

CURRENT INADEQUACY OF SMALL ARMS TRAINING
FOR ALL MILITARY OCCUPATIONAL SPECIALTIES
IN THE CONVENTIONAL ARMY

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General Studies

by

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

CURRENT INADEQUACY OF SMALL ARMS TRAINING FOR ALL MILITARY OCCUPATIONAL SPECIALTIES IN THE CONVENTIONAL ARMY, by MAJ Issac W. Ellison IV.

This thesis examines the current inadequacy of small arms training for all military occupational specialties (MOSs) in the conventional Army and the lack of focus on weapons training for the dynamic nonlinear/noncontiguous (NL/NC), asymmetrical battlefield that today's soldier encounters. Small arms weapons training and qualification in the United States Army is largely based on the defense and is woefully inadequate in the area of dynamic offensive operations. The NL/NC battlefield operating conditions increase the requirement for all soldiers, including combat support (CS) and combat service support (CSS), to be able to fight and defeat or suppress and escape (based on the size of the threat) an adversary and requires more offensive vice defensive training.

This thesis formed five recommendations for implementation, throughout the Army, that would bring marksmanship training to a relevant level for today's NL/NC battlefield. Update the POI in the respective Army field manuals and include range configurations to facilitate advanced, short-range, CQC like marksmanship training that will allow soldiers of all MOSs to dominate their 100 meters. Introduce Small Arms Master Gunner (SAMG) into all BCT and higher units. Update STRAC allocations to incorporate additional SRM live fire training and restore a full allocation of training ammunition to units that have an EST. Implement SRM training at IET, AIT, NCOES, OCS, OBC and also have a traveling Train-the-Trainer program to instruct and update installations and units on the advanced POI to produce a future cadre of proficient combat shooters. The Army should implement an additional skill identifier (ASI) for the recognition of advanced marksmanship training.

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Finally to my wife and children, I say thank you for putting up with this process and supporting me at every turn in the road.

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ACRONYMS

AAR	After Action Review
AIMSS	Advanced Infantry Marksmanship Strategies and Standards
AIT	Advanced Individual Training
AMU	Army Marksmanship Unit
ASI	Additional Skill Identifier
AUSA	Association of the United States Army
BCT	Brigade Combat Team
BRM	Basic Rifle Marksmanship
CCO	Close Combat Optic
CMP	Competition Marksmanship Program
COE	Contemporary Operating Environment
CSS	Combat Service Support
CS	Combat Support
CQB	Close Quarter Battle
CQC	Close Quarter Combat
CQM	Close Quarter Marksmanship
DCM	Directorate of Competition Marksmanship
DCM	Director of Civilian Marksmanship
EIC	Excellence in Competition
EST	Engagement Skills Trainer
FOB	Forward Operating Base
IDPA	International Defensive Pistol Association
IED	Improvised Explosive Device.

IET	Initial Entry Training
IPSC	International Practical Shooting Confederation
ITRO	Interservice Training Review Organization
JRTC	Joint Readiness Training Center
KD	Known Distance
MACOM	Major Command
MOI	Method of Instruction
MOS	Military Occupational Specialties
MTT	Mobile Training Team
MTU	Marksmanship Training Unit
NL/NC	Nonlinear/Noncontiguous
NCO	Noncommissioned Officer
OEF	Operation Enduring Freedom
OIF	Operation Iraqi Freedom
POI	Program of Instruction
UEx	Division Unit of Employment
UEy	Corps Unit of Employment
ROE	Rules of Engagement
RPG	Rocket Propelled Grenade
SAMG	Small Arms Master Gunner
SME	Subject Matter Expert
SP	Service Pistol
SRM	Short-Range Marksmanship
STRAC	Standards in Training Commission
TADSS	Training Aids, Devices, Simulators and Simulations

TTP	Tactics, Techniques and Procedures
USASOC	US Army Special Operations Command

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CHAPTER 1

INTRODUCTION

This thesis examines the current inadequacy of small arms training for all military occupational specialties (MOSs) in the conventional Army and the lack of focus on weapons training for the dynamic nonlinear/noncontiguous (NL/NC), asymmetrical battlefield that today's soldier encounters. Small arms weapons training and qualification in the United States Army is largely based on the defense and is woefully inadequate in the area of dynamic offensive operations. The NL/NC battlefield operating conditions increase the requirement for all soldiers, including combat support (CS) and combat service support (CSS), to be able to fight and defeat or suppress and escape (based on the size of the threat) an adversary and requires more offensive vice defensive training. The Army is going through a revolutionary change to meet the needs of current and future battle in an asymmetrical environment. This change is evident by the development of Units of Action and Employment, Network Centric Warfare, new vehicles and communication systems, new Warrior Ethos and a Joint and Expeditionary Mindset. Unfortunately, the Army's marksmanship program is not moving at the same speed that the rest of the Army is advancing. The Army's marksmanship program is inadequate for properly training soldiers for the type of combat that they are currently facing and will likely face in the future.

The typical Army soldier, outside of the Infantry and Special Operations communities, receives very little training on marksmanship and almost no training on advanced marksmanship skills. He is required to qualify twice a year and very seldom is

allowed to conduct additional training with his assigned weapon. The marksmanship training that he does receive is predominantly aligned for defensive operations, in improved fighting positions at engagement ranges of 50 to 300 meters. This is the standard configuration of the basic rifle marksmanship (BRM) training range, officially known as the Trainfire range, and is what most Army units are accustomed to training on.

The current training and qualifications conducted on a Trainfire range satisfy the critical first step of teaching the fundamentals of marksmanship to all soldiers. This training builds confidence in the accuracy of the weapon and the soldier's ability to operate his equipment in a very structured environment. What it fails to teach is the proper tactical employment of that weapon and tactics, techniques and procedures (TTPs) that could ultimately save the soldier's or his comrade's life in a dynamic environment. The additional small arms training that a conventional soldier should receive must be designed for offensive operations, while maneuvering, at engagement ranges of 0 to 100 meters.

As recent experience in Iraq and Afghanistan shows, soldiers of all MOSs (combat arms, combat support, and combat service support) on today's dynamic NL/NC, asymmetrical battlefield are required to not only defend, but to go on the offensive to defeat the enemy on the modern battlefield. Asymmetric warfare today lacks a historical frontline with a secured rear area. This NC/NL battlefield puts CS and CSS soldiers, who traditionally operated behind secure lines, into dangerous situations requiring offensive as well as defensive weapons training to survive. It requires a soldier to quickly engage targets from many positions, using available cover when possible, at ranges from 0 to 100

meters. Teaching the soldier to dominate his surrounding 100 meters will increase his safety and lethality while increasing the combat potential of the unit.

The requirement for this focus shift to offensive short range accuracy also stems from the enemies analysis of the U.S. Army's progressive reliance on technology and how to effectively negate it. "The enemy's plan is simple and effective: lure American forces into terrain where Information-Age knowledge, speed, and precision give way to the more traditional warfighting advantages of mass, will, patience, and the willingness to die" (Scales 2005, 9). The enemy realizes that by reducing the range between him and the soldier and conducting operations in the confined terrain that the urban environment provides he reduces the advantage that the modern digital soldier has.

Proposed Research Question

The primary question of this thesis is; has the Army's small arms marksmanship training evolved to meet the demands of the modern NL/NC asymmetrical battlefield for all MOSs? It is critical to look at all MOSs because of the NL/NC battlefield that our soldiers face today and will face in the future. Gone are the days where the Combat Support and Combat Service Support soldiers could feel a small sense of security while conducting their mission away from the "front line." There is no such line today, as illustrated by the convoy ambush of the 507th Maintenance Company in An Nasiriyah, Iraq, which resulted in the capture of Jessica Lynch and members of her unit. Every soldier needs to be prepared to place rapid and accurate fire to neutralize any symmetric or asymmetric threat.

A subordinate question asks whether weapons training TTPs are being modified or developed, and if they are, are they based on after action review (AAR) and lessons

learned from Operation Enduring Freedom (OEF) in Afghanistan and Operation Iraqi Freedom (OIF)? Another subordinate question is what impact would advanced weapons training have on the average soldier and his ability to engage targets to dominate his 100 meters? The ability to dominate his surrounding 100 meters is critical for survival in a close quarter urban environment of the current battlefield. Based on these results and the changed battlefield, would it be worthwhile to add advanced marksmanship training for all soldiers? And finally, has the Army explored other ways to augment live fire training, and if it has, does it effectively use these training enablers?

Background

The background of the problem becomes evident when you examine the fact that today's soldiers are receiving the same marksmanship training on Trainfire ranges that our forefathers received and it is woefully inadequate for the current and future missions. The Infantry School at Fort Benning, Georgia, developed the Trainfire range that we use today in response to WWII observations, by then COL S. L. A. Marshall, of fighting men's experiences. The book, *Men Against Fire* written by BG S. L. A. Marshall, focused on the need to increase the volume of accurate fire on the battlefield. "What we need to seek in training are any and all means by which we can increase the ratio of effective fire when we go to war" (Marshall 1947, 23). The Trainfire range is a good basis for teaching the soldier basic marksmanship skills and instilling confidence in his ability to engage targets out to 300 meters. The current doctrine is sufficient for basic fundamental marksmanship training but a more dynamic and offensive advanced marksmanship program is required to help ensure the modern soldiers mission success and safety.

The current Chief of Staff of the Army, GEN Schoomaker, recognized the marksmanship shortcomings and placed focus on marksmanship training for all soldiers when he said, “everybody’s a rifleman first” (Naylor 2003, 14). LTG Wallace, the former V Corps commander and combat veteran, backed that sentiment up by saying, “To be a warrior you’ve got to be able to use your individual weapon” (Naylor 2003, 14). Many AARs, professional articles, and first-hand conversations with combat veterans indicate that there is a training short fall in this area. Even from my standpoint as a noncombat veteran company commander, I have witnessed a lack of practical small arms training, doctrine and emphasis at all levels. I am in no way trying to advocate that every soldier in the Army needs to be trained to the level of proficiency found in a SWAT team, Hostage Rescue unit, Special Forces team or member of a Ranger squad. I am simply saying that the standard “stand in your fox hole and watch your lane” is not enough.

My personal background in shooting has three parts to it. The first began at the age of six and has continued through my life as a hunter and recreational shooter. The second part is in competitive shooting which started while in college and continues through today. I have been a competitor at the international level as a member of the US Developmental Shooting Team, on the national level in NRA Bullseye, and at the local level in International Defensive Pistol Association (IDPA) and International Practical Shooting Confederation (IPSC) competitions. I am a President’s Hundred recipient and have earned the ranking of US Army Distinguished Pistol Shooter, Master NRA Bullseye and Expert International pistol competitor. The third and final side of my background is as a military service member. This includes the standard Army range training and operations, training and competition with United States Army Special Operations

Command (USASOC) members, and conducting personal and small group weapons training for deploying soldiers. The individual and small group instruction was a result of the recognized need for additional training over and above what is normally received at the unit level.

