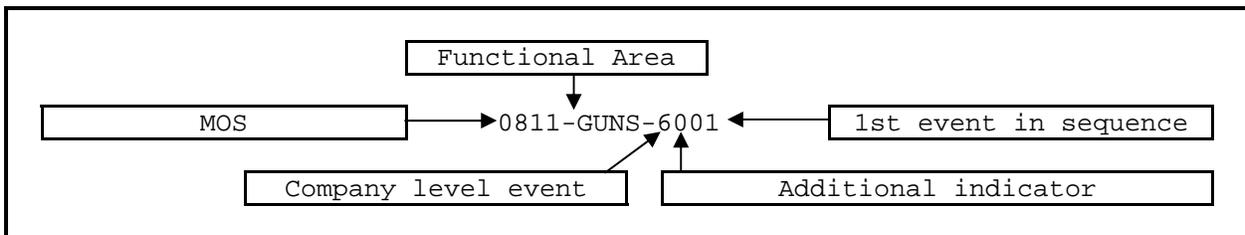


Figure 1-3: T&R Event Coding

a. The first set of characters indicates the main MOS or community (e.g., 0321, 1812, or INTL) that performs the event.

b. The second set of characters indicates functional or duty area (e.g., DEF, FSPT, MVMT, etc.). Categorizing events with the use of a recognizable code makes the type of skill or capability being referenced fairly obvious.

c. The third set of characters is broken down further into the event level, additional indicator (if applicable), and sequence.

(1) Event levels. The character in the thousands digit indicates the level and defines whether the event is performed by an individual (1000- and 2000-level) or by a collective unit, with the relative size of the unit performing the event indicated by the number (3000- through 9000-level). Note that the titles for the various echelons are examples only and are not exclusive. Some collective events levels may not apply to all T&R manuals. Event levels are shown in figure 1-4.

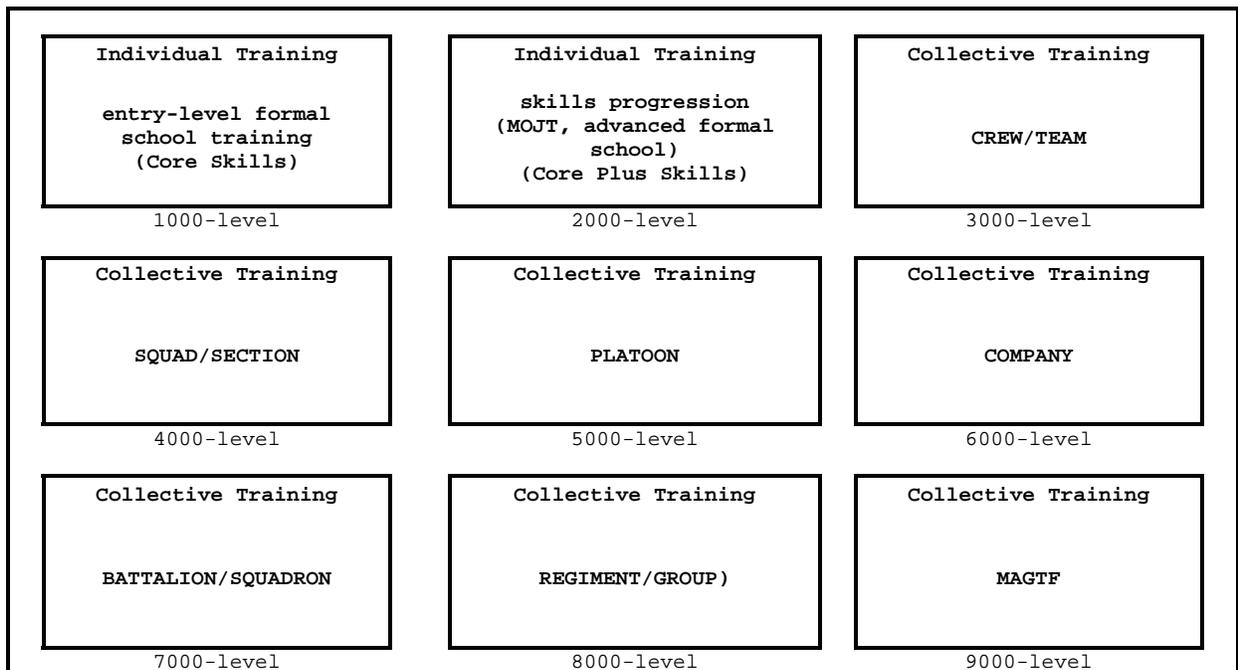


Figure 1-4: T&R Event Levels

(2) Additional indicator. The usage of a number used in the hundreds digit varies. When used in a T&R manual, the additional indicator methodology will be described in the relevant chapter(s).

(3) Sequence. The last two numbers indicate the sequence of the event. All events with the same MOS/community, functional area, and level codes will be grouped together.

3. Title. The name of the event. The event title contains one action verb and ideally, one object noun.

4. Evaluation Coded. A "Yes" indicates that a collective event is something that the Marine Corps has determined that a unit must be able to perform in order or that unit to be considered fully ready for operations. These evaluation-coded (E-coded) events represent the basic level of readiness for a unit. E-coded events are derived from the training measures of effectiveness for the METs assessed as a percentage of the successfully completed and current (within sustainment interval) E-coded events. Most E-coded events will 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 lower echelon unit is vital to the accomplishment of the supported unit's MET, then that lower echelon collective event may also be E-coded. Other collective events and all individual events will have a "No" to indicate that they are not evaluation-coded.

5. Supported MCT(s). List all MCTs that are supported by the collective training event, even if those events are not listed as a measure of effectiveness (MOE) in a MET.

6. Sustainment Interval. This is the period, expressed as a number of months, between demonstration of performance mastery and the requirement for retraining if mastery is not demonstrated during that period.

7. Billet/MOS. These fields designate who is responsible for performing the event. When formal training is associated with event, individuals in the associated billet(s)/MOS(s).

8. Grade. This field indicates the rank at which Marines are required to perform the event.

9. Description. This field allows an explanation of the 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). Event descriptions are required for collective events, but optional for individual events.

10. Condition. Condition refers to the environment in which the task must be performed. It must also identify the limitations that may affect event performance in a real-world environment. It indicates what is provided (equipment, tools, materials, manuals, aids, etc.), environmental factors 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 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.

11. Standard. The performance standard indicates the basis for judging the effectiveness of the performance. It identifies the proficiency level expected when the task is performed. The standard provides the minimum acceptable performance parameters. 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 the proficiency level, specified in terms of accuracy, completeness, time required, and sequencing to which the event is to be accomplished.

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

a. The event components and performance steps will be employed as the basis for performance evaluation check lists by the operating forces.

b. Event components may be either lower level collective events or individual events, indicating aspects of the event that are performed by the entire unit and individuals within the unit. Event components will correspond with the task titles of the related events, allowing for chaining of the events (see below).

13. Prerequisite Events. Prerequisites are academic training or other T&R events that must be completed prior to attempting the event. They are lower-level events 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. Chained Events. Collective T&R events are supported by lower-level collective and individual T&R events. This enables unit leaders to effectively identify subordinate T&R events that ultimately support specific Marine Corps tasks. When the accomplishment of any upper-level events, by their nature, result in the performance of certain subordinate events, the events are "chained." The completion of higher level events will update sustainment interval credit (and CRP for E-coded events) for the subordinate level chained events.

15. Related ITEs. A list of all of the individual training events (1000-2000-level events) that directly support the accomplishment of another event of the same level.

16. Initial Training Setting. All individual events will designate the setting at which the skill is first taught, either through formal training (Formal), managed on the job training (MOJT), or distance learning (DL). Formal training is conducted at a formal school. MOJT occurs within the operating forces and is the responsibility of leaders. DL products include correspondence courses and training conducted via computer applications.

17. References. The training references 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 references. References are key to developing detailed lesson plans, determining grading criteria, and ensuring standardization of training. The references listing for each event is representative of those that are most commonly used and are not encyclopedic.

