TC 3-20.11

Training to Proficiency
Maneuver Company and Troop

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TRAINING TO PROFICIENCY MANEUVER COMPANY AND TROOP

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Preface

TC 3-20.11 provides a detailed description of the maneuver force's training strategy for all company and troop-size formations to achieve fire and maneuver proficiency at home station. TC 3-20.11 includes the purpose of the integrated weapons training strategy, its standard structure, training requirements, the integration of combined arms assets, and resource requirements for the Armored, Infantry, and Stryker brigade combat teams' maneuver elements. This publication provides training principles and techniques for use by units to gain proficiency in engaging and destroying threats efficiently in any operational environment.

This publication includes all the required planning and preparation for a successful unit weapons training program. Where vehicle- or weapon-specific techniques in this training circular conflict with technical manuals (TMs), the readers should follow the procedures in the TM.

The principal audience for TC 3-20.11 is all members of the profession of arms. Commanders and staffs of Army headquarters serving as joint task force or multinational headquarters should also refer to applicable joint or multinational doctrine concerning the range of military operations and joint or multinational forces. Trainers and educators throughout the Army will also use this publication.

Commanders, staffs, and subordinates ensure that their decisions and actions comply with applicable United States, international, and in some cases host-nation laws and regulations. Commanders at all levels ensure that their Service members operate in accordance with the law of war and the rules of engagement. (See FM 6-27.)

TC 3-20.11 uses joint terms where applicable. Selected joint and Army terms and definitions appear in both the glossary and the text. When first defining other proponent definitions in the text, the term is italicized and the number of the proponent publication follows the definition. For the purposes of clarity, Army standard is directly implied when discussing "standard" or "standards." Throughout TC 3-20.11, the use of "company" or "companies" applies to Cavalry troops and company teams.

TC 3-20.11 applies to the Active Army, Army National Guard/Army National Guard of the United States and United States Army Reserve unless otherwise stated.

The proponent of TC 3-20.11 is the United States Army Maneuver Center of Excellence. The preparing agency is the United States Army Maneuver Center of Excellence. Send comments and recommendations on DA Form 2028 (*Recommended Changes to Publications and Blank Forms*) to Commander, Maneuver Center of Excellence, Directorate of Training and Doctrine, Doctrine and Collective Training Division, ATTN: ATZK-TDD, 1 Karker Street, Fort Benning, GA 31905-5410; by email to usarmy.benning.mcoe.mbx.doctrine@mail.mil; or submit an electronic DA Form 2028.

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Introduction

The principal audience for TC 3-20.11 is commanders, planners, trainers, and master gunners of maneuver units. TC 3-20.11 provides the details of the integrated weapons training strategy (known as IWTS) structure specifically designed for the maneuver companies and troops of the United States Army. This circular provides the training strategy for the maneuver commander to train, evaluate, and assess their unit's overall proficiency at home station. The maneuver company and troop training strategy include only the critical training events to build readiness at echelon using the integrated weapons training strategy's standard training structure. The standardized strategy synchronizes with the Army's force generation model (sustainable readiness model) and provides detailed training requirements to maneuver units.

The maneuver company and troop training strategy maximize the simulations, training aids, devices, simulators, simulations, and live-fire events capabilities in a systematic manner to increase and sustain Soldier unit proficiency, effectiveness, and lethality. The training strategy is capability based (unit, subordinate unit, and integrated warfighting functions) and maximizes the training resources available across the force. The strategy synchronizes with echelon-based proficiency gates within the sustainable readiness model and meets the training proficiency aim points and standards for a ready and capable force.

The maneuver company and troop training strategy encompass all critical training that builds a unit's ability to move, shoot, and communicate effectively and efficiently. Although the unit conducts other training as part of their training plan, the critical training path includes only those events that are conducted to ensure the maximum experience is achieved or gained by the trained Soldier, subordinate elements, integrated warfighting functions, and the unit.

