

Chapter One

Introduction

Section I

Overview

1.1. Purpose

a. Army leaders throughout the force want to align Standards in Training Commission (STRAC) and the Combined Arms Training Strategy (CATS) with FM 25-100: Training the Force and FM 25-101: Battle-Focused Training. These Field Manuals (FMs) contain the Army's standardized training doctrine applicable throughout the force. They provide the necessary guidelines on how to plan, execute, and assess training at all levels. Once aligned the Army can realistically reflect the mutually supporting role and closely balance requirements needed within the system for unit training. The Army's ultimate purpose is to prepare combat-ready units that can, and will, mobilize, deploy, fight, and win.

b. Success in the future will be based on the development of a standard Army training ammunition management system that manages the interactive exchange of Major Commands (MACOM) and the Training in Doctrine Command (TRADOC) proponent issues and strategies. This process must assist in the development of Army wide training ammunition requirements necessary to allow units of all components of the Army to attain and sustain all mission readiness levels. The future training ammunition mechanism must direct future strategies that integrate Training Aides, Devices, Simulations and Simulators (TADSS), STRAC XXI and related technologies into training programs. This process will enable TRADOC through the Combined Arms Training Strategy (CATS) to engineer the required implementation process needed to meet current and future training opportunities and goals. STRAC's mission is to determine the quantities and type of ammunition essential for soldiers, crews, and units to attain and sustain weapon proficiency relative to readiness levels, considering optimum use of TADSS and sub-caliber firing. STRAC is the basis for determining training ammunition requirements (AR 5-13).

c. CATS is a training management program that uses proponent developed strategies to support training to standard both in the units and in the schoolhouse. The CATS are the overarching concept supplying training strategies for the Army. This concept is designed to be a flexible process, providing menus of events and associated resources necessary to plan and manage training.

d. Historically, the Army has relied extensively on the use of actual equipment and full caliber ammunition. However, the escalating cost of ammunition, coupled with the fact that many critical tasks may be better trained using devices and simulators, has shifted the emphasis to a combination of full caliber and sub-caliber ammunition, with TADSS integrated throughout the training programs. The objective of TADSS is to increase combat readiness by providing greater, more effective training opportunities while saving or avoiding training costs like training ammunition and OPTEMPO.

e. TADSS aid sustainment in garrison or local training areas, and may be the sole medium for certain critical tasks. For some high-dollar items, such as missiles, the Department of the Army

emphasizes the use of TADSS as the primary means of training. For the Man Portable Air Defense System (MANPADS), air defenders rely exclusively on TADSS for attaining and sustaining the qualification standards. Future training ammunition requirements will be driven by live-fire based training strategies that recognize the complimentary value of TADSS.

f. Environmental Protection and Safety considerations need to be integrated into weapons and ammunition handling procedures. Guidance for integrating such considerations are found in FM 3-100.4 & FM 100-14.

1-2. References

Required and related publications are listed in appendix A.

1-3. Explanation of abbreviations

Abbreviations used in this pamphlet are explained in the glossary.

1-4. Training functions

a. The Assistant Secretary of the Army (Research, Development and Acquisition) ASA (RDA) manages the research, development and procurement of ammunition items.

b. The Deputy Chief of Staff for Operations and Plans (DA-DCSOPS)

(1) Trains Army Forces and Chairs the Standards in Training Commission (STRAC).

(2) Advises the Chief of Staff, Army and Vice Chief of Staff, Army on STRAC matters.

c. The Director of Training, Office of the DCSOPS (HQDA, DAMO-TR)

(1) Acts on behalf of the DCSOPS as the Headquarters, Department of the Army (HQDA) point of contact for standard training programs and chairs the STRAC General Officer Steering Committee.

(2) Prescribes policy, coordinates standards in training requirements and develops training ammunition requirements.

(3) Prescribes criteria for and designates units at Training Readiness Condition (TRC) levels.

(4) Monitors STRAC training programs.

(5) Resources the Army component of Combat Training Centers with ammunition separately from units.

d. The Deputy Chief of Staff for Logistics manages transportation and storage of ammunition required to support the training programs.

e. The Commanding General, US Army Training and Doctrine Command (CG, TRADOC)

(1) Develops, standardizes and evaluates standards and training strategies.