18. Distance Learning Products (DL). Distance learning products include: individual multimedia instruction (IMI), computer-based training (CBT), Marine Corps Institute (MCI), etc. This notation is included when 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 and 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

Where applicable, the ordnance requirements for one year of training for the events in the T&R manual will be aggregated into a table contained in an appendix to the T&R.

20. Suitability of Modeling and Simulation for Sustainment. If the occupational advocate determines that an event can be trained to standard by use of modeling or simulation, this will be noted in the event title in a parenthetical remark. Figure 4-1 contains all acceptable codes for inclusion in this parenthetical remark. The specific modeling or simulation that is acceptable for optional or required training will be noted in the description block and in miscellaneous block. Modeling and simulation, per reference (a) is defined as: The use of models, including emulators, prototypes, simulators, and stimulators, either statically or over time, to develop data as a basis for making managerial or technical decisions. For events that have simulation as an optional choice, the specific portions of the event that may be trained by the identified simulator should be noted as well.

Code	Requirement
P	Event performed in platform only
L	Event able to be performed to standard only live environment
S	Event performed only with simulator
P/S	Event performed in platform preferred/simulator optional
S/P	Event performed in simulator preferred/platform optional
L/S	Event performed live preferred/simulator optional
S/L	Event performed in simulator preferred/live optional

Figure 4-1: Acceptable Codes

a. Simulation should be used in lieu of live training (particularly when resources to support the event are constrained); or at the commander's discretion, used as a precursor to live training in order to help maximize and enhance the live training event.

b. This task can be supported by self-paced, CBT, (e.g., MarineNet).

c. Modeling and Simulation Terms (terms are refined from reference (a) as necessary):

(1) Simulation - Any actions that will be performed to achieve effects on a notional enemy and/or actions undertaken that assume the presence of an enemy.

(2) Simulator - Any device external to or in place of the materials or conditions identified in the condition statement of a T&R event to assist in simulating the presence of the enemy.

(3) Combat - Marines conducting actions with actual table of equipment; actual higher, adjacent and subordinate forces; and live ammunition against live, hostile opponents.

(4) Live - Marines conducting actions with actual table of equipment; actual higher, adjacent and subordinate forces; and live ammunition against notional opponents. Implies integration between the various echelons.

(5) Live/Constructive - Marines conducting actions with actual table of equipment; actual or notional higher, adjacent and subordinate forces; and without live ammunition against notional opponents. If there are integrations between the various echelons, this is an integrated live/constructive environment.

(6) Constructive - Marines conducting actions with approximations of table of equipment; actual or notional higher, adjacent and subordinate forces; and without live ammunition against notional opponents. If there are integrations between the various echelons, this is an integrated constructive environment.

(7) Virtual - Marines conducting actions with approximations of table of equipment; notional higher, adjacent and subordinate forces; and without live ammunition against notional opponents.

(8) Distance Learning - Any instruction and evaluation delivered to the student electronically or via mail.

## 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 schools 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

**1006. CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR.** In accordance with MCO 3400.3F all active duty Marines are required to conduct CBRN training on an annual basis. All training plans for the operating forces and supporting

establishments will include the Marine Corps Common Skills CBRN T&R events established to meet this service directed requirement. All units will ensure that personnel are able to execute individual and collective MOS requirements in a CBRN environment, based on resources, time available, and unit mission.

**1007. MOS-SPECIFIC PHYSICAL STANDARDS**

1. Within the Artillery community, Marines are required to demonstrate a high degree of physical strength to standard, in order to perform those regularly assigned, recurrent duties of each of the Artillery's military occupational specialties (MOSs).

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

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

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

**1008. OPERATIONAL RISK MANAGEMENT.** All active duty Marines are required to conduct ORM training on an annual basis. The ORM process is used by Marines at all levels to increase operational effectiveness by anticipating hazards and reducing the potential for loss, thereby increasing the probability of a successful mission. ORM assists the commander in determining the balance between training realism and unnecessary risks in training, the impact of training operations on the environment, and the adjustment of training plans to fit the level of proficiency and experience of Sailors/Marines and leaders. Further guidance for ORM is found in MCO 3500.27B.

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CHAPTER 12

MOS 0811 INDIVIDUAL EVENTS

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CHAPTER 12

MOS 0811 INDIVIDUAL EVENTS

**12000. PURPOSE.** This chapter details the individual events that pertain to cannoners. 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:

<u>Code</u>	<u>Description</u>
0811	Cannoneer

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

<u>Code</u>	<u>Description</u>
GUNS	Howitzer section

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:

<u>Code</u>	<u>Description</u>
1000	Core Skills
2000	Core Plus Skills

**12002. INDEX OF INDIVIDUAL EVENTS**

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**12003. 1000-LEVEL EVENTS**

**0811-GUNS-1000:** Perform Advance Party operations

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 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:** Ensuring tape and stakes are emplaced within +/- 20 mils of the azimuth of fire while correctly recording initial lay data.

**PERFORMANCE STEPS:**

1. (DFCS) Mark howitzer position with position stake.
2. (DFCS) Provide security until howitzer is in position.
3. (OFC) Record the azimuth of fire and emplace gun-guide tape and stakes using a compass.
4. (OFC) Establish communication.
5. (OFC) Emplace pantel marking stake and record initial deflection.
6. (OFC) Assist in measuring distance (subtense) and vertical angle from howitzer to aiming circle by placing rifle on top of pantel marker.
7. (OFC) Perform reconnaissance and select route of track plan.
8. (OFC) Receive howitzer at pickup point and guide into 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

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Performance steps may vary according to unit SOP.

---

**0811-GUNS-1004:** Emplace the collimator

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Cannoneer

**GRADES:** PVT, PFC, LCPL

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an emplaced howitzer, and sandbags.

**STANDARD:** Approximately 9 to 12 meters from the pantel within one (1) minute 30 seconds for emplacing.

**PERFORMANCE STEPS:**

1. Set the collimator up, pointing one leg towards pantel.
2. Place cover under tripod with closed end pointed at muzzle of howitzer.
3. Push feet of legs into ground to stabilize the collimator and place a sandbag on each leg.
4. Center azimuth adjustment screw.
5. Properly line up front and rear sights with lens of pantel.
6. Ensure cross level/bubble is between the two outer red lines in vial and

- does not touch two outer red lines.
7. Finger tighten cross level clamping knob to immobilize the optical assembly.
  8. Announce "Gunner".
  9. Rotate azimuth adjustment screw left and right, as directed by the gunner.

**REFERENCES:**

1. MCTM 10407C-OR/\_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

**SUPPORT REQUIREMENTS:**

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

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**

1. Time starts at performance step #1.
2. Time stops when the number 3 cannoneer announces "Gunner."
3. When using DFCS, this task will be performed during position improvement.

---

**0811-GUNS-1005:** Emplace the aiming posts

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 month

**MOS PERFORMING:** 0811

**BILLETS:** Cannoneer

**GRADES:** PVT, PFC, LCPL

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an emplaced howitzer and a gunner on the panel.

**STANDARD:** 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. Follow direction from the gunner's hand and arm signals.

**REFERENCES:**

1. MCTM 10407C-OR/\_ 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:** 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-1006:** Perform prefiring checks

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Cannoneer

**GRADES:** PVT, PFC, LCPL

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an emplaced howitzer.

**STANDARD:** Identifying discrepancies to the Section Chief.

**PERFORMANCE STEPS:**

1. Look through tube to ensure there are no obstructions.
2. Ensure breech and PFM witness marks are aligned.
3. Ensure oil index pin is flush or slightly indented on Recoil Accumulator.
4. Ensure howitzer has 5 points of contact with the ground.

**REFERENCES:**

1. JREGTO 3570.1\_ Standing Operating Procedures for Field Artillery Safety
2. MCTM 10407C-OR/\_ 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

**ADMINISTRATIVE INSTRUCTION:** If using alternate obturator group ensure that split rings are 180 degrees apart.

---

**0811-GUNS-1007:** Employ proper ammunition storage procedures

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 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 and secure ammunition in the vehicle to prevent movement in any direction.
2. Store ammunition in the field, separating ammunition by type, lot, and weight zone.
3. Ensure there is adequate dunnage underneath ammunition.
4. Protect ammunition from direct sunlight and weather conditions.