Higher echelon and subordinate element training strategies are defined in their respective echelon-based training publications as part of the IWTS structure as described in TC 3-20.0.

This training circular describes the training requirements for all maneuver company and troop training events necessary and resourced to achieve proficiency. This TC includes general information concerning multi-echelon training events and opportunities, where appropriate. The terms defined below are used frequently in this TC:

- A *company* is a unit consisting of two or more platoons, usually of the same type, with a headquarters and a limited capacity for self-support (ADP 3-90).
- A *troop* is a company-size unit in a Cavalry organization (ADP 3-90).
- A *company team* is a combined arms organization formed by attaching one or more nonorganic Armor, mechanized Infantry, Stryker Infantry, or light Infantry platoons to a tank, mechanized Infantry, Stryker, or Infantry company, either in exchange for, or in addition to, its organic platoons (ADP 3-90).

The following figure (page xii) illustrates the entire maneuver company and troop training strategy structure. The training strategy described within this publication follows the standard training structure found in TC 3-20.0 and synchronizes with the training principles found in FM 7-0.

	Table I	Table II	Table III	Table IV	Table V	Table VI
	PREREQ	PREREQ	PREREQ	CTP	Coordination/ Practice	LFPG
	Crawl	Crawl	Walk	Run	Run	Run
Company	TEWT	STX-V	STX	FTX	FCX	CALFEX
	Live	Virtual	TADSS	TADSS	Live Fire	Live Fire

Legend			
CALFEX	combined arms live-fire exercise	PREREQ	prerequisite
CTP	collective task proficiency	STX	situational training exercise
FCX	fire coordination exercise	STX-V	situational training exercise-virtual
FTX	field training exercise	TADSS	training aids, devices, simulators, and simulations
LFPG	live-fire proficiency gate	TEWT	tactical exercise without troops

Introduction Figure 1. Company training strategy overview

This TC describes each of the training events for Tables I through VI for the maneuver company and troop. The process of determining if a company-size maneuver unit retains its proficiency rating is included in this TC. Further, this TC provides the guidelines for building integrated training scenarios and events.

CHAPTER FOCUS

The chapters in this TC provide an overview of the training event, the training event definition, the purpose, method, and end state of the training, and a guide to plan, prepare, execute, and assess each event. An additional chapter details methods to manage the proficiency of the maneuver unit once the Soldiers achieve proficiency.

Chapter 1– Table I, Tactical Exercise Without Troops

Chapter 1 describes the company-level tactical exercise without troops (known as TEWT), the purpose, method, and end state of the event based on the commander's objectives. The chapter provides general information for the company commander to plan, prepare, execute, and assess the event using the eight-step training model.

Chapter 2 – Table II, Situational Training Exercise–Virtual

Chapter 2 describes the company-level situational training exercise-virtual (known as STX-V) using virtual training systems. The chapter includes the purpose, method, and end state of the event based on the commander's objectives. It provides general information for the company commander to plan, prepare, execute, and assess the event using the eight-step training model.

Chapter 3 – Table III, Situational Training Exercise

Chapter 3 describes the company-level situational training exercise (known as STX) using various training aids, devices, simulators, and simulations (known as TADSS) and includes the purpose, method, and end state of the event based on the commander's objectives. Chapter 3 provides general information for the company commander to plan, prepare, execute, and assess the event using the eight-step training model. Chapter 3 describes the requirements for training, integrating warfighting functions, and other planning considerations.

Chapter 4 – Table IV, Field Training Exercise

Chapter 4 describes the company-level field training exercise (FTX) using various TADSS and includes the purpose, method, and end state of the event based on the unit's mission-essential tasks. The chapter provides general information for the battalion to plan, prepare, execute, and assess the event using the operations

process. Chapter 4 describes the requirements for training, integrating warfighting functions, and the external evaluation (known as EXEVAL) requirements to meet the collective task proficiency gate.