Assumptions

The basic assumption that drives this discussion is that much of modern combat requiring the soldier to use his individual weapon is, and will be for the foreseeable future, fought in heavily populated urban operation environments or in forested or arid restricted terrain. This environment allows an insurgent force to reduce our technological advantage and lower their asymmetrical disadvantage. To compound this environment, modern combat will continue to be fought in a dynamic asymmetrical environment with restrictive rules of engagement (ROE). This requires a soldier to quickly identify and neutralize a target while continually assessing the environment around him or her.

Key Terms Defined

This thesis will use many key terms that are misused within the military as well as the civilian community and in the media. The following list is the initial compilation of terms and phrases that will be widely used throughout this thesis:

Close Quarter Combat (CQC). CQC involves the use of small arms used to neutralize an enemy within the soldier's immediate surroundings, usually at distances from 0 to 100 meters. It is usually conducted in confined or congested terrain and is very offensive in nature. CQC requires high levels of physical exertion, mental stamina, and

proficiency in weapons employment. CQC and Close Quarter Battle (CQB) will be used interchangeably within this document.

Noncontiguous (NC). The word noncontiguous stems from the root word contiguous which the Webster's New World Dictionary defines as "in contact; touching." Webster's also defines the use of the prefix "non" before a word as meaning not. From this we can determine that noncontiguous means not in contact or not touching. In military documentation, noncontiguous is described as when a commander has "one or more of his subordinate forces' areas of operations do not share a common boundary" (FM 3-90 2001, 2-50).

Nonlinear (NL). The definition of the word nonlinear begins with the root word of linear, which the Webster's New World Dictionary defines as "in a line; having only one dimension." Webster's also defines the use of the prefix "non" before a word as meaning not. From this we can determine that nonlinear means not in a straight line or multi-dimensional.

Optical sight. The optical sights that we will be dealing within this thesis will be non-magnified aiming devices that are mounted on the top of the soldiers M16/M4 and typically have a red dot that indicates the point of bullet impact as you look through it. Optical sights come in many different designs and are powered by either battery, tritium, solar or a combination of these sources. The most common optical sight found in the Army inventory is the M68 Reflexive Sight or sometimes referred to as the Close Combat Optic (CCO). However, this is not an aiming device that emits a laser to designate the bullet's point of impact.

Quick Fire. Method used at 25 meters or less that delivers fast and effective fires on unexpected targets with either limited use of the sights or instinctive pointing of the weapon. This procedure has also been called instinctive fire or quick kill (FM 3-22.9 2003, 7-15).

Reflexive Fire. Reflexive fire, as used in this thesis, is defined as immediate and instinctive employment of the soldier's weapon without the luxury of time, support or a stationary platform. Reflexive fire allows you to shoot and maneuver at the same time. Reflexive fire should be accurate and well placed, not just suppression of the enemy, and is offensive in nature. The training of reflexive fire procedures is described in paragraph 7-25 in FM 3-22.9.

Short-Range Marksmanship (SRM). Short-Range marksmanship training incorporates reflexive fire, target discrimination and all BRM fundamentals to train fast and accurate fire out to 50 meters (FM 3-22.9 2003, 7-37). This thesis expands this range to 100 meters to ensure that the soldier can dominate his surrounding area and ultimately survive on the battlefield.

Limitations and Delimitations

It was not the intention of this research to trace the origins of the United States Army marksmanship training program. This thesis briefly examines the training conducted in the mid 1900s, with the introduction of the Trainfire program, and then focuses on the current small arms marksmanship program and the doctrine that supports it. This thesis does not look at intricacies of the supply system or ammunition allocations other than in general terms. It should be noted that the supply system and ammunition allocation requirements will be impacted by the increase of ammunition expenditure

required to conduct the training proposed. The thesis does limit the definition of small arms as to the individual assigned service pistol and rifle (M9 pistol or M16/M4 variant). This thesis will not cover the training or employment of crew served weapons or grenade launchers assigned to the individual soldier.

Significance of the Study

This thesis will explain the shortcomings of current marksmanship training and doctrine and give some insight into the possible corrections or additions to the Army's current marksmanship program. I believe that a complete modernization of the marksmanship program of instruction (POI) is required and something comparable to the Master Gunner training model, used in the Armor or Mechanized Infantry community, could be incorporated for unit sustainment training at all levels. Ultimately this equates to increased mission effectiveness through better trained and equipped soldiers, economy of resources and saving soldiers' lives.

CHAPTER 2

LITERATURE REVIEW

The literature about this aspect of weapons training is found in military publications and professional journals as well as civilian publications. This chapter examines some of the relevant material that is available on the subject. The first portion of this chapter looks at existing Army doctrine pertaining to the training of small arms. Many different articles on the necessity for new and innovative training are examined next. These articles are written by military and civilian professionals that recognize the need for change, where training has come from, and where this training must go. Last is a real world case study of training received in theater, which includes AAR material, that gives a clear indication that we are not training small arms to the level that the common soldier requires.

Doctrine

The two primary US Army publications that cover procedural implementation of small arms training are FM 3-22.9, *Rifle Marksmanship M16A1, M16A2/3, M16A4, and M4 CARBINE*, and FM 3-23.35, *Combat Training With Pistols, M9 and M11*. Both FMs were updated in 2003 but FM 3-22.9 is the only manual that comes close to describing marksmanship training that falls outside of the conventional training in a static environment. Both field manuals discuss basic marksmanship, how to conduct the training, and the steps involved throughout the program. What is omitted are details on the instruction of using barricades, positions and offensive techniques needed for the modern asymmetrical battlefield. FM 3-22.9 provides a very good model of the conduct

of a year-round marksmanship program (see figure 1) and provides guidance, broken down in hourly increments, for the conduct of BRM training (FM 3-22.9 2003, 1-3--1-4).

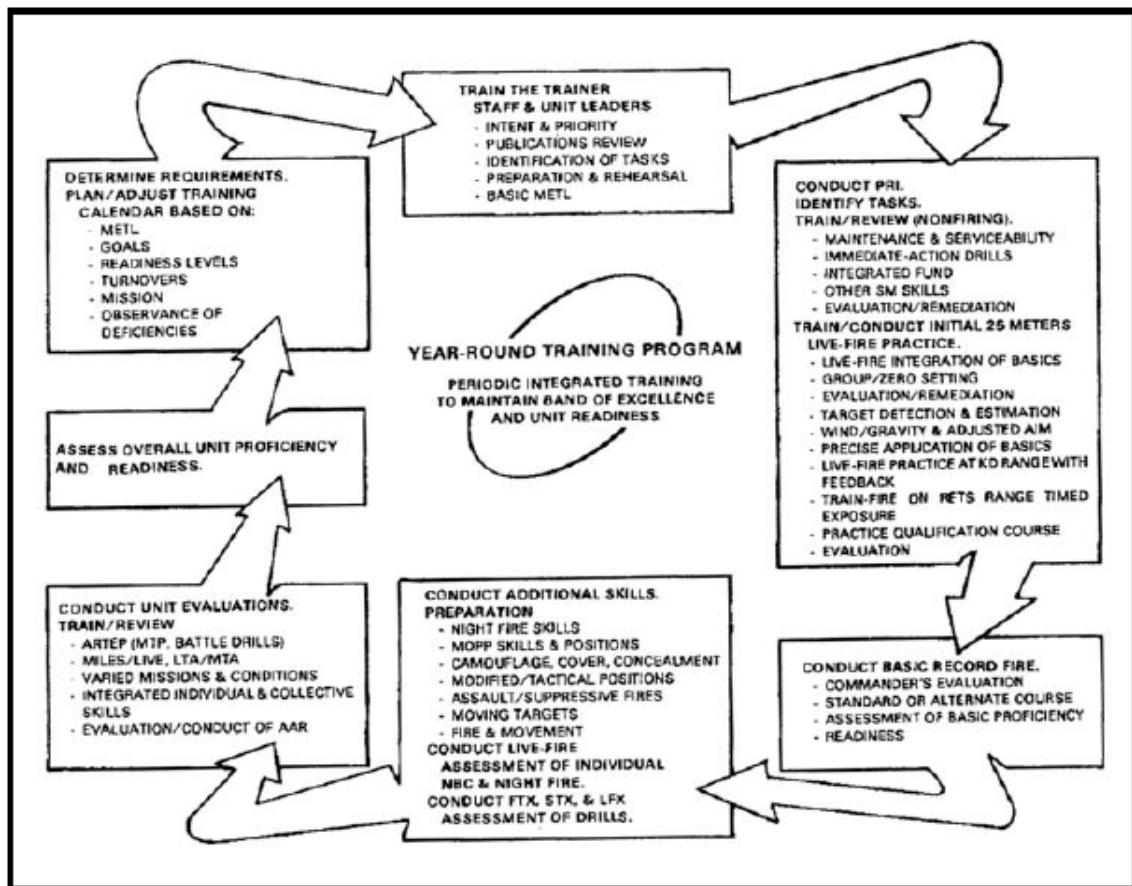


Figure 1. Unit Marksmanship Sustainment Strategy

Source: FM 3-22.9, Figure 1-1.

FM 3-22.9 also provides an example of a step-by-step strategy that allows a commander to train and assess his unit (FM 3-22.9 2003, 1-5 – 1-13). It stresses that even with semiannual qualification requirements, a quarterly sustainment program is required to maintain acceptable skill levels (FM 3-22.9 2003, 1-5). The Quickfire training and the SRM program are covered in moderate detail but are focused on the infantry, or

close combat support units, as the training audience. This training should be required in all units throughout the Army as a result of the AUSA speech by CSA Schoomaker stating, “every body’s a rifleman first” (Naylor 2003, 14). What is needed in both manuals is an in-depth procedural explanation, similar to the instruction for the Train Fire course, for the conduct of the alternate range operations and scoring methods. FM 3-22.9 does provides a list of useful training devices in Table 1-1 that the commander can use to augment and tailor his training for the best use of the time and assets at his disposal as depicted below in table 1.

Table 1. Training Devices and Exercises

EXERCISE	TRAINING DEVICE				
	Short Range Training Ammunition and M2 Bolt	Weaponeer	Engagement Skills Trainer	Military Arcade Computer System (MACS)	Location of Misses and Hits (LOMAH)
Zero	X	X	X		X
Practice Fire		X	X	X	X
Record Fire		X	X		X
NBC Practice		X	X	X	X
NBC Record		X	X		X
Unassisted Night Practice			X		X
Unassisted Night Record			X		X
NVD Zero			X		X
NVD Practice			X		X
NVD Record			X		X
Advanced Skills	X		X		X

Source: FM 3-22.9, Table 1-1.