**REFERENCES:**

1. JREGTO 3570.1\_ Standing Operating Procedures for Field Artillery Safety
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

**SUPPORT REQUIREMENTS:**

**ORDNANCE:**

<u>DODIC</u>	<u>Quantity</u>
D505 Projectile, 155mm Illuminating M485A1	2 projectiles per Marine
D544 Projectile, 155mm High Explosive M107	2 projectiles per Marine
D550 Projectile, 155mm Smoke White Phosph	2 Primers per Marine
DA12 Charge, Propellant 155mm MACS M231	2 charges per Marine
N291 Fuze, Proximity M732A2 Sub f/NA09	2 fuzes per Marine
N340 Fuze, Point Detonating M739/M739A1	2 fuzes per Marine
N523 Primer, Percussion M82	6 Primers per Marine
NA09 Fuze, Multi-Option M782	2 fuzes per Marine
NA15 Fuze, Electronic Time M767A1	2 fuzes per Marine
NA17 Fuze, Electronic Time M762A1	2 fuzes per Marine
N335 Fuze, Point Detonating M557	2 fuzes per Marine

**RANGE/TRAINING AREA:**

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

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**

1. This task does not apply to combat loading 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.

2. Physical Constraints: Marines are required to lift multiple projectiles in excess of 100 lbs repetitiously in a short time frame.

---

**0811-GUNS-1009:** Operate the Muzzle Velocity Sensor System (MVSS)

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 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. Mount the transceiver.
3. Connect all applicable cables.
4. Record muzzle velocities.

**REFERENCES:**

1. MCTM 09814A-14&P M94 Muzzle Velocity System
2. MCTM 10407C-OR/\_

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

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

---

**0811-GUNS-1011:** Respond to all fire commands

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 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:** Filling out the DA 4513 accurately and legibly.

**PERFORMANCE STEPS:**

1. Respond to the 11 fire command elements.
2. State firing reports.
3. Respond to planned targets.
4. Complete the Record of Missions Fired (DA 4513).

**REFERENCES:**

1. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery  
Cannon Battery
- 

**0811-GUNS-1013:** Prepare separate-loading ammunition for firing

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 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 be inspected by the Section Chief.

**PERFORMANCE STEPS:**

1. Inspect ammunition.
2. Select appropriate projectile.
3. Select appropriate propellant and charge.
4. Select appropriate fuze.
5. Set appropriate time setting, if applicable.

**REFERENCES:**

1. MCTM 10407C-OR/\_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
3. TM 9-1290-211-13&P Operator & Unit Maintenance Manual for Enhanced Fuze Setter: Portable, Inductive, Artillery, M1155A1 (E-PIAFS)

**SUPPORT REQUIREMENTS:**

**ORDNANCE:**

<u>DODIC</u>	<u>Quantity</u>
D505 Projectile, 155mm Illuminating M485A1	2 projectiles per Marine
D544 Projectile, 155mm High Explosive M107	2 projectiles per Marine

D550 Projectile, 155mm Smoke White Phosph	2 projectiles per Marine
DA12 Charge, Propellant 155mm MACS M231	6 charges per Marine
N291 Fuze, Proximity M732A2 Sub f/NA09	2 fuzes per Marine
N340 Fuze, Point Detonating M739/M739A1	2 fuzes per Marine
N523 Primer, Percussion M82	6 Primers per Marine
NA09 Fuze, Multi-Option M782	2 fuzes per Marine
NA15 Fuze, Electronic Time M767A1	2 fuzes per Marine
NA17 Fuze, Electronic Time M762A1	2 fuzes per Marine
N335 Fuze, Point Detonating M557	2 fuzes per Marine

**RANGE/TRAINING AREA:** Facility Code 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**

1. 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.
2. Physical Constraints: Marines are required to lift multiple projectiles in excess of 100 lbs repetitiously in a short time frame.

---

**0811-GUNS-1014:** Load a projectile

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 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 waist height
2. Place projectile on loading tray
3. Ram projectile into howitzer tube.

**REFERENCES:**

1. JREGTO 3570.2B Standing Operating Procedures for Field Artillery Safety
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery
3. TM 10407C-OR/1 Technical Manual, Operator's Manual Howitzer, Medium, Towed: 155-MM, M777A2

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**

1. This event is a MOS Specific Physical Standard required for the MOS of 0802 and 0811. See Appendix E for further detail.
  2. Surrogate or dummy projectiles are to be used.
  3. Physical Constraints: Marines are required to lift multiple projectiles in excess of 100lbs repetitiously in a short time frame.
- 

**0811-GUNS-1015:** Fire a prepared round

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETTS:** 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/\_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

**SUPPORT REQUIREMENTS:**

**ORDNANCE:**

<u>DODIC</u>	<u>Quantity</u>
D505 Projectile, 155mm Illuminating M485A1	2 projectiles per Marine
D544 Projectile, 155mm High Explosive M107	2 projectiles per Marine
D550 Projectile, 155mm Smoke White Phosph	2 projectiles per Marine
DA12 Charge, Propellant 155mm MACS M231	6 charges per Marine
N291 Fuze, Proximity M732A2 Sub f/NA09	2 fuzes per Marine
N340 Fuze, Point Detonating M739/M739A1	2 fuzes per Marine
N523 Primer, Percussion M82	6 Primers per Marine
NA09 Fuze, Multi-Option M782	2 fuzes per Marine
NA15 Fuze, Electronic Time M767A1	2 fuzes per Marine
NA17 Fuze, Electronic Time M762A1	2 fuzes per Marine

N335 Fuze, Point Detonating M557

2 fuzes per Marine

**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. Dummy/inert/ammunition mock-ups may be used for non-live-fire training.
  2. Physical Constraints: Marines are required to lift multiple projectiles in excess of 100 lbs repetitiously in a short time frame.
- 

**0811-GUNS-1016:** Take immediate action for misfire

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Cannoneer

**GRADES:** PVT, PFC, LCPL

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an emplaced howitzer, a misfire situation involving a cold tube, a warm tube, a warm tube in hot weather, or a hot tube, and the reference.

**STANDARD:** Perform immediate actions per the reference and commands given by section chief.

**PERFORMANCE STEPS:**

1. Attempt to fire two more times.
2. Announce misfire.
3. Insert breech crank locking pin.

**REFERENCES:**

1. MCTM 10407C-OR/\_ 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  
Facility Code 17650 Field Artillery Direct Fire Range

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**0811-GUNS-1020:** Perform Preventive Maintenance Checks and Services (PMCS)

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 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:** Following all safety precautions and warnings, correcting or reporting all defects.

**PERFORMANCE STEPS:**

1. Perform equipment checks and services.
2. Perform authorized maintenance inspections.
3. Maintain, assemble, and disassemble the firing mechanism.
4. Maintain, assemble, and disassemble the breech.
5. Disassemble and assemble the magazine assembly.

**REFERENCES:**

1. MCTM 10407C-OR/\_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Inspections occur at regular intervals to avoid equipment damage and/or failure (before, during, and after firing operations; and on a weekly and monthly basis).

---

**0811-GUNS-1021:** Prepare ammunition for displacement

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811, 0802

**BILLETS:** Cannoneer

**GRADES:** PVT, PFC, LCPL

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a field ammunition storage point, an ammunition vehicle (MTVR), 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 MTRV for storage and transport.

**REFERENCES:**

1. JREGTO 3570.2B Standing Operating Procedures for Field Artillery Safety
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**

1. This event is a MOS Specific Physical Standard required for the MOS of 0802 and 0811. See Appendix E for further detail.
2. Surrogate or dummy projectiles are to be used.
3. Physical Constraints: Marines are required to lift multiple projectiles in excess of 100lbs repetitiously in a short time frame.

---

**0811-MED-1030:** Conduct a ground MEDEVAC

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 6 months

**MOS PERFORMING:** 0811

**GRADES:** PVT, PFC, LCPL

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a tactical vehicle, associated equipment, and crew

**STANDARD:** In accordance with the reference.

**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. Pre-hospital Trauma Life Support
2. FM 8-10-6 Medical Evacuation in a Theatre of Operations
3. JP 4-02 Health Service Support
4. MCWP 3-16.1 Artillery Operations

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS**

1. This event is a MOS Specific Physical Standard required for the MOS of 0802, 0803, 0811, 0814, 0842, 0844, 0847, 0848, and 0861. See Appendix E for further detail.

