Field Artillery Gunnery

JULY 2006

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# Field Artillery Gunnery

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Preface

This manual describes how the field artillery (FA) gunnery program is executed to produce combat-proficient FA personnel, leaders, crews, and sections. This manual provides standards, principles, and techniques for achieving technical proficiency and safety in the operation of Field Artillery systems and weapons.

FM 3-09.8 is an integrated presentation that addresses all FA systems in a safe, technically and doctrinally grounded, progressive, task-oriented training model. This manual is designed for artillery leaders at all levels and is a resource for all types of artillery units. The programs outlined in this manual follow the concepts and guidance provided in FM 7-0 and FM 7-1.

The tasks, conditions, and standards in this manual are based on system technical manuals, training products, and tasks in military occupational specialty (MOS) 13-series Soldier’s manuals, and Army Training and Evaluation Program (ARTEP) 6-series mission training plans. In all cases, use only the most current technical manuals as references when executing the tables. All FA units are encouraged to provide ideas to upgrade the tasks, conditions, and standards in this manual.

This publication applies to the Active Army, the Army National Guard (ARNG)/Army National Guard of the United States (ARNGUS), and the U.S. Army Reserve (USAR) unless otherwise stated.

The proponent for this publication is the U.S. Army Training and Doctrine Command (TRADOC). Submit changes for improving this publication on DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forward it to the Deputy Chief of Staff Operations and Plans, G3, United States Army Field Artillery School, Fort Sill, Oklahoma 73503.

Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.
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Chapter 1

Introduction

This manual provides the guidelines for implementing an FA gunnery program that incorporates all FA systems. The objective is a safe, technically and doctrinally grounded, progressive, task-oriented training model. FA, as a system of systems, requires integrating functions or tasks performed by the critical elements of the gunnery team to provide timely and accurate fires. The artillery tables provide the commander with a systematic means of training and qualifying each of the sections/crews/teams that are critical to the solution of the gunnery problem. The tables provide progressive, gated training—from MOS-qualified individual tasks through collective tasks at the section level. These tables also provide all FA leaders and Soldiers with the “what” and “how” to train materials that are standard across the Army.

The FA commander continuously assesses the unit’s proficiency and readiness to perform mission-essential tasks. Each commander implements gunnery programs to achieve and sustain unit readiness and proficiency in these tasks. The commander uses all the resources available to implement an efficient gunnery program; this maximizes the use of ammunition, training area availability, and Soldier training time to sustain proficiency. The unit master gunner is a primary advisor and manager of the commander’s gunnery program.

FA master gunners are the commander’s key resource and the unit focal point for administering the training and qualification programs in this manual. Master gunners are selected for their technical education and skills in their MOS, training management, and individual instructor proficiency, as well as for breadth of proficiency in various artillery skills. A master gunner is an operations staff asset, having specified training management responsibilities for gunnery, technical standardization, and safety oversight. The master gunner is responsible for the selection, training, and certification of evaluators for implementing the tables in this manual. He will assist in the execution of the commander’s safety certification program. The master gunner will also assist the commander in developing programs and training future master gunners in the organization.

SCOPE

1-1. FM 3-09.8 is a design standardizing gunnery training for the FA force in the midst of changes brought on by the contemporary operational environment (COE). COE is a “condition” applied in the effective training of FA units. (For a more detailed discussion of the application of the conditions for training under COE, see Appendix D.) Effective FA training throughout the years has always required tough, thorough, and achievable standards. Technical proficiency and flexibility in a resource- and time-constrained environment is the hallmark of the FA branch.
GENERAL CONTENT

1-2. The general content of FM 3-09.8 provides—

- Tables with procedures and individual tasks based on the associated system technical manuals (TMs) for the equipment assigned to the section being trained. References are provided for all tasks in the tables.
- Focus on FA gunnery procedures, in the provision of an Armywide FA standard gunnery training program, in a common tabular format consistent with maneuver branch tables.
- Procedures for certification/qualification of all crews/sections involved in gunnery. For the purpose of this manual, certification refers only to the commander’s live-fire safety certification program as presented in chapter 2. The tables provide crew/section/team qualification tables (Radar Table VIII, chapter 5) as required to support the commander’s assessment of training readiness, in accordance with AR 220-1.