The third Army publication that deals with total Army marksmanship training is DA PAM 350-38 (Standards in Weapons Training). It provides guidance on mandatory live fire training and qualification events. It also provides Standards in Training Commission (STRAC) guidance that quantifies ammunition allocation for each type of Army unit. This pamphlet dictates that all active duty soldiers are required to qualify on their assigned weapon at least twice a year. It recommends, when possible, to use the training aids, devices, simulators and simulations (TADSS), such as the Engagement Skills Trainer (EST) 2000, for additional marksmanship training (DA PAM 350-38 2003, 5). The problem with this document is the ammunition allocation for a unit that has an available EST is lower than a unit without an EST. It is inadvertently advocating the use of the EST to replace range time instead of augmenting and enhancing it. This document provides the mandate for semiannual training, but fails in the specifics of the conduct of that training and limits the commander by reducing range time and ammunition with the use of the EST.

TC 90-1, *Training for Military Operations on Urbanized Terrain Training*, Chapter 2, “Urban Assault Course,” and Chapter 3, “Shoot House,” explain tasks and procedures to train and evaluate urban operations tasks. These scenarios evaluate the engagement of targets with a rifle, traversing obstacles and other CQC skills thus requiring the training of advanced individual marksmanship skills. It states that, “precision marksmanship training should be conducted before training at these facilities [urban assault course, shoot house, etc.], IAW FM 23-9 (3-23.9)” (TC 90-1 2002, A-7). This is just one of the many manuals in the Army that requires the conduct of CQC techniques to perform a mission. FM 90-10-1, *An Infantryman’s Guide to Combat in*

Built-Up Areas, covers fundamental combat skills and movement techniques in built-up areas in Chapter 5. It does not couple these techniques with marksmanship training.

Many other Army publications recognize that marksmanship is a fundamental requirement but do not further expound upon it past the superficial level. FM 3-22.9 mentions shot placement and speed by saying that “a shot that does not immediately incapacitate the enemy may be no better than a clean miss” (FM 3-22.9 2003, 7-40) because the threat is mortally wounded but can still be an effective combatant. It goes on to emphasize the difficulty of effective shot placement without proper training. The *Ranger Handbook* also calls for first hits that put the enemy down and take him out of the fight. The requirement for accurate and deadly fire in CQC is emphasized over and over but the training for this requirement is only stressed for infantry type units in current Army documentation. The requirement for accurate and reactive training techniques for the asymmetrical battlefields that all of today’s soldiers encounter is recognized by the soldier and is over due.

Articles and Books

“Fixing Army Marksmanship: Regaining the Initiative in the Infantryman’s Half Kilometer,” by LTC David J. Liwanag, states that “current marksmanship training programs do not give the soldier the confidence to control *The Infantryman’s half-kilometer*” (Liwanag 2004, 1). He believes that we need to train more at the close combat ranges of 7 to 200 meters as well as the extended ranges of 300 to 500 meter. The portions of his article that lend direct relevance to this thesis are his discussion on the lack of tactical relevance of the Trainfire range and the deterioration of competitive marksmanship events in the Army.

LTC Liwanag is the commander of the Army Marksmanship Unit (AMU) and has personally witnessed the shortcomings of the Army's marksmanship training program. He has seen units have to "roll their own" marksmanship training, as in the 10th Mountain, after returning from a deployment and evaluating their AARs because nothing else was available. He talks about the history of Army marksmanship and how in 1958, General Willard G. Wyman instituted a new training method called Trainfire. This training system replaced the Known Distance (KD) range and produced better shooters but fewer experts that we so desperately need today (Liwanag 2004, 3). LTC Liwanag's concern is that a Trainfire range gives the soldier immediate feedback on whether he hit the target but does nothing in the way of qualitative feedback in respect to shot placement (2004, 4). He notes that soldiers are graded in two defensive shooting positions (prone and foxhole) and mentally conditioned to believe that a single hit will eliminate the target. "It all conditions a soldier to shoot as a defensive measure vice closing with the enemy to destroy him" (Liwanag 2004, 4). He proposes to rebuild the noncommissioned officer (NCO) and Officer corps with proficient shooters that can train the rest of the Army to dominate the infantryman's half-kilometer on Combat KD courses that are inherently offensive in design. He also suggests initiating a system similar to the Mechanized Infantry and Armor's Master Gunner program to provide a resident expert at the BCT level to implement marksmanship training.

LTC Liwanag's additional concern is, over the past ten years, there has been a dramatic decline of shooting competitions and programs within the Army (2004, 5). In 1994 formal Army marksmanship competition ended in the active component. In 1996 the final blow was struck when the Directorate of Competition Marksmanship (DCM),

which directed the Army Competition Marksmanship Program (CMP), became a civilian program and was designated as the Director of Civilian Marksmanship (DCM). The DCM is now a congressionally mandated corporation completely divorced from the AMU and the Army. The AMU, lead by LTC Liwanag, is trying to bring marksmanship training and competition back to the Army to better prepare soldiers for the future NL/NC battlefield.

Men Against Fire: The Problem of Battle Command in Future War was written by BG S. L. A. Marshall in 1947 but is still relevant to today's training and battle. In this book he speaks about the requirement to train a soldier to improve his hitting power and thus increase his mobility. The General believed that "a highly proper doctrine which seeks to ingrain in the infantry soldier a confidence that superior use of superior weapons is his surest protection" (Marshall 1947, 39-40). The current training doctrine and methods reflect some of Marshall's findings but still fall short in the area of methods and techniques used to properly train all contemporary soldiers for today's NL/NC asymmetrical battlefield.

"Close Quarters Combat Training: Using the IDPA System", by CPT Jay Shebuski, is an in-depth look at the possibilities of using the IDPA or the IPSC 3-gun range methods and rules as a system for qualification of soldiers. CPT Shebuski is a competitive shooter in both organizations and recognizes a direct applicability of this type of competition to military weapons training. These two organizations conduct civilian competition based on tactical scenarios that incorporate many of the tactical rules and movements that are missing in the current Army marksmanship training (Shebuski 2004, 35). He also proposes incorporating a target, similar to the target used in civilian

competition, which enforces accurate placement of fire in vital areas in accordance with the Army manuals such as FM90-10-1 and the *Ranger Handbook*. CPT Shebuski provides detailed examples of possible scoring methods and courses of fire successfully used in civilian competition to support his proposition. He believes that this system will give the soldier instant feedback, emphasize shot placement, add stress and teach tactics in a controlled environment (Shebuski 2004, 36).

“Marksmanship for the Future Force: Enhancing Combat Readiness Through Training”, by SFC Aaron L. Hampton of the Army Marksmanship Unit, places the fix to marksmanship training squarely on the shoulders of the NCO Corps (2004, 2). This being said, the NCO Corps is currently very short of subject matter experts (SME) in the area of marksmanship training. This is in large part due to the lack of focus by the Army on training and competition since the mid 90’s. On today’s dynamic NL/NC battlefield soldiers seldom find themselves in a prone or foxhole supported position when they encounter the enemy, yet the Army trains and evaluates marksmanship skills exclusively for this type of engagement. Today’s soldier needs to train on both BRM and advanced marksmanship skills and believe that both he and his weapon will perform well while on the move in an urban environment. He emphasizes that more work needs to be done to incorporate feedback and AARs from redeploying soldiers to ensure the continued relevance of Army marksmanship training. SFC Hampton states that an all-encompassing training plan is required that will cover all marksmanship skills needed for the urban environment (2004, 2). He agrees that the current BRM training is a baseline but that it is just that, a training system that teaches the fundamentals to build from (Hampton 2004, 1).

The AMU has a mobile training team (MTT) that is currently employed, both CONUS and OCONUS, training the trainers to get Army marksmanship back on track. They perform and teach this training, developed by experienced shooters that have incorporated lessons learned from OEF and OIF, to equip soldiers with the skills to fight effectively on the modern battlefield. He also mentions that the development of a new rifle or a new bullet will not replace the need for sound training, to which I agree (Hampton 2004, 1).

Combative Fundamentals, an Unconventional Approach, by Jeff Gonzales, is an extraordinary book that is written on a professional level with the experienced shooter in mind. Mr. Gonzales bases this book on personal, real-world experience and provides tools and procedures that have been tested under fire and found to be tactically sound. This work provides suggestions, not answers, to the prosecution of battle with the pistol and carbine and always emphasizes that the soldier's mind is his most valuable weapon and must be trained as well. He discusses and offers clear techniques in detail on the employment of the pistol and carbine in battle. He insists that techniques must be taught with the latitude given to the soldier to evaluate and make minor modifications to adapt to skill level and tactical situation (Gonzales 2002, 15).

Mr. Gonzales believes that training is a building block process and that each step builds on the next and provides tasks, conditions, and standards to gauge the shooter's comprehension of the material and to help the future instructor. He stresses the need for a combat mindset when facing a lethal threat that should be taught at all levels of training for implementation on and off the range (Gonzales 2002, 24). Provided are many techniques and procedures that could be directly incorporated into military marksmanship

training. This holistic approach to marksmanship training allows the simultaneous training of the combative mind as well as tactical target engagement. A holistic marksmanship training program is definitely not found in any standard Army weapons training but is long over due. The overriding theme that should be taken away from his writing is, “The secret to winning is simple. Master the fundamentals and then execute them faster than your opponent” (Gonzales 2002, 307).

“Going to Fight in Iraq? Lessons From an Infantry Company Commander”, by CPT Daniel Morgan, talks about his experiences during his tour in Iraq as a Company Commander. CPT Morgan emphasizes that you must always have an offensive mindset and perform all missions as a movement to contact. Conditioning of soldiers to fight back in an ambush, he believes, is paramount to the soldier’s survival as well as reducing the will of the enemy to conduct another ambush. CPT Morgan stresses that training at home, as well as before departing the initial staging base, are critical steps and will increase the overall success rate of the mission and the soldiers’ survivability. The problem is the first time that a soldier encounters and trains on advanced marksmanship tasks, that will possibly save his life, should not be when he is preparing to or is deployed. The training received in preparation for or while on deployment should provide refresher training not introductory training.

Marksmanship is the core of excellence for infantry soldiers. Their proficiency in killing wins the battle. The more you suppress the enemy here without killing or wounding him, the bolder he becomes in attacking you. You need to train your soldiers to aim, fire and kill. If an enemy opens fire with an AK-47 aimlessly, which most of these people do, you should be able to calmly place the red dot reticule of your M-68 optic device on his chest and kill him with one shot. If you do this, the rest will run and probably not come back. This skill takes training, patience and, sadly, experience. (Morgan 2004, 24)

He ultimately believes that hard and realistic weapons training is paramount to the survival of the soldier in the asymmetric environment that they will be operating in during current and future deployments.

“Master Marksmanship: in the Light Infantry”, by SFC Kenneth E. Wolfe, proposes the implementation of a “Master Marksman” at the Battalion level to run all aspects of weapons training as the unit SMEs. The Master Marksman would be responsible for “establishing and directing a comprehensive marksmanship program within the unit” (Wolfe 2002, 36). He points out that the Army’s heavy forces and the Marines already have an effective system set in place to provide such training for their heavy combat weapon platforms. SFC Wolfe suggests the Master Marksman program be designed similar to the Master Gunner program found in the Mechanized and Armor communities and he suggests the position be emplaced in the S-3 or G-3 shop of each unit. I believe that this type of position would be best placed at the Brigade level for most units in the Army outside of the light infantry community. As an Infantry Platoon Observer-Controller at the Joint Readiness Training Center (JRTC), Wolfe is constantly faced with the reality that soldiers continue to struggle with marksmanship and their inability to engage targets effectively. His point is that all of the time and training assets are wasted if the soldier cannot effectively engage the enemy before the enemy engages the soldier. SFC Wolfe admits that the cost in ammo and time would be initially higher than the current program of range qualification twice a year, but this ability to provide advanced training to the soldier would pay off in the end with more soldiers returning home from theater.