(2) Staffs weapons training strategies through the STRAC General Officer Steering Committee for publication.

(3) Implements standards in training programs in the training base where applicable.

(4) Determines annual training ammunition requirements for the training base according to standard training programs.

f. Commanders of Major Army Commands (MACOMs)

(1) Train forces to attain and sustain weapons proficiency standards.

(2) Determine annual training ammunition requirements and authorizations for assigned units considering standards and notional (suggested) strategies in this pamphlet, unit mission, unit priority and applicable resource guidance.

g. The National Guard Bureau (NGB) functions as a MACOM for administering resources, programs, policies and plans pertaining to or affecting the Army National Guard IAW AR 130-5.

h. The U.S. Army Reserve Command (USARC) is responsible for administering resources, programs, policies and plans pertaining to or affecting the United States Army Reserves IAW AR 140-1.

1-5. Training Readiness Conditions (TRC) Levels and Categories

a. TRC's are training readiness levels with prescribed (mandatory) standards, notional training strategies and generic (general, non-unit specific) training resource requirements, i.e., resources required by units to attain and sustain standards. In general, Active Component (AC) units are designated TRC A. Special reaction teams, formed from active component military police units, are designated TRC S. National Guard Enhanced Brigade units are designated TRC B. USARC training divisions, USARC reception stations, USARC separate training brigades training cadre are designated TRC D. All other Reserve Component (RC) units are designated TRC C.

b. Training programs for some weapon systems have been divided into the following two categories:

CAT I- Applies only to soldiers with an 11B or 11M military occupational specialty (MOS) assigned to an Infantry rifle platoon or 19D or 11B assigned to a scout platoon/long-range surveillance detachment (LRSD). Combat Engineers assigned to heavy divisions are included in the category for M2 HB MG or MK-19 only (based on TOE). This category also applies to military police platoons and to 11H soldiers assigned to Delta Company of Airborne/Air Assault units for the MK-19 only. For the Claymore mine, Combat engineers are resourced as CAT 1. Both individuals and collective weapon training standards and strategies have been developed for this category.

CAT II- Applies to all other soldiers not identified as Category I. This includes soldiers assigned to MP Special Reaction Teams. Individual training standards and strategies, along with the minimum collective events have been developed for specific TRC's in this category.

Gunnery Year(GY) -

Maneuver Year (MY) -

c. Active Component (AC) Table of Distribution and Allowances (TDA) units with assigned individual weapons will use weapons standards for Category II, TRC A. Reserve Component (RC) TDA units with assigned individual weapons will use weapon standards for Category II, TRC C. Personnel assigned pistols or revolvers in AC and RC TDA units will use weapons standards for TRC A and C respectively. Personnel in TDA units who are not assigned individual weapons are exempt from weapons qualification in accordance with AR 350-41.

Section II

Army Standard Gunnery Training Programs

1-6. The Standards in Training Commission (STRAC)

In March 1982, the Vice Chief of Staff for the Army (VCSA) established the Standards in Training Commission, appointing the DCSOPS as chairman and TRADOC, Army Training Support Center (ATSC) as the Army Executive Agent. The mission is to determine the quantities and type of munitions for soldiers, crews and units to attain and sustain weapon proficiency relative to readiness levels making maximum use of TADSS and sub-caliber firing.

1-7. Management

The STRAC chairman directs the program and reports directly to the VCSA. The chairman is supported by the Training and Leader Development General Officer Steering Committee (TLGOSC) with membership from the Army staff (AC and RC), MACOMs, TRADOC and the Commandants of the proponent schools. The training steering committee reviews the program and provides recommendations to the chairman. Weapons committees chaired by the commandants of the Air Defense, Armor, Aviation, Maneuver Support Center (MANSCEN) to include Ordnance, Field Artillery and Infantry Schools, with full MACOM representation, develop weapons training standards and strategies. These standards and strategies are integrated and reviewed by STRAC Council of Colonels chaired by DAMO-TR, then forwarded to the Training General Officer Steering Committee for final recommendation.