Chapter 5 – Table V, Fire Coordination Exercise

Chapter 5 describes the company-level fire coordination exercise (known as FCX), and includes the purpose, method, and end state of the event based on the unit's mission-essential tasks and critical synchronization tasks. Chapter 5 provides general information for the battalion to plan, prepare, execute, and assess the event using the operations process.

Chapter 6 – Table VI, Combined Arms Live-Fire Exercise

Chapter 6 describes the company-level combined arms live-fire exercise (known as CALFEX), and includes the purpose, method, and end state of the event based on the unit's mission-essential tasks. The chapter provides general information for the battalion to plan, prepare, execute, and assess the event using the operations process. Chapter 6 describes the requirements for training, integrating warfighting functions, and the EXEVAL requirements to meet the live-fire proficiency gate.

Chapter 7 – Sustaining Company Proficiency

Chapter 7 describes how maneuver units manage their proficiency ratings over time after achieving proficiency. The chapter includes topics for commanders to consider that directly affects their proficiency ratings such as personnel changes, loss of subordinate qualification ratings, evaluation expiration, and changes to their mission.

APPENDICES FOCUS

The various appendices in this TC provide a guide to units as they build their collective training plan to achieve mission-essential task proficiency. They identify—

- The recommended training munitions, pyrotechnics, and simulators to conduct each event.
- Mission-essential task proficiency, gate requirements, and evaluations.
- Warfighting function integration requirements and examples.
- Range facility, TADSS, training area, and other enablers that support the unit's training.

The appendices provide a guide to develop the various training events effectively and efficiently, and outline the minimum tasks, actions, integration, conditions, and standards to achieve.

Appendix A – Ammunition

This appendix describes the recommended training ammunition, pyrotechnics, simulators, and other munitions that support the company training strategy. Appendix A provides a detailed listing of munitions by weapon, system, or platform, and includes various planning considerations.

Appendix B – Building Collective Training

Appendix B describes the integration requirements that support the company training strategy. Appendix B provides planning considerations, scenario requirements, and a detailed list of specific warfighting function elements that should be incorporated into the various training events.

Appendix C – Collective Evaluation

This appendix provides general information to evaluate collective training. Appendix C provides an overview of training and evaluation outlines and their use during collective training. This appendix also establishes and provides the evaluation criteria for live-fire proficiency.

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Chapter 1
Tactical Exercise Without Troops

Chapter 1 discusses the requirements of the exercises in Company, Table I, Tactical Exercise Without Troops (TEWT). This chapter describes how Company, Table I integrates into the unit training plan following the structure of the integrated weapons training strategy (known as IWTS). This chapter provides descriptive guidelines for the exercises listed in Company, Table I, and provides the purpose, method, and end state for the training event.

A tactical exercise without troops (known as TEWT) is a pre-live-fire leader training event of the commander's design. The TEWT focuses on the capabilities, function, standard operating procedures (SOPs), tactics, techniques, and procedures (TTP) that the unit employs to achieve its mission-essential tasks.

EVENT OVERVIEW

1-1. Company, Table I, verifies that the subordinate leaders understand the commander's intent for how the unit operates tactically, and the tactics the commander wishes to employ during tactical operations. Figure 1-1 shows the location of the company TEWT within the overall maneuver company training strategy. The figure details the number of days authorized for the event, as well as the total days of training remaining in the strategy to achieve live-fire proficiency. Figure 1-1 illustrates the collective task proficiency and the live-fire proficiency gates (known as LFPGs) for reference.

	Table I	*Table II*	*Table III*	*Table IV*	*Table V*	*Table VI*
Company	TEWT	STX-V	STX	FTX	FCX	CALFEX
Days Required	**1.0**	1.0	4.0	5.0	1.0	2.0
Training Days Remaining on Critical Path	13.0	12.0	8.0	3.0 CTP	2.0	LFPG

Multi-echelon indicates the training days are provided as part of the company training strategy. STX-V and STX lanes may be executed during similar events for the battalion if training, assessment, and retraining for the company is provided prior to the higher echelon task.