“Combat Marksmanship,” by J. L. Eby, states that the training conducted on Known Distance (KD) ranges by the Marines was good for its time but is focused more on competition than on current combat applications. He promotes a more combat oriented training that is more in line with the modern battlefield. “A course of this nature would re-focus our efforts towards fighting battles instead of winning medals in competition” (Eby, 1). The current Marine marksmanship program, Competition in Arms, is based on competition style training and is not realistic in replicating the combat environment. He advocates that a more combat style range and instruction are needed to “evaluate our Marines for their ability to fire in combat style courses of fire for the instruction to be worth the time” (Eby, 2). Many of the procedures that are taught to Marines in current training are counter productive in combat situations. Low stress, target style positions and slow trigger pulls are many of the practices that are seldom realistic or usable on the modern battlefield. He also points out that the marksmanship unit team members are often not combat veterans, yet still provide guidance on weapons design and shooting techniques that may be more aligned with competition shooting than with combat marksmanship.

In the end, he proposes “a complete overhaul to both the program and the marksmanship paradigm” (Eby, 5). His proposition will not change the length of training but the area of concentration and the qualification requirements, from predominantly target and competition to combat and survival. “Marines should be taught the fundamentals of marksmanship, but be evaluated on combat style shooting courses as the end state to marksmanship” (Eby, 5).

“After Action Report: on Close Quarters Battle Mobile Training Team to 1st Armored Division”, by SFC Charles E. Gibbs, is a historic account of the AMU’s Service Pistol (SP) team’s deployment to Iraq from 17 January thru 17 February 2004. This AAR discusses the three phases of the MTT mission (predeployment, deployment and redeployment) resulting in the development of a Close Quarter Marksmanship (CQM) course (Gibbs 2004, 1). The team attended several civilian and Special Forces advanced combat marksmanship training courses in preparation for this MTT mission deployment. He explains that these courses allowed them to build a current and relevant POI focused on the training that the 1st Armored Division (AD) requested. This training was designed to “give students more confidence in their weapons systems, make them faster and more accurate with those weapon systems, and provide them with the knowledge and means to teach their soldiers these skills” (Gibbs 2004, 1). Two hundred and fifty one soldiers received the advanced marksmanship training with an average improvement of 76 percent during the two and a half days of training (Gibbs 2004, 3). Included with the AAR was a sampling of student comment cards, gathered at the completion of the course, that reflect the outstanding training received and it’s relevance from soldiers that were in the combat zone having to apply these skills every day. A common thread throughout the training was that the course should be conducted before unit deployment and it should be made longer.

“Army MTT in Baghdad”, by Rob Garret, provides another accounting of the AMU’s MTT deployment in support of the 1st AD. In this article he gives a short history of the AMU and how the organization’s focus was broadened by the marksmanship unit’s commander, LTC Liwanag, from purely competition to additionally providing a test bed

for new concepts and a training resource to the field (Garret 2005, 82). The majority of the article describes the preparation, equipment and intensive training conducted while in Iraq. The training was designed to teach the soldiers of the 1st Armored Division how to survive the first thirty seconds of an urban CQC engagement. He points out that the course was designed to train the soldiers how to return to their units and teach close quarter marksmanship and not to train on close quarter or urban tactics (Garret 2005, 83). A portion of the article was devoted to discussing new equipment that the team brought to test in the desert environment, by battle hardened soldiers under combat conditions, and to receive feedback on that equipment from these combat tested men and women. Garret also states that the most common question asked on the comment cards that the unit received back from the students was, "Why didn't we receive this training prior to deployment?" (Garrett 2005, 86).

CHAPTER 3

RESEARCH METHODOLOGY

The research for this thesis is basically aligned with the Case Studies model. It explores, and ultimately answers the primary question; has the Army's small arms marksmanship training evolved to meet the demands of the modern NL/NC battlefield for all military occupational specialties (MOS)? The thesis question and all of the additional secondary questions, as outlined chapter one, are examined and answered during the compilation and diligent analysis of pertinent documents, records, interviews and observations. The ultimate goal of this thesis is to provide the reader with well thought out and pertinent recommendations to solve the problems derived from the research and conclusions.

The research begins with the study of Army Field Manuals and Training Circulars to examine if there is any doctrinal reference that required a more comprehensive marksmanship training program to meet the dynamic NL/NC battlefield. This was required to establish that the problem has been partially addressed in the Army community and requirements are in place to train on CQC type skills. This documented requirement for SRM skills should stand by itself as a reason to train and implement an advanced marksmanship training program.

The next logical step is to examine records that are available dealing with marksmanship training both past and present. The first articles that are examined are written by military personnel on the necessity for evolution of training to prepare soldiers for combat on the modern battlefield. The articles written by LTC Liwanag and BG S. L.

A. Marshall discuss the recent history of marksmanship in the Army and the history of the current Trainfire training template and range design. LTC Liwanag also examines the problems with the current system to meet the training requirements and why there is a lack of a large body of experts within the community to remedy the problem. CPT Shebuski, SFC Hampton, SFC Wolfe, and Gunner J. L. Eby provide insight into possible courses of action to solve the training deficiencies in marksmanship from a military perspective. The book by Mr. Gonzales adds additional insight, clarity, and possible corrections from both a civilian viewpoint as well as from his many years of service as a Navy SEAL. Last in the list of documentation are AARs from individuals and units that establish a need for better training for the dynamic NL/NC battlefield. Marksmanship scores from soldiers taken before and after training given by the AMU in Iraq, on new SRM range methods of instruction (MOIs), provide quantifiable data on the inadequacies of current training and the typical improvements made after receiving redesigned training.

Interviews with Army and civilian personnel on the subject of weapons training were continuous throughout the time devoted to research. Many soldiers, regardless of rank, gave examples of training shortfalls and others provided insight into training methods and possible adjustment or additions to the current training model to better address the dynamic NL/NC environment found on the modern battlefield. These interviews and discussions, many of which were with combat veterans, always reinforce the need for a better marksmanship training program and MOI than what is currently conducted throughout the conventional Army.

I used the recent MTT that the AMU service pistol team conducted in Iraq in support of 1st Armored Division as the case to support the other research conducted. This case illustrates some of the problems and shortfalls of Army marksmanship training and gives some insight to possible solutions for the future. This case looks at everything from advanced training and development of the POI, to the preparation and execution of training while deployed. This case also contains relevant findings that point to inadequacies of the current training methods which are made clear in the data gathered on individual improvement as a result of the course.

My observations are the final piece in the Case Study methodology that must be considered and are used throughout the thesis. My personal observations come from over twelve years of observing, conducting and participating in marksmanship training and qualifications. I have personally been a part of both Army marksmanship training in accordance with Army manuals, and modified training as the need for deviation became apparent because of the changing battlefield environment. I have also instructed SRM at the individual and group level allowing me to observe how this type of training adds to the preparation of the soldier. Other observations deal with the attitude of the average soldier (officer and enlisted) as they participated in the different types of marksmanship training. Observations have also been made on the attitude and emphasis put on weapons training by commands and soldiers alike. I have used my marksmanship experience background in analyzing data and formulating authoritative recommendations in this research.

The problem of inadequacies of small arms training in the modern Army can be fully analyzed by using the Case Study method of research. This is a method that was

briefed to the MMAS students by LTC Brown in phase one as an acceptable method of research. This is also a loose interpretation of the method used by Major T. Beagle in his thesis on effects-based targeting. With a proper look at documents, records, interviews and observations, the question of has the Army's small arms marksmanship training evolved to meet the demands of the modern NL/NC battlefield for all MOSs and the additional subordinate questions are answered. A model representation of the method is shown in figure 2.

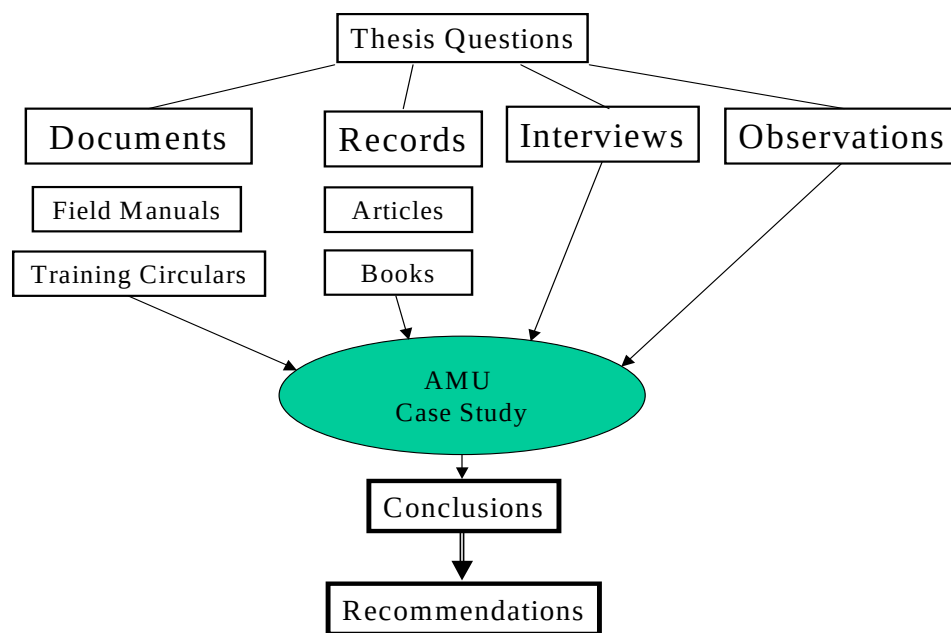


Figure 2. Thesis Research Model

CHAPTER 4

ANALYSIS

Small arms training, specifically rifle marksmanship, is one of the fundamental corner stones of the Army. Its correct execution enables the use and application of offensive and defensive tactics at all levels of command. Shoot, move and communicate are the three tasks that all soldiers should be able to individually perform without fail and are often referred to as “The Basics.” These are not basic because they are simple, but basic in the sense that they are military fundamentals that must be mastered to ensure success on the battlefield. The Army Chief of Staff at the Association of the United States Army’s (AUSA) annual meeting on 7 October 2003 stated that, “The specialization of jobs in the Army pulled the service away from the notion that every soldier must be grounded in basic combat skills” (Naylor 2003, 14). His statement clearly shows that marksmanship is still a fundamental task and is now, just as it has been since the advent of armies and smokeless gunpowder, a requirement for every soldier. GEN Schoomaker’s statement that “everybody’s a rifleman first” (Naylor 2003, 14) solidifies the relevance of marksmanship training as a fundamental skill for all MOSs in the United States Army.