**12004. 2000-LEVEL EVENTS**

**0811-COND-2600**: Conduct a conditioning hike of 15km

**EVALUATION-CODED**: NO

**SUSTAINMENT INTERVAL**: 18 months

**MOS PERFORMING**: 0802, 0811, 0842, 0844, 0847, 0861

**GRADES**: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT, 2NDLT, 1STLT, CAPT

**INITIAL TRAINING SETTING**: MOJT

**CONDITION**: Given an individual weapon, a fighting load, and as part of a unit movement

**STANDARD**: Within four (4) hours or less.

**PERFORMANCE STEPS**:

1. Assemble the load for the march.
2. Don the load for the march.
3. Complete a 15 kilometer march.

**REFERENCES**:

1. MCRP 3-02A Marine Physical Readiness Training for Combat

**MISCELLANEOUS**:

**ADMINISTRATIVE INSTRUCTIONS**: 1. This event is a MOS Specific Physical Standard required for the MOS of 0802, 0803, 0811, 0814, 0842, 0844, 0847, 0848, and 0861. Prior to executing this event, Marines will conduct a 5K and 10K march with the fighting load. Individual field equipment weight is not to exceed 55 pounds.

---

**0811-GUNS-2200**: Lay the howitzer for initial direction of fire (DFCS)

**EVALUATION-CODED**: NO

**SUSTAINMENT INTERVAL**: 3 months

**MOS PERFORMING**: 0811

**BILLETS**: Section Chief

**GRADES**: Cpl, Sgt, SSgt

**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/\_ 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 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-2202:** Lay the howitzer for initial direction of fire (OFC)

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Gunner

**GRADES:** LCpl, CPL, SGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a howitzer in a firing position and a determined method of lay.

**STANDARD:** To 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 and correct sight picture.
4. Respond to commands until howitzer is laid on the azimuth of fire.
5. Record reading from the azimuth counter on the gunners reference card.

**REFERENCES:**

1. MCTM 10407C-OR/\_ 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 17420 Maneuver/Training Area, Heavy Forces  
Facility Code 17671 Field Artillery Indirect Fire Range  
Facility Code 17650 Field Artillery Direct 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-2204:** 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 of the howitzer being laid.

**PERFORMANCE STEPS:**

1. Sight through the eyepiece of the pantel and turn the azimuth knob until a suitable place to locate the collimator is sighted.
2. Command the #3 cannoneer to fine tune until proper sight picture is obtained.
3. Announce, "SET."
4. Engage deflection clutch.
5. Record deflection from the azimuth counter on gunner's reference card.

**REFERENCES:**

1. MCTM 10407C-OR/\_ 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 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 lay deflection is recorded on the gunner's reference card. Time stops: When deflection to collimator is recorded on gunner's reference card.

---

**0811-GUNS-2205:** Align the aiming posts

**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:** Ensuring no displacement is present in the reticle pattern.

**PERFORMANCE STEPS:**

1. Rotate pantel to far aiming post.
2. Align aiming posts by directing cannoneer with standard hand and arm signals.
3. Verify correct sight picture.
4. Record deflection from azimuth counter to aiming posts on the gunner's reference card.

**REFERENCES:**

1. MCTM 10407C-OR/\_ 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 17420 Maneuver/Training Area, Heavy Forces  
Facility Code 17671 Field Artillery Indirect Fire Range  
Facility Code 17650 Field Artillery Direct Fire Range

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**0811-GUNS-2206:** Prepare gunner's reference card

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

**MOS PERFORMING:** 0811

**BILLETS:** Gunner

**GRADES:** LCpl, 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 Field Artillery  
Cannon Battery

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

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

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** The gunner's reference card is filled in promptly as pertinent information becomes available.

---

**0811-GUNS-2209:** Lay howitzer for deflection using M100-series sight

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Gunner

**GRADES:** LCpl, CPL, SGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an emplaced howitzer laid on the azimuth of fire, an aiming point (collimator, aiming posts, distant aiming point) established, and a fire command.

**STANDARD:** Using proper commands and 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. Level bubbles and recheck sight picture, announce "Ready."

**REFERENCES:**

1. MCTM 10407C-OR/\_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

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

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Time starts when deflection is announced.  
Time stops when Gunner announces "READY".

---

**0811-GUNS-2210:** Refer the piece

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Gunner

**GRADES:** LCpl, 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:** Using proper commands, and ensuring 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/\_ 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 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 upon receipt of command "Battery refer aiming point this instrument."
  2. Time stops when the referred deflection is announced.
- 

**0811-GUNS-2212:** Conduct direct fire

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 1 months

**MOS PERFORMING:** 0811

**BILLETS:** Gunner

**GRADES:** LCpl, CPL, SGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a howitzer in a firing position, a target, and a fire command.

**STANDARD:** 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 off the announced lead.
4. Announce, "FIRE", after the assistant gunner announces "SET."
5. Continue to lay and fire on target until it is neutralized, 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/\_Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
3. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

**SUPPORT REQUIREMENTS:**

**ORDNANCE:**

<u>DODIC</u>	<u>Quantity</u>
D529 Projectile, 155mm High Explosive M79	3 projectiles per Section
DA13 Charge, Propellant 155mm MACS M232	3 charges per Section
N340 Fuze, Point Detonating M739/M739A1	3 fuzes per Section

N523 Primer, Percussion M82	3 primers per Section
NA15 Fuze, Electronic Time M767A1	3 fuzes per Section
N335 Fuze, Point Detonating M557	3 fuzes per Section

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**

1. Physical Constraints: Marines are required to lift multiple projectiles in excess of 100 lbs repetitiously in a short time frame.
  2. Time fuzes are intended to be utilized to conduct "killer junior" missions.
  3. Time starts when Warning Order is given. Time stops when target is neutralized or destroyed.
- 

**0811-GUNS-2213:** Lay the howitzer for quadrant using the fire control quadrant

**EVALUATION-CODED:** NO                      **SUSTAINMENT INTERVAL:** 2 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:** Ensuring 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. Level cross level vial.
4. Announce "Set."

**REFERENCES:**

1. MCTM 10407C-OR/\_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

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

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Time starts when quadrant is announced. Time

stops when "Set" is announced.

---

**0811-GUNS-2214:** Lay for quadrant using the Gunner's Quadrant

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSgt

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a howitzer in a firing position and a fire command that includes use of the gunner's quadrant.

**STANDARD:** Ensuring 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 with the line of fire arrow toward the muzzle of the tube.
3. Direct the Assistant Gunner to elevate or depress the tube until the bubble is level.
4. Announce "SET" when prepared.

**REFERENCES:**

1. MCTM 10407C-OR/\_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

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

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Time starts when quadrant is announced. Time stops when "Set" is announced.

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**0811-GUNS-2215:** Measure the quadrant using the Fire Control Quadrant

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Assistant Gunner

**GRADES:** LCpl, CPL

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a howitzer in a firing position elevated to an unknown quadrant.

**STANDARD:** To 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:**

1. MCTM 10407C-OR/\_Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

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

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**0811-GUNS-2216:** Boresight the direct fire elbow telescope using a Distant Aiming Point

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** A-Gunner

**GRADES:** LCpl, CPL

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a howitzer in a firing position and section equipment.

**STANDARD:** To an accuracy of 0 mils.

**PERFORMANCE STEPS:**

1. Insert boresight disks.
2. Sight in on Distant Aiming Point (DAP).
3. Align muzzle on Distant Aiming Point (DAP).
4. Level bubbles.
5. Adjust 0 elevation line of the elbow telescope on Distant Aiming Point (DAP) using the elevation adjusting screw.
6. Repeat STEPS 2-5 if elevation is misaligned by more than 0.5 mils.
7. Verify sight picture.

8. Remove boresight disks.

**REFERENCES:**

1. MCTM 10407C-OR/\_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  
Facility Code 17650 Field Artillery Direct Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Muzzle crosshairs may be used in lieu of muzzle boresight discs.