STANDARDIZATION

1-3. Standardization is simply the best in practice provided as a guideline to unit commanders and Soldiers for application in their training environment. Using these practices depends on the planning and expertise of Soldier leaders in their environment. This manual is a prescriptive source to sustain the technical body of knowledge in a force performing a multitude of Soldier tasks related and unrelated to gunnery proficiency. Standardization—

- Provides prescriptive guidelines and rationale for standardized gunnery in U.S. Army FA units.
- Accommodates command, table of organization and equipment (TOE), and unit-peculiar requirements (such as theater of operations, mission-essential task list [METL], airborne, and air assault) while capturing artillery standards at the same time.
- Provides baseline proficiency requirements for unit(s) retraining from nonartillery employments.
- Allows commanders to incorporate training conditions, exercises, and focus.

SINGLE SOURCES

1-4. Though a single-source document, this manual is not an encyclopedic, multivolume recapitulation of technical manuals. This manual is designed to be used with the up-to-date technical manuals required for the safe and effective operation of all FA systems. Single source—

- Provides actual information or bibliographical references to artillery documentation for training FA tables to standard.
- Provides a living document to the field Army by reference to the requirements for updated technical manuals as they are developed for current and new systems.

TASK-BASED TRAINING STRATEGY

1-5. The artillery tables represent a task-based training strategy linked to required resources to assist the commander and training manager in the development of realistic, battle-focused gunnery training. The artillery training and standards in this manual are, by design, related to other available descriptive collective training strategies available to unit leaders. These strategies include the following:

- The Combined Arms Training Strategies (CATS) for artillery battalions include a strategy, the supporting resources and recommended events, training aids, devices, simulators, and simulations (TADSS), and supporting training support packages (TSP) for the training of the artillery tables. The CATS ammunition resources are based on the Standards in Training Commission (STRAC) allocations.
- DA Pam 350-38 provides descriptive strategies, combining ammunition allocations and TADSS based on the overarching CATS.
ARTILLERY TABLE TRAINING AND QUALIFICATION

1-6. The overall training and qualification program of the FA tables provides a methodology for progressively training sections and crews and integrating them into the system of systems that is the FA unit. The cost of training an FA unit requires that leaders take full advantage of the training benefits of every round of ammunition fired during live-fire exercises. Unit leaders ensure that unit training plans maximize the benefits of available resources by taking advantage of multi-echelon training opportunities.

1-7. The iterative, gated, tabular model, illustrated in figure 1-1, is designed to ensure that all sections and crews can safely and effectively perform required gunnery tasks before entering live-fire. Artillery live-fire exercises are executed after the command assessment of readiness for training at this level. The commander must assess the status of each element participating in live-fire table VIII to ensure that participants are trained to perform the required tasks safely, as validated by dry-fire tables for the section. Successful table VIII training qualifies all members of the FA team, provides a readiness benchmark to the command, and prepares the unit for collective training at battery and battalion levels requiring the presence and participation of all elements of the FA team. Planning appropriate training exercises and thoughtful expenditure of scarce resources allows all elements to share the training benefits.

Figure 1-1. Gunnery progression chart

1-8. FA gunnery training programs belong to commanders, leaders, and Soldiers and prepare them to perform their missions in combat. The effective and efficient use of resources in a standardized program, as provided in this manual, allows for unit flexibility in executing training while also attaining branch standards and readiness requirements. The baseline tasks, conditions, and standards are provided here. Units enhance the training value by adding conditions appropriate to the unit and any anticipated theater of operations and by executing appropriate tactics, techniques, and procedures (TTP) while delivering safe and accurate fires on target.