The Army has become a very technical and innovative community over the past twenty years. It is currently going through one of the most profound changes in structure and mindset since its formation in 1775. The Army is restructuring to become lighter, more agile and Joint as it transforms from brigades to modular units as Brigade Combat Teams (BCT) and by the reformation of divisions and corps into Units of Employment (UEX and UEY). The Army is also undergoing a fundamental shift in ideology by

adopting a Joint and Expeditionary mindset. LTG William Wallace said, “In our well-intended direction of trying to develop very technically competent soldiers in branches of the service, perhaps we lost some of the edge associated with being a soldier” (Naylor 2003, 14). The trend, that arose from the very technical developments in the Army, that the soldier is a technician first and a warrior second is being rectified by GEN Schoomaker’s program to instill the “Warrior Ethos.” This ethos instills the belief that every soldier is a soldier first and that should be his or her primary focus. As we move into a new dynamic NL/NC, asymmetrical battlefield that today’s soldier encounters, it is critical that all soldiers are able to fight and defeat or suppress and escape (based on the size of the threat) an adversary. This capability requires more offensive vice defensive marksmanship training that is being taught today.

History and Trainfire

The small arms training that the United States Army currently conducts is based upon lessons learned from World War II (WWII) and the tactics of that time period. The range setup and training regimen is called Trainfire and was adopted in the late 1950s to update the marksmanship training program. Trainfire was adopted based on a study conducted by BG S. L. A. Marshall in 1947, which showed that the more confidence that a soldier has in his weapon, the more effective he is on the battlefield. The study documented that, “the rarest thing in battle is fire in good volume, accurately delivered and steadily maintained” (Marshall 1947, 66). Trainfire was designed around the premise that, “What we need to seek in training are any and all means by which we can increase the ratio of effective fire when we go to war” (Marshall 1947, 23). The Infantry School at Fort Benning, Georgia created Trainfire from BG Marshall’s observations that

incorporated reactive popup targets at ranges out to 300 meters (Liwanag 2003, 2).

Trainfire is an excellent system to teach basic rifle marksmanship and provides an overall training framework to instill basic confidence in the weapon and the shooter's ability to hit a target in a controlled environment. It is conducted on a range with targets placed at 50 to 300 meters with the soldier engaging the targets from the prone position or from a foxhole supported position which emphasizes defensive marksmanship. The Trainfire program is based upon the conditions that were generally found on the battlefield at the time and this type of training was conducive to operations and tactics that were employed during and after WW II. Where the Trainfire range falls short is the ability to teach soldiers the skills needed for dynamic offensive combat operations that are prevalent on the battlefield of today.

Advanced Marksmanship Training

An examination of Army manuals reveals a requirement for individual CQC and SRM training stated both directly and indirectly. FM 90-10-1 and TC 90-1 call for the training of tasks such as Quick Fire techniques, precision marksmanship and EST training as a building block before the collective training can be executed. All of the live fire exercises that are discussed within these manuals could not be safely conducted without the fundamental building blocks that SRM and CQC training provide. The *Ranger Handbook* and other Army literature also call for tactics and techniques that could not properly be performed without a thorough understanding of and application of SRM skills.

Research shows that Army manuals, specifically FM 3-22.9, explain in detail the conduct of the Trainfire range and the training that must be conducted prior to the actual

day of the range. This type of range and course of instruction is excellent in teaching BRM and is the critical first step in Army marksmanship training. It teaches the soldier the basics that are known as the fundamentals of marksmanship. This type of training is very stationary and defensive in nature. The fundamentals of marksmanship that are stressed as part of the Trainfire range include proper breathing techniques, stance, sight alignment, and trigger control. These basics must be mastered before a soldier can continue to the more progressive and offensive advanced marksmanship training. Without a clear demonstration of competence of the fundamentals of marksmanship, a soldier will not be able to properly perform the more advanced techniques covered in FM 3-22.9.

FM 3-22.9 covers advanced marksmanship training, to include SRM training, in limited detail in section VI of Chapter seven. Omitted from this manual are more in-depth range setup and training procedures. A cursory description of a SRM qualification course of fire is described and standards are set in table 7-5. This is a good start in the explanation of SRM training and qualification, placing emphasis on time, distance and method of fire. It does not however, train on distances from 25 meters to 100 meters or the use of barricades for cover and concealment. The situations that the average soldier encounters on the modern battlefield in a NL/NC environment require that he or she be able to dominate their surrounding 100 meters to increase safety, lethality and the combat effectiveness of the unit. In this area, the FM falls short of the detail required to physically set up and conduct training on this type of marksmanship range.

Safety Responsibility

One fundamental concept that all current Army qualification ranges do not stress or reinforce is individual soldier's responsibility for their own safety and the others around him by proper weapons handling. This weapons handling and safety is made even more important when you apply it to the NL/NC battlefield that American soldiers find themselves in every day. During the conduct of a Trainfire range, stringent conditions are set to ensure that a soldier does nothing without instruction from the range personnel. Soldiers are commanded to keep their weapons pointed "up and down range," a lane safety must ensure that everyone's chambers are empty and the selector is on "safe" before they are allowed to leave their position and each weapon must be "roded" (a cleaning rod run through the bore, muzzle to chamber) before soldiers are allowed to exit the range, thus ensuring a high degree of safety. This type of rigid control is arguably necessary at the basic training level and should be continued until the soldier shows proficiency and mental competency. But this type of strict control and over regimentation will also breed complacency and takes the responsibility of weapons safety out of the individual soldier consciousness.

In combat, a soldier will not have a lane safety to clear his weapon, ensure the selector lever is on safe or make sure that he is pointed down range. And on the modern NL/NC battlefield there is no "up and down range" for the soldier to find. I have personally seen soldiers show blatant disregard for muzzle awareness in the field when they knew that the weapon was unloaded, and could not be loaded, because there was no ammunition available. That same soldier, on the qualification range with live

ammunition, was shaken to the point of reduced motor skills because live ammunition was introduced into the equation.

Safety on a range is always the paramount consideration during all training activities. The shift of responsibility must be made from the range safety to the individual soldier to insure proper weapons handling procedures are followed. This will ensure that the same safe procedures are followed in combat.

Shot Placement and Accuracy

One aspect of marksmanship training that Trainfire ranges do not include but Army marksmanship manuals (FM 3-22.9, FM 90-10-1 and briefly in FM 3-23.35) do cover, is the importance of shot placement. FM 3-22.9 talks about the importance of shot placement and under what conditions they should be evaluated. The discussion of how a center of mass first shot, to knock a person down in close quarters, and then follow up with a incapacitating shot may be more important than a slower, more carefully aimed, incapacitating first shot. The reverse situation may also present itself and the soldiers training should replicate, as much as possible, the decisions that he will face in the combat zone. Above all a soldier must be taught to shoot an adversary to the ground, regardless of round count, to incapacitate or eliminate the threat. This type of training and assessment on the range will directly impact the soldier's survivability in combat. These kinds of decisions are exemplified by CPT Morgan who explains, "If an enemy opens fire with an AK-47 aimlessly . . . you should be able to calmly place the red dot reticule of your M-68 optic device on his chest and kill him with one shot" (Morgan 2004, 24). The Trainfire method does not emphasize shot placement but simply emphasizes target hit and trains a soldier that a hit equates to a kill, or incapacitation, because the target went

away. Several personal discussions with combat soldiers reaffirm the fact that an enemy soldier is not always incapacitated just because he is hit.

Shots that merely wound or that are mortal but do not incapacitate the target instantaneously are only slightly better than clean misses. Members of clearing teams should concentrate on achieving solid, well-placed head shots. This shot placement is difficult for some soldiers to learn, having been taught previously to aim at center of mass. (FM 90-10-1 1993, K-18)

This type of shot placement and weapons accuracy also translates into conditions found in the NL/NC battlefields of OIF and OEF. Soldiers are not commonly faced with the trench lines of soldiers from 50 to 300 meters or combating the counter attack at the “Battle of the Bulge.” American soldiers more commonly find themselves engaged by several gunmen with rifles and rocket propelled grenades (RPG) intermingled with a crowd in a market or outside of a mosque. Or they find themselves chasing a single gunman fleeing down a crowded alleyway after he has detonated an Improvised Explosive Device (IED). “American soldiers are facing an enemy with a cell phone in one hand, and an RPG in the other and an ill-conceived hatred in his heart. This enemy is asymmetrical in the most unpredictable way.” (Morgan 2004, 26) The modern battlefield, filled with noncombatants and media personnel, requires a high emphasis on shot placement and accuracy. The ability to hit your target without causing collateral damage becomes paramount to the successes of the local mission as well as the strategic missions of nation building and counter terrorism operations. Trainfire does not train for this type of fight.

Offensive Mindset

An area that none of the Army marksmanship manuals cover is the mental mindset that is required and how it needs to be incorporated into weapons training. Mr.

Gonzales, in his training and book, stresses the need for a combat mindset when facing a lethal threat that should be taught at all levels of training (on and off the range) (Gonzales 2002, 24). The inherently defensive nature of the Trainfire range does not instill the mental diversity required to close with and destroy the enemy during an offensive operation. SRM training and qualification courses are the type of advanced training that teaches the soldier how to properly use movement and engagement techniques to close with and destroy the enemy offensively.

Training and Competition

The Army's small arms marksmanship training has evolved in some ways to meet the demands of the modern NL/NC battlefield. Doctrine has evolved to explain the procedures for conducting this advanced training to some degree. The most critical piece that is missing are the qualified instructors and trainers to setup and conduct this type of training. The lack of qualified instructors for advanced marksmanship training is a shortcoming that is not easily fixed. Because of many years of reduction in competitions and post, division, and Major Command (MACOM) organized shooting teams, the cadre of expertise is very small to almost nonexistent. Beginning around the time of the Vietnam War, competitive shooting teams and the Marksmanship Training Units (MTUs) that supported them, were seen as expensive and irrelevant for teaching combat skills that were predominant on the battlefield (Liwanag 2004, 4). This was primarily because the course of fire that these teams competed on was based on the KD ranges that were fired for National Matches and Excellence in Competition (EIC) matches. This type of precision shooting was not seen as immediately applicable to the training that needed to be executed to prepare soldiers for combat in the jungles of South East Asia. The major

mistake in drawing down these teams and the MTU was that it left the Army with the AMU and the 29th Infantry Regiment, which conducts the Army's sniper course, as the only base of regular Army resident experts in training marksmanship outside of the course of instruction for Trainfire ranges. "Formal active Army marksmanship competition ended in 1994, the Army Championships having moved from Fort Benning, Georgia to Camp Robinson, Arkansas" (Liwanag 2004, 5).