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**0811-GUNS-2300:** Supervise the emplacement of a howitzer (OFC)

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a howitzer, section, equipment and an aiming point.

**STANDARD:** Utilizing the memory aid TLABSPAP.

**PERFORMANCE STEPS:** In accordance with the technical manual and the memory aid TLABSPAP emplace the howitzer.

**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/ \_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
4. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

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

**0811-GUNS-2301:** Supervise the emplacement of a howitzer (DFCS)

**EVALUATION-CODED:** NO                      **SUSTAINMENT INTERVAL:** 1 month

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a howitzer, section, equipment and an aiming point.

**STANDARD:** Utilizing the memory aid TLPAP.

**PERFORMANCE STEPS:** In accordance with the technical manual and the memory aid TLPAP emplace the howitzer.

**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/\_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
4. 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

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**0811-GUNS-2302:** Measure the site to crest

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

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**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.

**PERFORMANCE STEPS:**

1. Measure the angle of site-to-crest.
2. Measure piece-to-crest range by, subtense, 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/\_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
4. 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

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**0811-GUNS-2303:** 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:** Accurately and legibly, per the reference MCWP 3-16.3.

**PERFORMANCE STEPS:**

1. Sketch the sector of fire and likely avenues of approach.
2. Ensure data section lists necessary data to engage targets.

**REFERENCES:**

1. 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

**0811-GUNS-2304:** Determine whether a howitzer is safe to fire

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an emplaced howitzer, a safety "T", a series of fire commands.

**STANDARD:** Ensuring the command, "CHECK FIRING," is given when unsafe conditions exist.

**PERFORMANCE STEPS:**

1. Verify data using safety Ts.
2. Verify that the deflection and quadrant are set correctly.
3. Verify charge and lot on projectile and propellant.
4. Verify fuze and fuze setting.
5. Verify all safe conditions exist according to Joint Reg Safety SOP.
6. Command, "CHECK FIRING," if any unsafe condition exists.

**REFERENCES:**

1. JREGTO 3570.1\_ Standing Operating Procedures for Field Artillery Safety
2. MCTM 10407C-OR/\_ 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:** SIMULATION: YES

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**0811-GUNS-2305:** Supervise the preparation of ammunition for firing

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given the components of a complete round and a fire command.

**STANDARD:** Ensuring authorized ammunition combinations and handling procedures are used.

**PERFORMANCE STEPS:**

1. Identify proper shell/fuze combination from fire commands.
3. Identify proper propellant/projectile combination from fire commands.
4. Verify the proper setting of Fuze Time and Variable Time.
5. Ensure proper ammunition handling procedures are used.
6. Ensure only authorized shell/fuze combinations are prepared for firing.

**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/\_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
4. 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

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**0811-GUNS-2307:** Conduct indirect fire missions

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an emplaced howitzer, section, equipment, and a fire command.

**STANDARD:** Ensuring the howitzer is ready to fire within 45 seconds for low angle and 1 minute for high angle.

**PERFORMANCE STEPS:**

1. Section Chief verifies data on the Chief of Section Display (CSD)/DA form 4513.
2. Verifies proper selection, setting, and loading of ammunition.
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/\_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
4. 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 17671 Field Artillery Indirect Fire Range  
Facility Code 17650 Field Artillery Direct Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Time Starts: Quadrant elevation is announced by the section chief. Time stops when howitzer is ready to fire.

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**0811-GUNS-2308:** Lay on priority target

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an emplaced howitzer and priority target data.

**STANDARD:** At the completion of each mission.

**PERFORMANCE STEPS:**

1. Ammunition components are inspected and segregated.
2. Propellant is prepared and segregated.
3. Verify priority target data is recorded on gunner's reference card.

**REFERENCES:**

1. JREGTO 3570.1\_ Standing Operating Procedures for Field Artillery Safety
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 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Physical Constraints: Marines are required to lift multiple projectiles in excess of 100 lbs repetitiously in a short time frame.

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**0811-GUNS-2309:** Prepare howitzer to fire outside of normal traverse limits (OFC)

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an emplaced howitzer, section, equipment, and fire commands.

**STANDARD:** Within 3 minutes in daylight and 6 minutes in darkness.

**PERFORMANCE STEPS:**

1. Ensure gunner properly switches aiming points.
2. Apply deflection from FDC to pantel.
3. Command "Shift, muzzle right (or left)."
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 Field Artillery Cannon Battery

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

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

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Start: On the command QE. Time Stops: On the command "Laid."

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**0811-GUNS-2311:** Compute data for Sweep and Zone fire mission

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a howitzer section and fire commands.

**STANDARD:** Ensuring correct number of deflection, quadrants, and rounds per the fire command.

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

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**0811-GUNS-2313:** Engage targets with howitzer in direct fire role

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an emplaced howitzer, section, equipment and a designated target.

**STANDARD:** For armor/material with maximum of 3 rounds (daylight in 2 minutes/darkness in 3 minutes), and for personnel with maximum 2 rounds (daylight in 1 minute and darkness in 1.5 minutes).

**PERFORMANCE STEPS:**

1. Issues fire order for direct fire mission.
2. Ensure Howitzer range card is utilized.

**REFERENCES:**

1. MCTM 10407C-OR/\_ 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:**

**ORDNANCE:**

<u>DODIC</u>	<u>Quantity</u>
D529 Projectile, 155mm High Explosive M795	3 projectiles per Section
DA13 Charge, Propellant 155mm MACS M232	3 charges per Section
N340 Fuze, Point Detonating M739/M739A1	3 fuzes per Section
N523 Primer, Percussion M82	3 primers per Section
NA15 Fuze, Electronic Time M767A1	3 fuzes per Section

**RANGE/TRAINING AREA:**

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

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**0811-GUNS-2317:** Supervise securing of howitzer ammunition in preparation for transport

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an ammunition vehicle and a load plan.

**STANDARD:** Ensuring ammunition is safely loaded and secured.

**PERFORMANCE STEPS:**

1. Ensure ammunition is loaded IAW the references.
2. Ensure adherence to safety precautions.
3. Direct the crew to correct any errors observed.

**REFERENCES:**

1. JREGTO 3570.1\_ Standing Operating Procedures for Field Artillery Safety
2. NAVSEA SWO20-AF-ABK-010 Motor Vehicle Driver and Shipping Inspector's Manual for Ammunition, Explosives and Related Hazardous Materials

**SUPPORT REQUIREMENTS:**

**ORDNANCE:**

<u>DODIC</u>	<u>Quantity</u>
D529 Projectile, 155mm High Explosive M795	8 projectiles per Section
DA12 Charge, Propellant 155mm MACS M231	8 charges per Section
DA13 Charge, Propellant 155mm MACS M232	8 charges per Section
N340 Fuze, Point Detonating M739/M739A1	8 fuzes per Section
N523 Primer, Percussion M82	8 primers per Section
NA15 Fuze, Electronic Time M767A1	8 fuzes per Section

**RANGE/TRAINING AREA:**

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

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**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, an appropriate) mount with appropriate adapters and a machinegun (M240B, M2, or MK19).

**STANDARD:** Ensuring it is secured for movement.

**PERFORMANCE STEPS:**

1. Connect the appropriate weapon mount to ring mount.
2. Mount machinegun to appropriate weapon mount.

**REFERENCES:**

1. MCWP 3-15.1 Machine Guns and Machine Gun Gunnery
  2. MCWP 4-11.3 Transportation Operations
- 

**0811-GUNS-2310:** Establish standard angle

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

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a howitzer that has been boresighted, a pre-tested gunner's quadrant, section equipment, and the reference.

**STANDARD:** Within an accuracy of 1/4 mil.

**PERFORMANCE STEPS:**

1. Ensure cannon tube is at 100 mils.
2. Correctly position pantel and ensure correct sight picture.
3. Read and record the standard angle from the azimuth counter.
4. Verify pantel boresight using the M154 alignment device.
5. Perform steps 2-4 until three consecutive readings at 4800 (+/- 0.5 mils) is achieved.

**REFERENCES:**

1. MCTM 10407C-OR/\_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

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

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**0811-GUNS-2320:** Test the gunner's quadrant

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a howitzer and a gunner's quadrant.