1-8. Weapon System Training Programs

a. Success in the future will be based on the development of the STRAC XXI system and STRAC XXI concepts that manage the interactive exchange of MACOMs and the Training in Doctrine Command (TRADOC) proponent STRAC issues and strategies. This process must assist in the development of Army-wide training ammunition requirements necessary to allow units of all components of the Army to attain and sustain all mission readiness levels. The training ammunition mechanism must direct future strategies that integrate TADSS, STRAC XXI, the Unit Training Management System (UTMS) and related technologies into training programs.

b. STRAC XXI strategies support the way the Army trains to fight today. STRAC XXI provides commanders the authority and flexibility for training design and decision-making. It maximizes the use of simulations to sustain baseline individual/crew proficiency and allows the commander to reallocate ammunition for collective training. STRAC XXI recognizes that units have individuals/crews with varying training needs and allows commanders several methods of qualifying/validating crews.

c. STRAC tables listed in subsequent chapters contain the total training ammunition requirements necessary for soldiers, crews, and units to attain and maintain STRAC standards. Since

training strategies differ by weapon/weapon system type, unit type, TRC, and category, ammunition requirements differ for the same reasons. The STRAC Pamphlets contain ammunition requirements for pyrotechnics, mobilization, and combat training center (CTC) rotations. The STRAC Pamphlets provide commanders and other unit trainers the information necessary to forecast and justify annual ammunition requirements through the following strategies; qualification and weapons proficiency, unit specific type, RC mobilization, and Combat Training Center (CTC) rotation.

(1) The standards listed throughout each chapter are mandatory.

(2) Training strategies and associated ammunition requirements are not mandatory. The STRAC strategies provided are models. Commanders may tailor strategies as required to allow their units to achieve standards. This flexibility in the strategies is intended to accommodate unique mission training requirements.

(3) This pamphlet reflects total training ammunition requirements by type units.

d. Upon notification for training, TRC B and TRC C units are authorized at TRC A for training ammunition. Notification for training occurs prior to the receipt of an official mobilization order. A unit is considered notified for training upon receipt of an official Department of the Army (DA) message.

e. Upon mobilization, TRC C commanders will reinforce/build upon their accomplished training by completing individual and collective training events as outlined in Chapter 9.

1-9. Standards and Strategies for TRC D.

a. Standards and strategies for the USAR Training Divisions, Separate USAR Training Brigades and NGB Training Cadre appear in this pamphlet as “TRC D USAR Training Battalion”.

b. USAR training programs support both initial entry and prior-service personnel. TRC D training programs in this Pamphlet support and accommodate the USAR phased qualification/sustainment program by basing training ammunition on the number of soldiers in each phase instead of the number of weapons in the unit’s MTOE/TDA.

c. For individual weapons qualification, all personnel, except instructors and drill sergeants involved in marksmanship instruction, will follow TRC C Category II programs. Soldiers assigned as Track Commanders/Instructors in Infantry or Scout AIT or OSUT units are considered to be instructors when determining resources and the attainment of standards.

d. The ammunition requirements for USAR Training Battalions are located in the specific weapon system tables.

Section III

STRAC XXI

1-10. STRAC XXI

a. STRAC XXI depicts strategies to support the way we train to fight today. Ammunition resource requirements are based on unit mission, STRAC XXI ensures commanders have the authority

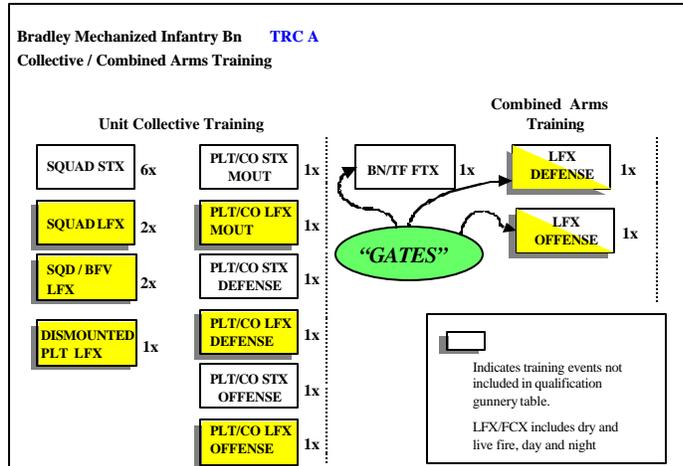


Figure Two – Collective / Combined Arms Training Gates for a Bradley Mechanized Infantry Bn TRC A

e. Figure Three diagrams Table 5-38, the M16A1/A2 Rifle/M4 Carbine TRC A (CAT I/II), using the STRAC XXI concept. The table illustrates the three options open to the commander to train his soldiers on their personal weapon depending on their level of qualification.