Legend

CALFEX	combined arms live-fire exercise	LFPG	live-fire proficiency gate
CTP	collective task proficiency	STX	situational training exercise
FCX	fire coordination exercise	STX-V	situational training exercise-virtual training environment
FTX	field training exercise	TEWT	tactical exercise without troops

Figure 1-1. Company, Table I, TEWT

1-2. Company, Table I, TEWT, provides the commander with a training event that educates their key leaders and Soldiers, synchronizes unit processes and procedures with the higher organization on those standardized procedures, and assists in validating the unit SOP and their associated TTP as the unit progresses through their unit training plan. Company, Table I, provides commanders with an assessment of their subordinate's understanding of those standards, how they apply to their task and purpose, and how they relate to the higher headquarters mission and function.

1-3. During Company, Table I, TEWT, key leaders must demonstrate knowledge proficiency on their supporting collective tasks and basic tactical tasks, communications skills, and collective engagement techniques through demonstrated performance with a reduced force. The event provides the commander with a means to instruct and reinforce the company SOPs, doctrine concepts, and TTP to achieve mastery of the unit's mission-essential task. Table I is a prerequisite to any company or troop collective live-fire training.

1-4. The purpose of Company, Table I, TEWT, is to provide the commander with an informal assessment of all assigned or attached key leaders (generally staff sergeant and above) on their understanding of how the organization executes their mission essential, critical, or specified tasks to complete the unit's assigned missions.

1-5. The commander uses the TEWT as a resourced event to instruct mission essential and supporting collective tasks to their subordinate units. The TEWT enables the commander to conduct an initial assessment of their unit's understanding of their mission essential, critical, and specified tasks, as well as to determine the quality and effectiveness of the unit SOP. The TEWT provides the commander with a method to assess how well the subordinate units understand their movement and maneuver roles and responsibilities, and how the commander intends to tactically employ the organization required to achieve mission-essential task proficiency.

1-6. Table I is a commander-defined training event that units conduct at a suitable training area with the appropriate equipment, weapons, and platforms. Units complete Table I between T-6 and T-execution (T-X) of the live-fire training event.

Note. Table I is commander-defined, designed, and implemented. This allows the commander to focus on the mission-essential tasks, supporting collective tasks, command training guidance, and other critical training.

1-7. Ninety percent of the subordinate leaders (staff sergeants and above) must successfully complete the training in Table I to the commander's satisfaction in accordance with TC 3-20.0. The members of the organization successfully demonstrated in a live environment, at a reduced tempo, the mission essential, critical, and directed tasks the organization is expected to conduct during combat or deployed operations. Leaders must adequately demonstrate to the commander's satisfaction their knowledge of the functions of the higher headquarters staff, common procedures, drills, battle tasks, and collective tasks required of their rank and experience.

PLANNING CONSIDERATIONS

1-8. The exercise listed in Company, Table I, TEWT, is a rehearsal of how the training element will conduct terrain analysis, unit and weapon emplacement, scheme of maneuver, and operations planning using subordinate leaders. The exercise in Table I is a commander-designed scenario using orders, graphics and control measures, verbal and non-verbal actions, and effective decision-making that specifically teach and train the supporting collective tasks and mission-essential tasks without full unit involvement. The commander's scenario focuses on the critical skills of mission command, integrating warfighting functions, maneuver, fire control and distribution, and synchronization for the unit to achieve proficiency and reinforce its SOPs. The company commander uses the unit's tactical SOPs and the applicable training and evaluation outlines to guide and assess the unit during Table I.

PLAN

1-9. Company, Table I, TEWT, is mandatory for all key leaders (generally, assigned staff sergeants and above) prior to any collective live-fire event where they are—

- Assigned as a member of the company and troop.
- Attached as a member of a specialty unit.
- The key leader of a cross-attachment.