**STANDARD:** To 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:**

1. MCTM 10407C-OR/\_ 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-2324:** Boresight the howitzer

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 4 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an emplaced howitzer that is out of boresight.

**STANDARD:** Using a distant aiming point, standard angle, and/or the M2A2 aiming circle methods to an accuracy of 0 mils within 3 minutes with a DAP and 5 minutes with an aiming circle.

**PERFORMANCE STEPS:**

1. Determine method to be utilized.
2. Prepare the howitzer.
3. Perform actions for the method selected.
4. Section Chief verifies boresight.

**REFERENCES:**

1. MCTM 10407C-OR/\_ 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 17420 Maneuver/Training Area, Heavy Forces  
Facility Code 17671 Field Artillery Indirect Fire Range

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**0811-GUNS-2325:** Measure the quadrant using the gunner's quadrant

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an emplaced howitzer with the tube elevated to an unknown quadrant, a tested gunner's quadrant, and an accurate reading from the gunner's quadrant.

**STANDARD:** Ensuring measurement to the nearest whole mil.

**PERFORMANCE STEPS:**

1. Place the gunner's quadrant on the quadrant seats.
2. Center the bubble in the cross level vial.
3. Center the bubble on gunner's quadrant.
4. Read the quadrant to the nearest whole mil from the gunner's quadrant.

**REFERENCES:**

1. MCTM 10407C-OR/\_ 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 17671 Field Artillery Indirect Fire Range  
Facility Code 17420 Maneuver/Training Area, Heavy Forces

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**0811-GUNS-2326:** Perform fire control alignment tests and measurements

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an emplaced howitzer, section and equipment.

**STANDARD:** Ensuring the on-carriage fire control equipment and the gunner's quadrant are serviceable and within authorized tolerances.

**PERFORMANCE STEPS:**

1. Prepare the howitzer.
2. Conduct the tests of the on-carriage fire control equipment.
3. Determine and record standard angle.
4. Notify organizational maintenance if any alignment device exceeds the tolerance

**REFERENCES:**

1. MCTM 10407C-OR/\_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

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

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**0811-GUNS-2327:** Operate the Muzzle Velocity Sensor System (MVSS)

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an emplaced howitzer.

**STANDARD:** Recording and reporting all muzzle velocities to the FDC.

**PERFORMANCE STEPS:**

1. Check for obvious defects.
2. Mount the transceiver.
3. Connect all applicable cables.
4. Record muzzle velocities.

**REFERENCES:**

1. MCTM 10407C-OR/\_

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

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

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**0811-GUNS-2332:** Prepare a howitzer section for helicopter displacement

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 6 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a howitzer section, equipment, and a warning order.

**STANDARD:** Ensuring all personnel and equipment are identified in accordance with the reference, MCRP 4-11.3E/FMFRP 5-31 VOL 1.

**PERFORMANCE STEPS:**

1. Brief personnel.
2. Identify necessary individual gear.
3. Identify necessary section gear.
4. Assign personnel to carry section gear.
5. Ensure individual weapons are properly handled.
6. Determine sequence of embark/debark.

**REFERENCES:**

1. MCRP 4-11.3E/FMFRP 5-31 VOL 1 Multi-Service Helicopter Sling Load: Basic Ops and Equipment
2. MCTM 10407C-OR/\_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

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

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**0811-GUNS-2335:** Initialize Digital Fire Control System (DFCS)

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 month

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a howitzer and a known point.

**STANDARD:** Ensuring 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/\_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

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

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**0811-GUNS-2336:** Process fire missions using Digital Fire Control System (DFCS)

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 month

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an emplaced howitzer, digital or voice fire mission.

**STANDARD:** Ensuring accurate data is prepared for firing.

**PERFORMANCE STEPS:**

1. Acknowledge receipt of fire mission.
2. Announce the fire commands to the section.
3. Follow procedures for specific mission type.
4. Acknowledge all alarms and messages from the Chief of Section Display (CSD).

**REFERENCES:**

1. MCTM 10407C-OR/\_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
2. Joint Reg SOP

**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. Manual Fire Mission is used when the DFCS communications are OUT. The manual procedures for a fire mission are the same as a digital fire mission, except a manual entry is required.
  2. Specific processing for different types of missions are dependent on mission type (When Ready, AMC, DNL, FPF, PGM, Excalibur).
-

**0811-GUNS-2337:** Conduct manual move order (DFCS)

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an initialized howitzer and a movement order.

**STANDARD:** Ensuring all data is entered in the CSD.

**PERFORMANCE STEPS:**

1. Update manual move order entries.
2. Confirm range to destination using available resources.
3. Navigate to destination.

**REFERENCES:**

1. MCTM 10407C-OR/\_ 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

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**0811-GUNS-2323:** Take immediate action for misfire

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an emplaced howitzer, a misfire situation involving a cold tube, a warm tube, a warm tube in hot weather, or a hot tube, and the reference.

**STANDARD:** Perform immediate actions per the reference

**PERFORMANCE STEPS:**

1. Verify two more times attempts to fire.

2. Announce misfire.
3. Verify breech crank locking pin is inserted.
4. Carryout procedures in accordance with the reference.

**REFERENCES:**

1. MCTM 10407C-OR/\_ 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  
Facility Code 17650 Field Artillery Direct Fire Range

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**0811-GUNS-2350:** Displace howitzers to supplementary positions in defense of the battery position

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Section Chief

**GRADES:** CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a howitzer section and ammunition.

**STANDARD:** Within 3 minutes in daylight and 5 minutes in darkness.

**PERFORMANCE STEPS:**

1. Displace howitzers.
2. Emplace howitzers.
3. Displace howitzers.

**REFERENCES:**

1. MCTM 10407C-OR/\_ 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:**

**ORDNANCE:**

<u>DODIC</u>	<u>Quantity</u>
D529 Projectile, 155mm High Explosive M795	3 projectiles per Section
D544 Projectile, 155mm High Explosive M107	3 projectiles per Section
DA12 Charge, Propellant 155mm MACS M231	2 charges per Section
DA13 Charge, Propellant 155mm MACS M232	3 charges per Section
DA45- Projectile, 155mm Excalibur	3 projectiles per Section
N340 Fuze, Point Detonating M739/M739A1	3 fuzes per Section





**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Platoon Sergeant

**GRADES:** SSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a firing battery.

**STANDARD:** Ensuring all personnel are equipped properly and able to displace to the new position.

**PERFORMANCE STEPS:**

1. List the personnel required in an advance party.
2. List the primary duties of advance party personnel.
3. List the equipment required by an advance party.
4. Displace the advance party to the new position.

**REFERENCES:**

1. 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 17671 Field Artillery Indirect Fire Range

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**0811-GUNS-2405:** Conduct local security operations

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 1 month

**MOS PERFORMING:** 0811

**BILLETS:** Local Security Chief

**GRADES:** SGT, SSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a firing battery.

**STANDARD:** Per the reference, MCWP 3-16.3.

**PERFORMANCE STEPS:**

1. Plan for the reconnaissance.
2. Select positions: Recommend an alternate and supplementary position.
3. Conduct a security sweep of the position and establish security.

4. Record the location of each section and support vehicles.
5. Set up the aiming circle and measure rough deflection, distance, and vertical angle to the proposed gun positions. Determine estimated XO's minimum QE using the M2 compass, if time permits.
6. At night, mark key positions, as dictated by unit SOP. Practice noise and light discipline.
7. Assemble the guides at the release point as the main body nears the position.
8. Plan for the defense of position.
9. Continue to improve the position and practice continuing actions.

**REFERENCES:**

1. 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 17671 Field Artillery Indirect Fire Range

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**0811-GUNS-2406:** Emplace the M2A2 aiming circle

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 1 month

**MOS PERFORMING:** 0811

**BILLETS:** Platoon Sergeant/ Battery Gunnery Sergeant

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an area clear of magnetic attractions.

**STANDARD:** Within 2 minutes and recovering it within 1 minute.

**PERFORMANCE STEPS:**

1. Set up the aiming circle (with tripod) for operation.
2. Level the aiming circle.
3. Recover the aiming circle.

**REFERENCES:**

1. 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 17671 Field Artillery Indirect Fire Range

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Time starts upon command. Time stops when aiming circle is centered and leveled over the known point.