**Table 5-38 (Future) TRC A
M16A1/A2 Rifle/M4 Carbine (CAT I/II)**

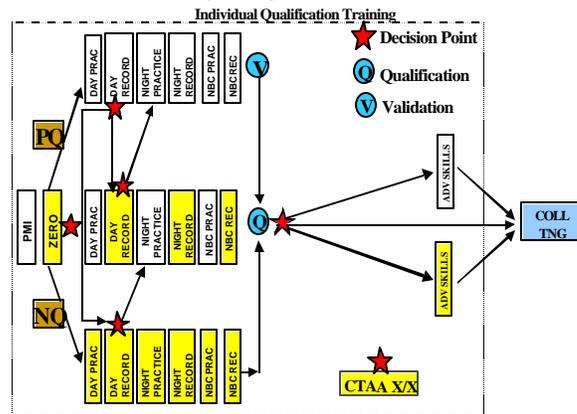


Figure Three – Table 5-38 M16A1/A2 Rifle/M4 Carbine TRC A (CAT I/II)

f. Decision points allow commanders the flexibility to train/retrain crews based on their demonstrated ability. Commanders are authorized to keep the ammunition that was allocated by STRAC, but not fired by crews who validated in the virtual domain. Commanders are authorized to use this ammunition to execute collective tasks not previously resourced. Per AR 5-13, commanders will expend all the ammunition quantities required to meet training objectives. All unused ammunition will be turned into the Ammunition Supply Point (ASP).

g. Today’s Army must train and sustain readiness for full spectrum conflict and expect to deploy virtually anywhere in the world on short notice. Deployments will feature tailored packages of

forces including reserve components, and will require the Army to employ information age technology against multiple and asymmetric threats.

h. The ATSC STRAC is the final reviewing authority for all submissions, evaluating information against independent data sources and reconciles deviations from linked HQDA and doctrinal guidance. ATSC will then link to HQDA and finalize the training ammunition automated procedure. HQDA reviews and evaluates available stocks needed to conduct training and ensures needed procurement is integrated into the budget process. The current STRAC Web page will remain active until the STRAC XXI system can fully integrate the makeup of the STRAC page.

Table 2-2 M1A1/M1A2 SERIES (TRC A) - TK BN

Platoon Level Training Strategy

Table	Crews	Freq	TPDS-T	SLAP-T	7.62	CAL .50	RED PHOS	7.62 BLK	CAL .50 BLK	HOFF-MAN
XI	44	1	TWGSS	40	0	0	0	200	100	20
XII	44	1	15	0	200	100	4	0	0	20
Strategy			660	1760	8800	4400	176	8800	4400	1760
Standard			660	0	8800	4400	176	0	0	880
DODIC			C785	AA38	A131	A557	G978	A111	A598	L602

TRAINING STANDARD

- Crews will conduct Gunnery Table IV/TCPC semi-annually using TWGSS. The goal is for 100% of crews to qualify on Gunnery Table VIII and Gunnery Table XII.
- The minimum standard at the conclusion of each of the two gunnery densities provided by the notional strategy is 85% of the assigned crews must have qualified through Gunnery Table VIII. A qualified crew is a Tank Commander and Gunner combination that has met Gunnery Table VIII standards together within the past 12 months.
- All crews firing Gunnery Table XII must be qualified on Gunnery Table VIII. Platoons will conduct Gunnery Table XII at least once a year. The qualification levels are:
 - 7 of 9 platoons in a tank battalion
 - 7 of 9 tank platoons in an ACR
 - 3 of 4 tank platoons in a divisional

Commanders Training Strategy Worksheet

Table	Crews	Freq	TPDS-T	SLAP-T	7.62	CAL .50	RED PHOS	7.62 BLK	CAL .50 BLK	HOFF-MAN	Crew	Freq	Sim
XI	44	1	TWGSS	40	0	0	0	200	100	20			
XII	44	1	15	0	200	100	4	0	0	20			
Strategy			660	1760	8800	4400	176	8800	4400	1760	Click here to calculate		
Standard			660	0	8800	4400	176	0	0	880			
DODIC			C785	AA38	A131	A557	G978	A111	A598	L602			