The Army is once again holding the All-Army Small Arms Championships and it has developed over the years to keep pace with the dynamic needs of the Army on the modern battlefield. The primary focus has shifted from a precision event and courses of fire to a more combat oriented course of fire. This match is shot with rack grade weapons (weapons with no accuracy modifications), in full tactical gear and it is conducted on a combat oriented course of fire. An example of this shift in focus is exemplified in the conduct of the combat rifle EIC match. During the first portion of this match, the soldier must progressively engage targets starting at 300 meters and then advance to engage targets at 200 and 100 meters. The second portion of the course is simulates a tactical advance where the soldier must engage targets at CQC ranges. During the execution of the match, the soldier must use all firing positions that he would use in a real combat environment. What is still missing from the equation is a large number of competent instructors (NCOs or Officers) within the Active Army to coach and lead these teams and their members. More importantly, this void impacts the Army's ability to provide a cadre of trainers and coaches to teach SRM and other advanced marksmanship skills at the unit level. These trainers are essential training assets to a commander; they will afford him the ability to prepare soldiers for the CQC encountered in the current NL/NC battlefield.

“There are plenty of civilian men and women who shoot as a hobby who can routinely outshoot infantrymen” (Shebuski 2004, 35). These men and women compete in matches held at local ranges based on realistic scenarios that are directly applicable to today’s NL/NC battlefield environment. The three main associations that govern this type of competition are the IDPA, IPSC and the Glock Sport Shooting Foundation. This type of training and competition stresses time, distance, tactical concealment and the ability to evaluate the combat situation under stress and offensively react to the situation. “The U.S. Army Infantry is 30 years behind these organizations in CQC weapons training and qualification” (Shebuski 2004, 35). What is missing from Shebuski’s assessment is that the Army is behind the curve on training tactical and offensive marksmanship to all MOSs. Each of these associations operates a website with applicable rules and suggested courses of fire. These courses of fire are general reference points that can be modified to reflect a scenario that has been found to be prevalent in the combat unit’s area of operation. Also provided are scoring systems that stress both speed and shot placement and they penalize the shooter for poor tactical procedure and unsafe practices.

Range Comparison

At this point a comparison of the Trainfire range and a more advanced marksmanship training range need to be shown. The Trainfire range is very sterile and focuses on the shooting fundamentals and BRM techniques. It is the primary range that all soldiers qualify on beginning in basic training and continue to qualify on their entire career. This range does not incorporate any tactical techniques such as proper movement, use of cover and concealment, or target discrimination and shot placement.

During the course of the Trainfire range a soldier will be commanded, by the range personnel and the range tower operator, to perform all functions as instructed by the tower. He will be given forty rounds to qualify with as he engages targets from 50 to 300 meters with exposure times of three to twelve seconds, dependent on range and single or pair presentation. These targets will pop-up individually or in pairs at different distances and fall back down if they are hit, but provide no other feedback such as shot placement or engagement time. Twenty rounds are fired from the foxhole supported position (figure 3) and the other twenty will be fired from the prone supported position (figure 4).



Figure 3. Foxhole Supported Position
Source: FM 3-22.9, Figure 4-22.

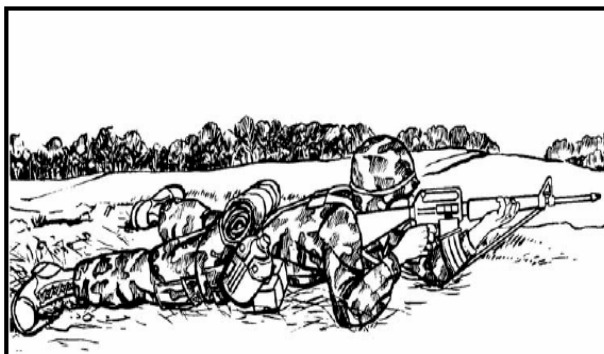


Figure 4. Prone Supported Position
Source: FM 3-22.9, Figure 4-23.

A minimum of twenty-three out of forty targets must be hit for a successful qualification. The levels of proficiency are measured in FM 3-22.9 by classifications of Marksman (23 to 29 hits), Sharpshooter (30 to 35 hits), and Expert (36 to 40 hits). This type of range demonstrates the soldier's comprehension and correct application of the fundamentals of marksmanship as he detects and engages targets on the range. The

soldier remains in one position, the foxhole supported or prone unsupported, for the entire sequence of fire. This allows for a more sedate shooting environment with little to stress the body or require the mind to make tactical decisions as it would on the battlefield.

In comparison, an advanced marksmanship range should be designed to build upon the Trainfire range experience. This range should incorporate tactical techniques such as proper movement, use of cover and concealment, target discrimination, and shot placement. It should also stress the soldier physically and mentally, requiring him to make decisions that he may face on the modern NL/NC battlefield. Figure 5 is just an example of a range that would incorporate BRM and SRM skills to fully test the soldier and provide confidence in his ability to shoot, move and make decisions that closely replicate the combat environment.

This example range is 80 meters in depth and approximately 80 meters in width, thus requiring very little room to operate. In this example the soldier would run from a start point, some predetermined distance requiring an increase in heart rate, to the barricade in front of box A. Properly positioning himself behind the barricade, demonstrating understanding of cover and concealment, he would engage targets in a tactical order. This range design would also require, as indicated by the X marked white targets, the soldier to discriminate between friend and foe. As the soldier finishes engaging the first five targets, with two shots per target, he will begin to transition to box B. During his movement to the box he will encounter target six requiring him to engage it while on the move with accurate fire. After arriving in box B he will again have to

demonstrate understanding of cover and concealment as he engages the last targets in a tactical order.

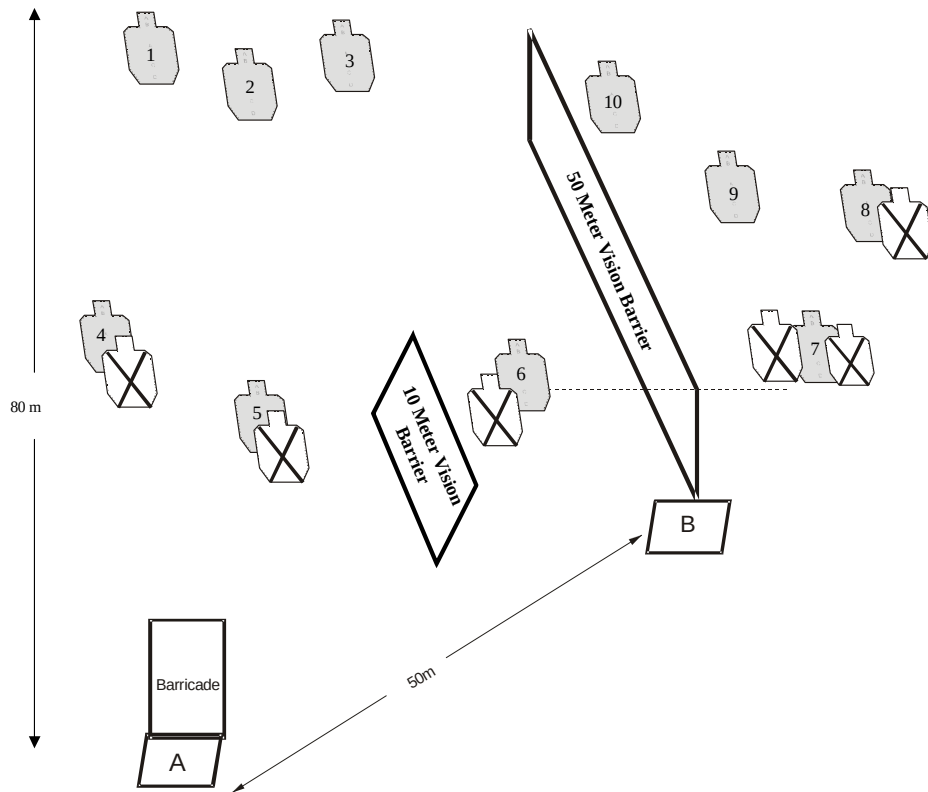


Figure 5. Possible Range Scenario

There are several different fully developed scoring systems already in use during civilian competitions that could easily be incorporated to meet the requirements of this type of military range. All of these scoring methods incorporate time, tactical positioning, rapid problem solving and accurate shot placement into score computation. These scoring methods evaluate the shooter on his total performance and the ability to employ his weapon and his mind to solve a tactical problem. The shooter is rewarded for speed and

accuracy during the execution of the course of fire. The IDPA scoring systems also penalizes the shooter for tactical (poor movement, improper use of cover, etc.) and technical/safety violations (improper gun handling, unsafe act, etc.) and would be directly applicable to safe and relevant Army marksmanship training.

Standards in Training Commission Allocations

The STRAC allocations, which are meticulously described and tabulated in DA PAM 350-38, have increased recently to allow the qualification of all soldiers semiannually. It allows for instructional training or prequalification training rounds prior to qualification on the standard Trainfire type range. There is no allocation of ammunition for training past the basic skill level for individual training. The STRAC allocation of ammunition also handicaps units that have an EST at their location by cutting the number of rounds and augmenting the use of the EST to replace, rather than enhance, training. Units that have an EST available to them currently have half the ammunition allocation for qualification that a unit without an EST has.

The EST is a very useful piece of TADSS equipment and should be used to its fullest capabilities in the course of weapons training. I have personally used it for training and witnessed its ability to provide accurate and valuable feedback to the shooter and the instructor on the progression of basic marksmanship training. It is also useful in the training of target identification and engagement analysis. The EST should be a system that is used to enhance live fire weapons training and not replace it. The commander should be given the latitude to use this system, as recommended in DA PAM 350-38, to qualify soldiers on NBC and night fire tasks. But DA PAM 350-38 should not remove from the commander the ability to train on those skills at the range, if he or she so

desires, by reducing the STRAC allocation if an EST is available. I agree that modern simulations can provide a profound training asset to the commander but they should be used to augment training and never used to replace real range training.

Use of TADSS

Research shows that the Army fully recognizes the training potential and enhancement that TADSS, especially the EST, provide to the trainer and the commander. As discussed previously, DA PAM 350-38 encourages the use of integrated TADSS in the unit's training strategies. With proper integration of the simulator in the training program, a commander can make better use of his time and ammunition allocation for weapons training. The use of TADSS allows instructors the opportunity to devote training time, not range time, to soldiers that are having difficulties by placing them in a sterile and low stress environment. This will allow soldiers that require additional training to elevate their skill level to the standard level of performance before they go to the range and attempt to qualify.

The Initial Entry Training (IET) Marksmanship Strategy, briefed at the IET Brigade Commanders and Command Sergeant Majors Conference at Redstone Arsenal in 2005, proposes extensive use of the EST. This program is designed for all Advanced Individual Training (AIT) and Interservice Training Review Organization (ITRO) courses that last more than six weeks. The program uses the EST to train Preliminary marksmanship, Grouping, Zero, Field Fire I/II, Reflexive Fire and Bore light procedures prior to actually performing them on the range. The commander of C/2-54 IN commented that, "Our qualification went faster and we had more first time goes compared to our previous cycle. The Drill Sgts and I feel the EST 2000 used during BRM 2 & 3 cut our

time on zeroing and qualification by 3 hours” (IET Marksmanship Strategy 2005, 10). By using the EST to pre-train and familiarize the soldiers before actual range operations, they were able to save time and get the most benefit out of the range time that had been allocated to them. This research shows that effective use of the EST prior to the range can improve the performance of the soldier and increase the value of the time spent on the range.