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**0811-GUNS-2409:** Lay the firing battery

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Platoon Sergeant, Battery Gunnery Sergeant

**GRADES:** SSgt, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Battery has occupied a new firing position.

**STANDARD:** To an accuracy of 0 mils or +/- 20 mils using the M2 compass, and within the following times: OA 11 min, M2 9 min, AP 4 min Darkness: OA 19 min, M2 14 min.

**PERFORMANCE STEPS:**

1. Determine method of lay: Aiming point-deflection, M2 compass, Howitzer back lay, Grid Azimuth, Orienting Angle methods.
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/\_ Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
  4. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery
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**0811-GUNS-2410:** Compute minimum quadrant elevation (MIN QE)

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 1 month

**MOS PERFORMING:** 0811

**BILLETS:** Platoon Sergeant/Battery Gunnery Sergeant

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given all required 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. Manually or by applying the rapid fire tables compute minimum quadrant elevation.
3. This task will be computed for each charge.

**REFERENCES:**

1. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery  
Cannon Battery

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

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

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**0811-GUNS-2411:** Construct the local security diagram

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 1 months

**MOS PERFORMING:** 0811

**BILLETS:** Local Security Chief

**GRADES:** Sgt, SSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a battery that has just occupied a new position, personnel, and equipment.

**STANDARD:** Ensuring the location of observation posts and weapons systems are to be 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 and ensure the plan is integrated with higher and adjacent units.
2. Plan and supervise local security patrols.
3. Plan and supervise preparation for defense against air attack.
4. Prepare the defensive diagram.

**REFERENCES:**

1. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery  
Cannon Battery LLC.

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

Facility Code 17671 Field Artillery Indirect Fire Range

Facility Code 17420 Maneuver/Training Area, Heavy Forces

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**0811-GUNS-2412:** Lead a quick reaction force (QRF)

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Local Security Chief

**GRADES:** SGT, SSGT

**INITIAL TRAINING SETTING:** FORMAL

**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 movement and actions of the QRF to defend the battery/platoon position.
4. Employ automatic weapons.
5. Call for supporting arms, if appropriate.
6. Maintain communication with higher.

**REFERENCES:**

1. MCWP 3-1 Ground Combat Operations
2. MCWP 3-15.1 Machine Guns and Machine Gun Gunnery
3. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

**SUPPORT REQUIREMENTS:**

**ORDNANCE:**

<u>DODIC</u>	<u>Quantity</u>
A059 Cartridge, 5.56mm Ball M855 10/Clip	200 cartridges per Marine
A063 Cartridge, 5.56mm Tracer M856 Single	500 cartridges per Battery
A064 Cartridge, 5.56mm 4 Ball M855/1 Trac	500 cartridges per Section
A131 Cartridge, 7.62mm 4 Ball M80/1 Trace	500 cartridges per Section
A518 Cartridge, Caliber .50 4 SLAP M903/1	200 cartridges per Section
A576 Cartridge, Caliber .50 4 API M8/1 AP	500 cartridges per Section
B542 Cartridge, 40mm HEDP M430/M430A1 Lin	500 cartridges per Section
B546 Cartridge, 40mm HEDP M433	500 cartridges per Section
D529 Projectile, 155mm High Explosive M795	2 projectiles per Section
DA12 Charge, Propellant 155mm MACS M231	2 charges per Section
DA13 Charge, Propellant 155mm MACS M232	2 charges per Section
DA45- Projectile, 155mm Excalibur	2 projectiles per Section
K143 Mine, Antipersonnel M18A1 with M57 F	20 mines per Battery
L328 Signal, Cartridge Red Flare	5 flares per Section

L495 Flare, Surface Trip M49 Series	50 flares per Battery
N340 Fuze, Point Detonating M739/M739A1	2 fuzes per Section
N523 Primer, Percussion M82	2 primers per Section

**RANGE/TRAINING AREA:**

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

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**

1. Physical Constraints: Personnel are required to lift and mount heavy machine guns approximately 75lbs onto vehicles and mounts.
2. Concertina Wire, sandbags and all other fortification items needed.

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**0811-GUNS-2414:** Conduct a hasty displacement to an alternate position

**EVALUATION-CODED:** NO                      **SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Local Security Chief

**GRADES:** SGT, SSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an emplaced battery and a tactical situation while serving as the Local Security Chief.

**STANDARD:** Ensuring the advance party assembles and departs for new position after battery displacement is approved/ordered within 4 minutes in daylight and 6 minutes in darkness.

**PERFORMANCE STEPS:**

1. Assemble the advance party with all equipment.
2. Depart with the advance party.

**REFERENCES:**

1. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

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

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**0811-GUNS-2417:** Perform crater analysis

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

**MOS PERFORMING:** 0811

**BILLETS:** Local Security Chief

**GRADES:** SGT, SSGT

**INITIAL TRAINING SETTING:** FORMAL

**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 using fuze furrow or side spray method.
4. Collect usable shell fragments.
5. Send shell fragments and develop shell report to appropriate agency as required.
6. Report via unit SOP.

**REFERENCES:**

1. MCWP 3-16.1 Artillery Operations
2. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery
3. MCWP 3-16.6 Supporting Arms Observer, Spotter and Controller

**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 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-2501:** Assist in the unit training plan

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Platoon Sergeant / Battery Gunnery Sergeant

**GRADES:** SSgt, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given commander's training guidance.

**STANDARD:** In accordance with MCRP 3-0A.

**PERFORMANCE STEPS:**

1. Analyze capabilities and deficiencies of the battery in performing mission essential tasks described in the Artillery T&R Manual.
2. Review the battalion annual training plan.
3. Advise the battery commander on the unit's status and make recommendations on how to increase combat readiness.

**REFERENCES:**

1. MCRP 3-0A Unit Training Management Guide
  2. MCRP 3-0B How to Conduct Training
- 

**0811-GUNS-2504:** Direct battery organizational maintenance on organic equipment

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 1 month

**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:** Ensuring section equipment is properly maintained and accounted for, and 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.

**REFERENCES:**

1. MCO P4790.1\_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
2. MCTM 10407C-OR/1 Operator's Manual for Howitzer, Medium, Towed: 155mm, M777A2
3. TM 02498A-23/2 Machine Gun, Caliber .50, Browning, M2 HB
4. TM 08670A-10/1A Operator's Manual, Machinegun, 7.62mm, M240
5. TM 08670A-14&P/1 Supplement 1, M240G
6. TM 08671A-23&P/2A Machine Gun 5.56MM M249
7. TM 10629-10C Operator Manual for the Truck, Cargo, 7-Ton
8. TM 2320-10/6B Truck, Utility 1 1/2 Ton (HMMWV)

9. TM 4700-15-1/F Marine Corps Equipment Forms and Records
10. TM 9-1005-201-10 Operator's Manual for Machinegun, 5.56mm, M249
11. UNIT SOP Unit's Standing Operating Procedures

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Physical Constraints: Marines are required to lift/shift heavy equipment in support of the battery's maintenance obligation.

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**0811-GUNS-2505:** Employ hasty survey techniques for directional and positional control

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 1 month

**MOS PERFORMING:** 0811

**BILLETS:** Platoon Sergeant, Battery Gunnery Sergeant

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a tactical scenario involving the absence of accurate survey data and associated equipment.

**STANDARD:** Per the reference MCWP 3-16.3.

**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, Polaris 2, 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 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 17671 Field Artillery Indirect Fire Range

Facility Code 17650 Field Artillery Direct Fire Range

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**0811-GUNS-2506:** Lay the battery for an emergency fire mission (hip shoot) while in a convoy

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 1 months

**MOS PERFORMING:** 0811

**BILLETS:** Platoon Sergeant, Battery Gunnery 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.

**STANDARD:** Emplacing and laying the battery as soon as possible after receiving the target location and complete the FFE phase of the mission within 13 minutes.

**PERFORMANCE STEPS:** If using OFC, set up aiming circle, facilitate howitzer back lay and lay the remainder of battery.