1-10. The TEWT is resourced for three iterations of a single-day event per company-size unit during the fiscal year (active component). Commanders can combine the training days to support their training plan. Leaders should make every attempt to conduct Table I prior to Tables II and III to apply the information learned during Table I appropriately during follow-on training events, reinforcing the unit's SOP across the unit training plan.

1-11. To plan a successful Company, Table I, TEWT, commanders must consider their goals and objectives to achieve overall mission-essential task proficiency. Commanders should be familiar with the event's framework during the planning process as follows:

- Prerequisites. There are no directed prerequisites for Company, Table I. Commanders should include sufficient training time for leaders to instruct their leaders on the contents of the unit SOP, and utilize various other learning events (leader professional development instruction, sand tables, virtual battle space, and so forth) prior to execution. Leaders should reinforce these learning events during squad and platoon level training, which provides subordinate leaders with a common understanding of how the elements integrate into the company or troop-level TEWT.
- Table duration. Company, Table I is conducted between T-6 and T-execution of the company live-fire event.
- Environment and conditions. Units conduct Company, Table I in a live environment that is in a field setting that is typically in an appropriate size training area. This event may include the use of utility vehicles to replicate crew platforms and small units.
- Training days required. Successful completion of Company, Table I may require up to three separate iterations of 1 training day per company. The commander determines the training leading up to the event based on training task requirements found in the Combined Arms Training Strategy (CATS) and the commander's assessment of the unit's level of proficiency. Units may use all authorized training days in one event or create multiple events in any manner the commander deems necessary.
- Frequency. Company, Table I is conducted a minimum of once per year prior to company and troop live-fire training events.
- Throughput. The event includes sufficient time to conduct tactical reviews, discussions, and reduced-tempo execution of the unit's mission-essential tasks and critical supporting tasks.
- Primary and alternate facilities. Commanders should request sufficient training area space for a reduced force, reduced tempo, tactical movement and maneuver to instruct leaders through the unit's execution of their mission-essential tasks and select critical tasks. The training area should easily support full range distances for offensive and defensive operations.

1-12. Table I should focus on the mission-essential tasks and collective tasks that commanders train and evaluate to achieve proficiency. Commanders should create their Table I using the task sets that support the mission-essential tasks they execute during the unit's training plan. This provides the commander with the ability to—

- Validate maneuver unit SOPs and collective TTP.
- Validate subordinate unit or element SOPs, as applicable.
- Focus on critical tasks that directly affect the unit's mission success.
- Ensure the unit understands how warfighting functions integrate into their scheme of maneuver.
- Support command training guidance at platoon and company level early in the training plan.
- Train target hand-off tasks.
- Train commander selected tasks, basic tactical tasks, and enabling tactical tasks.

WARFIGHTING FUNCTION TASKS

1-13. All maneuver company types train and test tasks for Table I. Commanders should focus their training on the tasks indicated in figure 1-2. The tasks listed in figure 1-2 depict how commanders should train and evaluate the warfighting functions throughout the company's collective training events. The warfighting functions are—

- Mission command.
- Movement and maneuver.
- Fire support.
- Intelligence.
- Protection.
- Sustainment.

1-14. Commanders use the warfighting functions to help them exercise command and control. A warfighting function is a group of tasks and systems (people, organizations, information, and processes) united by a common purpose that commanders use to accomplish missions and training objectives. All warfighting functions possess scalable capabilities to mass lethal and nonlethal effects.

Note. Commanders may choose to integrate specific warfighting function tasks during Table I, TEWT that can significantly increase the company's proficiency for Table IV, FTX and Table VI, Combine Arms Live-fire Exercise (known as CALFEX) evaluations. The commander may also elect to integrate additional tasks listed within figure 1-2 that are deemed beneficial to the company training in order to obtain the proficiency level on the desired tasks selected by the commander. In doing so, this enables a unit to maximize training opportunities on commander-selected tasks using a progressive training model needed to achieve the desired end state prior to evaluation.