Table 2-2 STRAC XXI for M1A1/A2 Series (44) Tank Battalion w/TWGSS TRC A

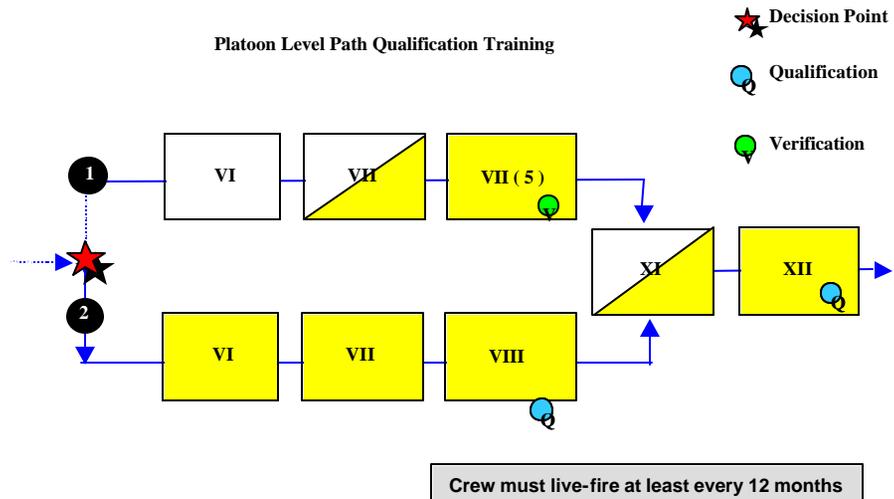


Table 2-3 M1A1/M1A2 SERIES (TRC A) - TK BN

Company Level Annual Training Strategy (TWGSS)

Table	Crews	Freq	TPDS-T	7.62	CAL .50	7.62 BLK	CAL .50 BLK	HOFF-MAN
CALFEX	56	1	5	200	200	0	0	20
BNSQ FT	58	2	0	0	0	200	100	18
CO/TRP F	56	2	0	0	0	400	100	36
PLT FTX	48	4	0	0	0	200	100	18
BNSQ FC	22	2	0	0	0	0	0	8
CO/TRP F	20	2	0	0	0	0	0	8
Strategy			280	11200	11200	61600	30800	7336
Standard			0	0	0	0	0	0
DODIC			C785	A131	A557	A111	A598	L602

Commanders Training Strategy Worksheet

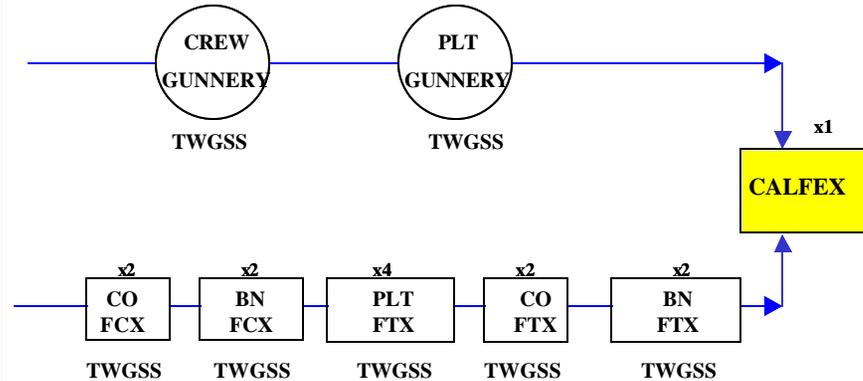
										STRA	TPDS	TP-T
										Strate	280	0
										CTAA	0	0
Table	Crews	Freq	TPDS-T	7.62	CAL .50	7.62 BLK	CAL .50 BLK	HOFF-MAN		Crew	Freq	Sim
CALFEX	56	1	5	200	200	0	0	20				
BNSQ FT	58	2	0	0	0	200	100	18				
CO/TRP F	56	2	0	0	0	400	100	36				
PLT FTX	48	4	0	0	0	200	100	18				
BNSQ FC	22	2	0	0	0	0	0	8				
CO/TRP F	20	2	0	0	0	0	0	8				
Strategy			280	11200	11200	61600	30800	7336				
Standard			0	0	0	0	0	0				
DODIC			C785	A131	A557	A111	A598	L602				