**REFERENCES:**

1. MCWP 3-16.3 Tactics, Techniques, and Procedures for 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's and Addendums TFT's and Addendums

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

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

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**0811-GUNS-2507:** Supervise a battery displacement

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Platoon Sergeant, Battery Gunnery 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:** Ensuring an appropriate movement order is issued, equipment and ammunition is properly secured and elements assume proper location within movement order or technique.

**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. (NOTE: Format found in ST 6-50-20.)

**REFERENCES:**

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

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Physical Constraints: Marines are required to shift the howitzer and lift multiple projectiles in excess of 100 lbs repetitiously in a short time frame.

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**0811-GUNS-2508:** Direct the defense of a field artillery unit

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Platoon Sergeant, Battery Gunnery Sergeant

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a battery that has occupied a position, and a completed defensive diagram.

**STANDARD:** To ensure uninterrupted artillery operations.

**PERFORMANCE STEPS:**

1. Select the appropriate course of action, based upon the tactical scenario.
2. Supervise the execution of the defensive plan.
3. Supervise the handling of EPW's.

**REFERENCES:**

1. MCIP 3-16.01 Tactics, Techniques, and Procedures for Lightweight 155
2. MCWP 3-15.1 Machine Guns and Machine Gun Gunnery



**CONDITION:** Given a firing battery that has been laid, and administrative materials.

**STANDARD:** Ensuring the accuracy of the required information per MCWP 3-16.3.

**PERFORMANCE STEPS:**

1. Verify the lay of the battery.
2. List the primary information in the XO's report.
3. Complete report.

**REFERENCES:**

1. MCWP 3-16.3 Tactics, Techniques, and Procedures for 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
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**0811-GUNS-2511:** Measure the azimuth of the line of fire

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 4 months

**MOS PERFORMING:** 0811

**BILLETS:** Platoon Sergeant, Battery Gunnery Sergeant

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an area free of metal attractions, a situation wherein survey control is not available and the appropriate equipment.

**STANDARD:** Ensuring the azimuth is measured to an accuracy of 0 mils.

**PERFORMANCE STEPS:**

1. Use proper commands, with survey, ensuring the azimuth is measured to an accuracy of 0 mils.
2. Use proper commands, without survey, ensuring the azimuth is measured to an accuracy of 0 mils.

**REFERENCES:**

1. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery
  2. ST 6-50-20 Battery Executive Officer's/ Platoon Leader's Handbook
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**0811-GUNS-2513:** Measure the vertical angle (VA) and Subtense

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Platoon Sergeant, Battery Gunnery Sergeant

**GRADES:** SSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an aiming circle with tripod, a scenario allowing no time for advance party preparations, and an emplaced howitzer.

**STANDARD:** Determine location

**PERFORMANCE STEPS:**

1. Set up and level aiming circle.
2. Use elevation knob determine correction factor.
3. Measure Vertical Angle.
4. Measure Subtense

**REFERENCES:**

1. MCWP 3-16.3 Tactics, Techniques, and Procedures for Field Artillery Cannon Battery
  2. ST 6-50-20 Battery Executive Officer's/ Platoon Leader's Handbook
  3. TM 9-1290-262-10 Operator's Manual, Aiming Circle, M2 and M2A2
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**0811-GUNS-2517:** Coordinate logistics

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Platoon Sergeant, Battery Gunnery Sergeant

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a scenario involving a unit conducting tactical operations.

**STANDARD:** Adhering to logistics and maintenance management Standing Operating Procedures (SOPs).

**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.

**REFERENCES:**

1. MCWP 3-16.1E Combat Service Support for Artillery Unit
  2. UNIT SOP Unit's Standing Operating Procedures
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**0811-GUNS-2518:** Maintain Class V small-arms ammo basic load and supplies

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 2 months

**MOS PERFORMING:** 0811

**BILLETS:** Platoon Sergeant, Battery Gunnery Sergeant

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given appropriate small arms ammunition.

**STANDARD:** Ensuring all small-arms ammunition is available, maintained, and requisitioned.

**PERFORMANCE STEPS:**

1. Adhere to established Standing Operating Procedures (SOPs).
2. Ensure small arms Basic Load (BL) are maintained for all equipment.
3. Forecast and submit requisitions to maintain the Required Supply Rate (RSR).

**REFERENCES:**

1. MCO 8010.1\_ Class V (W) Planning Factors for Fleet Marine Force Combat Operations
  2. MCWP 3-16.1E Combat Service Support for Artillery Unit
  3. UNIT SOP Unit's Standing Operating Procedures
- 

**0811-GUNS-2519:** Supervise the pickup and delivery of designated classes of supply

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 3 months

**MOS PERFORMING:** 0811

**BILLETS:** Platoon Sergeant, Battery Gunnery Sergeant

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given supplies requiring distribution, and the appropriate equipment.

**STANDARD:** Ensuring the proper supplies are delivered and issued to the

correct units 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. Make delivery to proper battery elements, as directed by requisitions.

**REFERENCES:**

1. MCWP 3-16.1E Combat Service Support for Artillery Unit

**SUPPORT REQUIREMENTS:**

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

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**0811-GUNS-2520:** Supervise ammunition resupply on the gunline

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 6 months

**MOS PERFORMING:** 0811

**BILLETS:** Platoon Sergeant, Battery Gunnery Sergeant

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an emplaced battery, an ammunition load, and a mission.

**STANDARD:** Ensuring the required ammunition to respond to all fire missions is present on each howitzer.

**PERFORMANCE STEPS:**

1. Receive information on the battery mission from the Battery Executive Officer.
2. Supervise the battery ammunition section in the timely delivery of all ammunition components.
3. Ensure excessive amounts of ammunition are not delivered.
4. Supervise the pickup of all ammunition dunnage.

**REFERENCES:**

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

**SUPPORT REQUIREMENTS:**

**RANGE/TRAINING AREA:**

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

Facility Code 17650 Field Artillery Direct Fire Range

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**0811-GUNS-2521:** Supervise embarkation

**EVALUATION-CODED:** NO

**SUSTAINMENT INTERVAL:** 6 months

**MOS PERFORMING:** 0811

**BILLETS:** Platoon Sergeant, Battery Gunnery Sergeant

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an artillery unit designated as a landing element of a larger force, and available shipping to conduct an amphibious assault.

**STANDARD:** Coordinating with the Marine Air Ground Task Force (MAGTF) Ground Combat Element (GCE) embarkation officer, and other embarkation officers/movement officers, as appropriate.

**PERFORMANCE STEPS:**

1. Determine the unit's transportation lift requirements.
2. Ensure all material is properly marked, packaged, manifested, and loaded for embarkation.
3. Conduct embarkation inspections.
4. Prepare and execute embarkation/movement plans.
5. Provide security for material during embarkation.

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** DISTANCE LEARNING PRODUCTS: 045, The Logistics/Embarkation Specialist and 047, Introduction to Amphibious Embarkation.

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APPENDIX E

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)
- 0811-MAR-2600, March with a fighting load

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

<b>CREW UNIFORM WITH PPE</b>			
<b>Clothing Worn &amp; Packed</b>	<b>Weight (Lbs)</b>	<b>Quantity</b>	<b>Total Weight</b>
<b>Level I (On the Body)</b>			
Marine Corps Combat Utility, Blouse and Trouser	2.97	1	2.97
T-Shirt, Green	0.18	1	0.18
Marine Corps Combat Boots, Combat With Laces	3.12	1pr	3.12
Socks	0.16	1pr	0.16
Card, ID	0.028	1	0.028
Tags, ID	0.10	1	0.10
Helmet	3.45	1	3.45
Glove Shells w/ Inserts	0.30	1pr	0.30
Glasses, ESS	0.15	1	0.15
Ear Plugs with case	0.10	1	0.10
<b>Total</b>			<b>13.538</b>
<b>Level II (LBE)</b>			
Scalable Plate Carrier with Soft Armor Inserted	5.50	1	5.50

<b>Total</b>	<b>5.50</b>
<b>CREW UNIFORM WITH PPE TOTAL (Level I-II)</b>	<b>19.038</b>

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 MTRV 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) MTRV 7-Ton

(d) Personnel on MTRV 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 MTRV. 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 MTRV 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 MTRV.

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 MTRV. 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.