For example, during a one-day TEWT at a local training site upon issue of the company operation order (OPORD), the commander conducts a backbrief with subordinate leaders on the available indirect fire assets and their capabilities prior to execution of the rehearsal. The unit then rehearses the company's scheme of maneuver plan by walking through each phase of the operation for each subordinate element. During the rehearsal, the commander incorporates a "troops in contact" scenario to reinforce the subordinate leader's ability to execute tactical decision-making during operations. The platoon in contact then coordinates for notional indirect fire support with field artillery assets to defeat the threat injected by the commander. The commander chooses to execute the same scenario for each platoon at a pre-selected phase throughout the rehearsal.

MISSION COMMAND	*SQUAD*	*SECTION and PLATOON*	*COMPANY and TROOP*
Graphics Overlay	Required	Required	Required
OPORD	Required	Minimum 1	Minimum 2
FRAGORD	Optional	Minimum 2	Minimum 4
Conduct a Rehearsal	Required	Required	Required
Operate a Command Post			Required
MOVEMENT AND MANEUVER			
Engineers			Required
Breach Obstacle (Offense)			Required
Integrate Obstacle (Defense)			Required
Direct Fire Support		Required	Required
Employ Snipers			Required
Special Purpose Weapons*	Minimum 1	Minimum 2	Minimum 3
Conduct Quartering Party Activities		Optional	Required
Conduct a Dismounted Tactical Road March*		Required	Required
Conduct a Mounted Tactical Road March**		Required	Required
Occupy an Assembly Area	Optional	Required	Required
Conduct Tactical Movement	Required	Required	Required
FIRE SUPPORT			
Close Air Support			Optional
Attack Aviation			Optional
Field Artillery			Required
Mortars (Company or Battalion)			Required
Air Defense or Counterfire			Optional
INTELLIGENCE			
UAS/UGS			Required
Digital Icon Population		Required	Required
Digital Reports			Required
PROTECTION			
CBRN	Optional	Required	Required
Maintain Operational Security	Required	Required	Required
Perform Field Sanitation Functions	Optional	Optional	Required
Conduct Risk Management	Required	Required	Required
SUSTAINMENT			
CASEVAC	Required	Required	Required
MEDEVAC			Required
Conduct Consolidation and Reorganization	Required	Required	Required
Conduct LOGPAC Support			Required

*Dismounted units only
**Mounted units only

Legend

CASEVAC	casualty evacuation	MEDEVAC	medical evacuation
CBRN	chemical, biological, radiological, and nuclear	OPORD	operation order
FRAGORD	fragmentary order	UAS	unmanned aircraft system
LOGPAC	logistics package	UGS	unmanned ground system

Figure 1-2. Integration of warfighting functions and tasks, Table I, TEWT

TRAIN THE TRAINERS

1-15. Units execute Table I in a variety of ways. Typically, each platoon conducts preparatory training independently prior to the company TEWT. The commander may elect to use Platoon, Table I, and the Company, Table I to train the platoon as a concurrent, multi-echelon event. The primary trainer is the battalion commander and company commander, with the platoon leaders, platoon sergeants, first sergeant, and executive officer providing oversight and assistance as necessary.

1-16. The commander must provide the unit's leadership with the unit SOP, tactical SOP, the selected high-payoff collective tasks for training and evaluation, and their respective training and evaluation outline. The platoon leadership is responsible to train their platoons on why and how the unit conducts the collective tasks to support the unit's mission-essential task.

1-17. Table I provides a method of assessing their subordinate leader's understanding of the unit's SOP, task, purpose, mission-essential tasks, and tactical employment. Leaders use the information in Table I to develop, update, instruct, and evaluate their subordinate and attached Soldiers to fight as a maneuver company within the battalion.

1-18. Units should include the higher headquarters staff and specialty elements (mortars, scouts, sniper teams, and so forth) into the training event when possible. This allows the subordinate leaders to understand the battalion or squadron's staff functions, processes, and procedures to broaden their knowledge of the unit's operations and capabilities.