The AMU in Baghdad

The study of the recent MTT mission, that the AMU Service Pistol Team (SPT) conducted, exemplifies many of the points that are discussed earlier in this chapter. Members of the AMU SPT were given the mission to prepare a POI and then deploy to teach it as a train-the-trainer course to soldiers in OIF. This came as a direct request from the 1st AD in Baghdad asking; “Help us to survive the first 30 seconds of an urban gunfight” (Garrett 2004, 82). They found that there were not many foxholes to fight out of and it is hard to take up a good prone supported position while wearing the heavy protective and tactical gear they were fighting in. The USAIC CAVNET Lessons Learned Collection Team, during a 2004 trip to Sadr City, found that leaders normally have their soldiers take up a kneeling position rather than the prone to ensure rapid mobility, good use of armor and maximize observation in the urban environment (IET Marksmanship Strategy 2005, slide 12). The kneeling position is not taught or practiced on any conventional Army range and is only mentioned on pages 7-2 and 7-38 of FM3-22.9 as an alternant firing position. 1st AD realized that they were not shooting the same way that they had trained for with Trainfire on the ranges back home before they deployed to Iraq.

Upon receipt of the mission from LTC Liwanag, the AMU team began to get the training and equipment that they needed to conduct initial training. This requested training, if it had been available, would have been conducted as refresher training prior to deployment and not the first time they were exposed to it. The SPT attended CQC training at Universal Shooting Academy to refine the fundamental tactical skills and to ensure that they were included in the POI the team was tasked to produce. They subsequently attended classes specifically tailored to their mission at Blackwater Training Facility and with the 1st Special Forces Group to complete the base of knowledge to build the course.

The fact that the AMU team had to go to civilian and SF courses for additional tactical training is an indicator of the inadequacies of the current small arms training doctrine in the Army. I am in no way suggesting that the AMU shooters are not proficient marksmen, simply pointing out the lack of established POI. I have personally competed against members of this team and can attest that they are world-class shooters. Members of this team regularly win or place high in international and national competitions. At the 2004 IPSC National Championships, a combat oriented match, the team took first and second place. This additional training and skill level allowed them to put together a POI in four months that should have been in place in Army doctrine for years and taught beginning in basic training and reinforced throughout the soldier's career. The course that AMU pistol team crafted was not intended to train soldiers in preparation for SWAT team membership. The POI was simply designed to "give students more confidence in their weapons systems, make them faster and more accurate with those weapons and

provide them with the knowledge and means to teach their soldiers these skills” (Gibbs 2004, 1).

During the deployment the team trained two hundred and fifty one soldiers at six different forward operating bases (FOB). A total of nine classes were taught with a total ammunition expenditure exceeding 250,000 rounds of 5.56 mm ball (Gibbs 2004, 2). An average improvement of 76 percent was realized between the first day and last days drills. The course covered everything from equipment selection and setup to the fundamentals of SRM and dry fire practice. On the range the soldiers were instructed on shooting Controlled Pairs (CP), Double Tap (DT) procedures, tactical movement techniques, target discrimination, the proper use of available cover, and a ballistics demonstration.

During the night phase of the training the students were taught night firing engagement techniques and the use of white light as a force multiplier on the battlefield. I personally observed the night portion of this POI during a MTT course they conducted at Fort Riley, KS in November 2004. This training was the commensurate high level of marksmanship training conducted by the AMU that I have witnessed or been a part of in the past. Rob Garrett noted that this training was not any different than the training that is received at many civilian training schools. “The difference was that the “students” were immediately able to put these techniques into practice” (Garrett 2004, 86). At the conclusion of training every soldier was given a digital copy of the POI and a copy was also given to the unit S3s for incorporation into their training program. This POI is very flexible and can be adjusted to meet the needs of the unit in or out of the combat environment.

The training was well received and most students could not figure out why they had not received this type of marksmanship training previously in their Army career. The biggest complaint of the course was that it was not long enough and it needed to be at least five days long. “Several commanders and senior leaders requested that the USAMU do whatever possible to have this training become an annual training requirement for all active Army units” (Gibbs 2004, 3). This just solidifies my position that the current level of marksmanship training is inadequate for the demands of the current and future NL/NC battlefield environments. Shooting is a core competency in the Army and we cannot afford to train it for the first time while deployed in combat. We do not teach pilots to fly tactically in a combat zone and we should not teach soldiers how to shoot tactically in one either.

Research shows that units are incorporating TTPs from OIF and OEF as they “roll their own” POIs to train advanced marksmanship skills to their soldiers in the absence of any established range procedures and POIs. The AMU’s POI, used for the training of 1st AD, is just an example of the type of POI that should be developed for the training of all soldiers in the Army. Currently the Army marksmanship POI found in FM 3-22.9 discusses a few relevant tactical TTPs but in no way evaluates these during the conduct of the soldier’s qualification. Marksmanship training should incorporate both the fundamentals of marksmanship and the tactical techniques and procedures that are directly applicable to the conditions found on the modern NL/NC asymmetrical battlefield. A soldier should receive this training during his IET and it should be continually reinforced throughout his Army career. After the revision of the Army

marksmanship POI and weapons qualification ranges are completed, a cadre of trained personnel to train and evaluate this new POI will be required.

Small Arms Master Gunner

What is needed is a NCO in every BCT or equivalent that is capable of preparing, training, and evaluating marksmanship on every small arms weapon system within that BCT. A position and training program to support this position, similar to the Master Gunner Programs found in the Armor and Mechanized Infantry community, would provide the ideal capability to ensure that all soldiers receive the highest level of marksmanship training possible.

The idea of developing a Small Arms Master Gunner (SAMG) position within Army units is not a new idea. The 82nd Airborne Division developed a SAMG, under the guidance of LTG McNeil (Liwanag 2005), because of the growing complexities of the weapon systems within the division. Their experience showed that with the increase in technical systems, advanced optics, and LASER aiming devices, marksmanship performance would deteriorate without rigorous training (2/29th INF REGT, 1). The 82nd's focus was to emplace this capability down to every infantry battalion by requesting that the AMU train experienced NCOs on Advanced Infantry Marksmanship Strategies and Standards (AIMSS) and the JAVELIN (an Anti-tank weapon) and then execute a train-the-trainer program to disseminate the knowledge throughout the division (2/29th INF REGT, 1).

This type of program was proposed as a possible training capability by the 2/29th INF but was overturned in 2002 and dropped. I believe that this should be reexamined for implementation down to the BCT level but should incorporate all units, not just limited to

infantry organizations. Because of the ever-evolving NL/NC battlefield, all soldiers are being faced with combat situations that historically were predominantly encountered by combat arms units. The Army could even develop this into a permanent ASI to support this advanced marksmanship skill. The function of such an NCO would be to: schedule and organize ranges within the brigade, provide coordination and oversight of weapons maintenance, assume responsibility for the training of range personnel and instructors, and above all be present at all ranges as the primary instructor for small arms training.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The purpose of this thesis was to ask the question: Has the Army's small arms marksmanship training evolved to meet the demands of the modern NL/NC asymmetrical battlefield for all MOSs? It was critical to look at all MOSs because of the evolving characteristics of the NL/NC battlefield and a lack of a traditional rear area that, in the past, provided some security away from the "front line." The Combat Support and Combat Service Support soldiers on today's battlefields are not afforded a sense of security while conducting their missions and must always maintain an offensive mindset while conducting even routine operations. All soldiers in today's Contemporary Operating Environment (COE) need to be trained and prepared to place rapid and accurate fire to neutralize any symmetric or asymmetric threat.

In support of the primary thesis question, an examination of training POIs currently in use (Trainfire) and those being developed, was made to discern if they are being modified based on AARs and Lessons Learned from Iraq and Afghanistan. After examination of the current Army rifle publication (FM 3-22.9), I can say that some progress has been made to incorporate the NC/NL environment soldiers are faced with today into the POI. As covered previously, FM 3-22.9 contains a training model for the conduct of a year-round marksmanship program (FM 3-22.9 2004, Figure 1-1) and provides guidance, broken down in hourly increments, for the conduct of BRM training (FM 3-22.9 2004, 1-3 -1-4). In addition to the thorough explanation of BRM fundamentals and the POI for a Trainfire range, this manual discusses advanced

marksmanship training and provides shooting positions and techniques that are required for combat on the modern battlefield. Where the manual falls short is the incorporation of these advanced elements into the training POI for SRM ranges and training.

Compounding this problem, as discussed in Chapter 4, is the lack of trained and qualified cadre to instruct this new POI once implemented. The focus away from marksmanship training and competition has produced a void in the enlisted and officer ranks of proficient and knowledgeable shooters.

The Army's handgun manual (FM 3-23.35) follows in the same format for teaching fundamentals and a POI to support the training and evaluation of pistol marksmanship fundamentals during the conduct of the range. This manual discusses almost nothing about advanced marksmanship techniques or training and incorporates nothing in the way of tactical operations integration into the POI. Omissions include details on the instruction of using barricades, positions and offensive techniques needed for the modern battlefield.

With GEN Schoomaker's statement that "every body's a rifleman first" (Naylor 2004, 14), establishing that all soldiers require thorough marksmanship training, the Army must recognize the need for a revision of its marksmanship training and the need to include SRM as a basic marksmanship requirement. What is needed in both manuals is an in-depth POI, similar to the instruction for the Train Fire course, for the conduct of the advanced range operations and scoring methods and the inclusion of this POI as a requirement for all Army soldiers. In addition, a concerted effort must be made to build a training program to produce a qualified cadre to instruct this new POI with resident experts down to at least the Brigade level.

Another area that was researched was the impact of advanced weapons training on the average soldier and his ability to engage targets to dominate his 100 meters. Based on the results of the case study of the AMU's MTT operation for the 1st AD in Iraq, it appears that it would definitely be worthwhile to add advanced marksmanship training for all soldiers. The AMU team trained two hundred and fifty one soldiers, of all MOSs in multiple locations within Iraq, at the request of the 1st AD. This request was a result of the division's leadership recognizing the need for marksmanship training for the average soldier that surpassed the standard Trainfire curriculum. The specific request was to teach the soldiers the skills and techniques needed to, "help us to survive the first 30 seconds of an urban gunfight" (Garrett 2004, 82). As a result of the training the average improvement of the trainee's marksmanship skills went up 76 percent during the two and a half days of training (Gibbs 2004, 3). Just as important as the increase of quantifiable improvement in scores was a noticeable increase in the soldier's confidence levels and offensive mindsets. The student AAR comment cards, collected during the training, reflect the gratitude for the training received and its relevance to the soldiers that were in the combat zone having to apply the skills every day. The only recurring negative comments about the training were that the POI that the AMU team conducted should have been received before deployment and the training should have been extended. This case study again points out that the soldiers need more relevant combat marksmanship training, in addition to the BRM fundamentals, and that the cadre of resident experts does not reside in the units, even at the Division level.