Click here to calculate

TRAINING STANDARD

- Crews will conduct Gunnery Table IV/TCPC semi-annually using TWGSS. The goal is for 100% of crews to qualify on Gunnery Table VIII and Gunnery Table XII.
- The minimum standard at the conclusion of each of the two gunnery densities provided by the notional strategy is 85% of the assigned crews must have qualified through Gunnery Table VIII. A qualified crew is a Tank Commander and Gunner combination that has met Gunnery Table VIII standards together within the past 12 months.
- All crews firing Gunnery Table XII must be qualified on Gunnery Table VIII. Platoons will conduct Gunnery Table XII at least once a year. The qualification levels are:
 - 7 of 9 platoons in a tank battalion
 - 7 of 9 tank platoons in an ACR
 - 3 of 4 tank platoons in a divisional

Table 2-3 STRAC XXI for M1A1/A2 Series (58) Tank Battalion w/TWGSS TRC A



Crew must live-fire at least every 12 months

Table 2-1 M1A1/M1A2 SERIES (TRC A) - TK BN

Crew Level Annual Training Strategy

Table	Crews	Freq	TPDS-T	TP-T	7.62	CAL .50	7.62 BLK	HOFF-MAN
COFT	0	12	0	0	0	0	0	0
TCGST	0	2	0	0	0	0	0	0
TCPC	44	2	TWGSS	TWGSS	0	0	100	17
V	44	2	0	0	500	200	0	10
SCREEN	44	2	2	2	100	100	0	0
VI	44	2	TWGSS	TWGSS	0	0	0	12
VII	44	2	9	6	400	100	0	32
VIII	44	2	18	6	350	100	0	34
Strategy			2552	1232	118800	44000	8800	9240
Standard			1584	528	30800	8800	8800	4488
DODIC			C785	C784	A131	A557	A111	L602

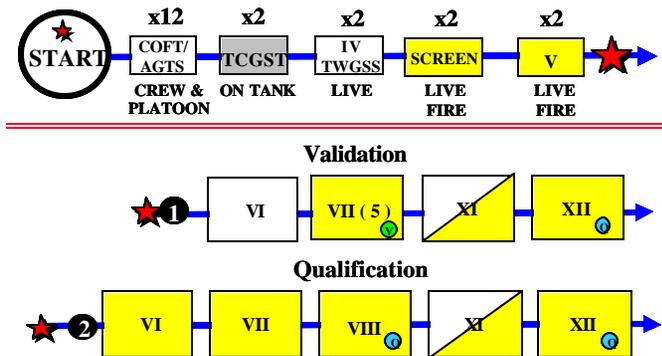
Commanders Training Strategy Worksheet

									STRAC	TPDS	TP-T
									Strate	2552	1232
									CTAA	0	0
Table	Crews	Freq	TPDS-T	TP-T	7.62	CAL .50	7.62 BLK	HOFF-MAN	Crew	Freq	Sim
COFT	0	12	0	0	0	0	0	0			
TCGST	0	2	0	0	0	0	0	0			
TCPC	44	2	TWGSS	TWGSS	0	0	100	17			
V	44	2	0	0	500	200	0	10			
SCREEN	44	2	2	2	100	100	0	0			
VI	44	2	TWGSS	TWGSS	0	0	0	12			
VII	44	2	9	6	400	100	0	32			
VIII	44	2	18	6	350	100	0	34			
Strategy			2552	1232	118800	44000	8800	9240	Click here to calculate		
Standard			1584	528	30800	8800	8800	4488			
DODIC			C785	C784	A131	A557	A111	L602			

TRAINING STANDARD

- Crews will conduct Gunnery Table IV/TCPC semi-annually using TWGSS. The goal is for 100% of crews to qualify on Gunnery Table VIII and Gunnery Table XII.
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 - 7 of 9 tank platoons in an ACR
 - 3 of 4 tank platoons in a divisional

Table 2-1 STRAC XXI for M1A1/A2 Series (44) Tank Battalion w/TWGSS TRC A



Crew must live-fire at least every 12 months