A division size unit requesting additional marksmanship training, while in a combat theater, is a strong indicator that the Trainfire program (stressing BRM

fundamentals) alone is not supportive of the soldier in the NL/NC battlefield. This type of training request from a unit in combat and the lack of a SRM POI is a clear indicator that the Army's small arms marksmanship training has not fully evolved to meet the demands of the modern NL/NC asymmetrical battlefield for all MOSs.

The final topic area that was looked at was the Army's use of TADSS to augment live fire training and its ability to effectively use these training enablers to leverage the limited time and resources to train. FM 3-22.9 provides a list of useful TADSS and simulations (FM 3-22.9, Table 1-1) that a unit commander should use to augment and tailor his unit's training. These devices will allow him, if he or someone on his staff is properly trained, to assess the tactical situation and construct a program that will best use the time and assets at his disposal. These devices can be used to reinforce the static BRM training conducted prior to the range and will allow a soldier to accustom himself with his weapon and build confidence in his ability in a low stress environment. I can personally attest that commanders at all levels recognize the usefulness of TADSS during weapons training by the usage rates of these devices on any post that is equipped with them. TADSS. FM 3-22.9 also provides an example of a step-by-step strategy, with simulations integrated in the process, which allows a commander to train and assess marksmanship within his unit (FM 3-22.9 2004, 1-5 – 1-13). TADSS can be used to provide additional training opportunities that will augment a quarterly sustainment program that is seen as a requirement to maintain acceptable skill levels (FM 3-22.9 2004, 1-5) over and above the regulatory semiannual qualification requirements.

Recommendations

The following recommendations are based on the conclusions previously discussed in this chapter. Further study is required to examine the exact execution of these recommendations and the appropriate organizations to implement the changes. All of these recommendations should be feasible and supportable with the understanding that marksmanship is one of the three fundamental skills that all soldiers must maintain. Many of these recommendations have been implemented at various levels of organization, therefore this thesis suggests that they be standardized within the Army and implemented across the service. The recommendations are as follows:

1. Update the POI

Update the POI in the respective Army field manuals and include range configurations to facilitate advanced, short-range, CQC like marksmanship training that will allow soldiers of all MOSs to dominate their 100 meters. It must be stressed in marksmanship field manuals that all MOSs require this type of training. The NL/NC battlefield requires that every soldier is a combat soldier first and a specialist in his field second.

Several POIs exist throughout the Army that cover advanced marksmanship training. These POIs were produced locally because there is no standard POI within the Army doctrine for advanced marksmanship. The AMU and 10th Mountain POIs are just two examples of documents that could provide starting points for the creation of an advanced marksmanship POI. This update to the current program should compliment the basic POI and not replace it. There remains a requirement to conduct BRM training and this basic training should be the prerequisite for advanced marksmanship training. The

fundamentals of marksmanship skills, that the current BRM POI trains and Trainfire evaluates, are the basis of marksmanship training. The new POI should simply build upon that base of training to provide a real world application in the contemporary NL/NC battlefield.

These POI updates, both rifle and pistol, should include scenarios that will provide a basis from which to design ranges, and start positioning the targets on the range to train the soldiers on the environment that they will be operating in. They should always remain descriptive and not prescriptive so that the trainer can configure the range to replicate situations based on AARs and lessons learned from current operations. What should be avoided at all cost is an overzealous application of the scenarios as the school solution to a given situation. The examples that need to be developed should be a guide to be adapted for individual units, locations and environments. “All Courses of Fire must either simulate a possible real life scenario or test skills that might reasonably be used in a real life self-defense confrontation” (IDPA Rule Book 2005, 12). This is a sound guideline to judge the validity of the scenario and the applicability to the unit and soldier. Additional sources for sample scenarios may be found on line and in publications dedicated to IDPA and IPSC competition.

These range setups should in no way be perceived as doctrine but merely examples of the possible. The unlimited combinations to a range that this type of marksmanship training allows should not intimidate leaders. They should look at this as a real opportunity to adjust range training to the situations that they and their units have encountered and avoid the cliché of “that is not how it happens down range.” This allows

them to design, build and execute training on a range that closely replicates the conditions that they find on the battlefield.

The construction of the range facilities designed for this type of training is not specifically required and can be performed on existing pistol or rifle ranges with a depth of 100 meters. The addition of separating berms, at least 10 feet in height and running the length of the range, to provide individual shooting bays would be advisable but not imperative. These additions would simply allow for simultaneous training of multiple shooters. An additional cost would be realized at each installation for the initial procurement of target stands and the upkeep of those stands with periodic replacements of the wooden stanchions and cardboard backing.

2. Small Arms Master Gunner

Introduce Small Arms Master Gunner (SAMG) into all BCT and higher units. Examples of this type of organization can be found in the 82nd ABN, 10th MNT and others' programs. This NCO would reside in the operations section of every BCT or equivalent. He should be school trained and capable of preparing, training, and evaluating marksmanship on every small arms weapon system within that BCT. The overall responsibilities of the SAMG would be to: schedule and organize ranges within the brigade, provide coordination and oversight of weapons maintenance, assume responsibility for the training of range personnel and instructors, and be present at all ranges as the primary instructor for small arms training. This position and training program should be modeled after the very successful Master Gunner programs found in the Armor and Mechanized Infantry community. His expertise would provide the ideal skill set, resident in the unit, to ensure that all soldiers receive the highest level of

marksmanship training possible. This position will not relieve the subordinate units of the traditional responsibilities of operating and coordinating the range. The SAMG would be responsible for the correct training and instruction on all small arms weapons and subsystems found within the unit but not the operation of the range itself.

As mentioned previously, the idea of developing a SAMG position within Army units is not a new idea. The 82nd Airborne Division recognized the need for this position because of the growing complexities of the weapon systems and subsystems within the division, but their focus was on infantry battalions having this capability. This set of expertise should be resident in every BCT, regardless of the unit designation and affiliation. All soldiers on today's NL/NC battlefield that reflects the current COE must be able to perform traditional infantry tasks because of the unconventional threat they face every day. Training SRM skills required for the SAMG are available through many sources, many civilian schools, and can be attended individually or as a group. It is also possible to bring in SMEs in the form of MTTs, Army or civilian, that can give local instruction and also advise on range setup and improvement.

This position should be made a dedicated position, supported by MTOE, because of the ever evolving technical systems, advanced optics and LASER aiming devices and the predictable deterioration in performance without rigorous training. The responsibilities of this job, in a BCT or higher, will fully occupy the time of a single individual if performed as described. His ultimate focus of a SAMG should be to emplace this knowledge and capability down to every battalion by conducting BCT level train-the-trainer courses to unit armorers or interested personnel. The Army should recognize this

training and track this skill as any other advanced training and develop this into a permanent ASI.

3. STRAC allocations

Update STRAC allocations to incorporate additional SRM live fire training and restore a full allocation of training ammunition to units that have an EST. The training of SRM to soldiers will approximately double the small arms ammunition requirement of the average unit to train effectively on a semi-annual basis. This may initially sound like a profound increase in cost but, considering the Army pays significantly less than retail for training ammunition, this cost only comes out to an increase of approximately \$50 per soldier per year if it was bought retail. The cost benefit of increased proficiency, as shown from the results of the AMU MTT in Iraq, will far outweigh the price of the increase in STRAC allocation.

The EST is a simulation and should be used to augment and enhance marksmanship training and not leveraged to replace range training. In the current DA PAM 350-38, units with an available EST have their small arms ammunition allocation reduced, as much as fifty percent, forcing them to qualify selected marksmanship tasks with the use of the simulation. It recommends, when possible, to use the TADSS, such as the EST 2000, for additional marksmanship training (DA PAM 350-38 2003, 5). This recommendation becomes a requirement if the allocation is reduced below the round count required to fully qualify on the range. This does not take into account any re-fires or additional training that may be needed. The Army must not advocate the use of the EST to replace range time but must allow the use of the EST to augment and enhance the training.

This document provides the mandate for semiannual training, but must be updated to allow for the conduct of that training and remove the limits on the commander by not reducing range time by restricting ammunition allocation. It should afford the same ammunition allocation whether an EST is present or not, and allow the commander and his trainers the latitude to structure the unit's weapons training to best fit the unit's requirements. With the increase of STRAC allocation and the ability to use both Trainfire and SRM ranges, with the proper incorporation of TADSS, the commander will have a powerful capability to train his unit on one of the most basic and primary soldier skills.

4. SRM training

Implement SRM training at IET, AIT, NCOES, OCS, OBC and also have a traveling Train-the-Trainer program to instruct and update installations and units on the advanced POI to produce a future cadre of proficient combat shooters. To quickly implement this advanced training throughout the Army, a concerted effort must be made to produce officers and NCOs that are proficient in small arms marksmanship. As discussed earlier, with the reduction in formal competition within the Army over the past ten years, the cadre of qualified marksmanship instructors is extremely limited. This dearth could be overcome in approximately two years with the incorporation of SRM training at the professional development courses that are attended during normal career progression. Those individuals that would not be slated to attend career progression courses in that time frame could receive instruction from a MTT as it conducted training at installations around the Army. This training must be conducted to insure that the senior NCOs are as versed on this new training as the junior NCOs and soldiers that will receive this type of instruction during their IET and AIT training.

The AMU has conducted several MTT courses, both stateside and overseas, that could provide an excellent model to be emulated by a group or training team to be designated in the future. This team could consist of Army personnel, qualified contractors or a mixture of both. This team would be scheduled to provide training support at major bases around the world where both tenant organizations and outlying units would send their trainers to receive professional instruction in a train-the-trainer fashion. The Army Reserve and National Guard would need to conduct the same training but with a longer time line to adjust for the time constraints associated with their organizations. It should be noted that the Reserve and National Guard have, unlike the active Army, maintained an active marksmanship program (in some states) thus providing a solid base of marksmanship experts. Close coordination would have to be maintained to ensure that this training is received during predeployment training in the event that an Active Duty, Reserve or National Guard unit is ordered to deploy prior to receiving this training.

5. Additional Skill Identifier

The Army should implement an additional skill identifier (ASI) for the recognition of advanced marksmanship training. Graduates could then be placed in brigade and larger (combat, CS and CSS) SAMG positions throughout the Army to implement the new Army small arms marksmanship POI. The advanced marksmanship training that the SAMG will receive is a perishable skill and must be exercised on a routine basis. By placing a SAMG at the BCT level, he will be able to keep his proficiency level elevated as he instructs soldiers on a continual basis. This skill should be viewed as the same type of perishable skill that is associated with the combat lifesaver ASI. This skill must be continually practiced and re-certification should be required on a periodic basis to insure

consistent training standards and as a method to update the SAMG on new methods and procedures.

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