RECON THE SITE

1-19. The company TEWT requires a training area sufficient in size to support the reduced force at a reduced tempo. The company TEWT should include the ability to walk the terrain of both Company, Table IV, FTX and Table VI, CALFEX for the upcoming training events. Depending on the method used to instruct and assess the key leaders on the execution of their critical tasks, commanders should consider using—

- All-terrain vehicles.
- Pyrotechnics, markers, and simulators.
- General instruction classroom facilities located near the training area for terrain board, instruction, and after action reviews (AARs).

1-20. Once the method of training and evaluation is established, commanders should secure the training location and appropriate training aids, devices, simulators, and simulations (known as TADSS), equipment, or systems that enhance the training event. Units must confirm the training location is sufficient to accommodate the number of Soldiers and vehicles attending training, multiple iterations, or rotations, and provide a retraining capability.

ISSUE THE ORDER

1-21. Commanders can issue an OPORD, warning order (WARNORD), or use the training schedule as necessary. The order should include the list of tasks that the commander plans to assess during the event, as well as the method of maneuver, resources required, and specific instructions to the subordinate key leaders.

1-22. Commanders should provide sufficient time for subordinate leaders to effectively train those tasks and skills prior to the TEWT, and ensure the appropriate training resources are available and accessible. Upon receipt, subordinate leaders that have SOPs for their organizations must ensure their procedures support and complement the higher headquarters' publication.

1-23. Typically, the unit training schedule provides all the information required for the subordinate units to initiate movement and begin planning their preparatory training as appropriate. Commanders provide WARNORDs and fragmentary orders (FRAGORDs) during the company training meetings as necessary.

REHEARSE

1-24. The unit conducts a rehearsal of the TEWT with all training resources, materials, and equipment available. During the rehearsal, commanders ensure their unit has sufficient time to train to the specified standard. Commanders should plan terrain board rehearsals, map reconnaissance, and other low-impact preparatory training to support the rehearsal.

1-25. The rehearsal also provides the commander with an opportunity to verify that the tasks selected for Table I are consistent with the tasks, actions, and TTP of the higher organization. The rehearsal provides an opportunity for the commander to synchronize the unit SOP with the tactical SOP of their gaining unit for maneuver units that are expected to cross-attach to an external unit.

1-26. Use of a terrain model or sand table is encouraged to ensure the Soldiers have a comprehensive understanding of the task, their specific actions, and those of their squad, section, or platoon as part of the larger organization.

1-27. Regardless of the formation type, the SOP instruction must include the procedures, tasks, or assignments to conduct the supporting collective tasks, critical tasks, and tactical reporting requirements for the unit to build proficiency prior to the situational training exercise-virtual (known as STX-V), situational training exercise (known as STX), FTX, and live-fire events during the upcoming training density.

EXECUTE

1-28. Table I consists of a commander-developed assessment. The method of the assessment is at the commander's discretion. Units complete Table I between T-6 through T-X (active component and reserve component).

1-29. Units are resourced 3 total training days to conduct the TEWT during the fiscal or training year. The commander may combine these days into one single TEWT or multiple events based on their training plan.

EVALUATE THE TRAINING

1-30. Commanders should follow the appropriate training and evaluation outlines as a guide to the assessment of their subordinate key leaders. Used in conjunction with the unit SOP, the training and evaluation outlines identify critical shortfalls in the execution of the supporting collective tasks that impede the unit's success.

1-31. Soldiers within the organization and those attached to it receive the training and evaluation on their understanding, comprehension, and retention of the information. At the completion of Table I, key leaders discuss with their senior leader any shortcomings, gaps, or disconnects between SOPs by echelon and determine any corrective actions.

1-32. Once Table I is completed, the small unit SOP (with corrections as necessary) is provided to the unit commander for review and record. The commander identifies the key leaders that require additional training and the specific tasks that require attention.

RETRAIN

1-33. Leaders that fail to demonstrate the minimum understanding of the unit SOP and the tasks associated with the mission-essential tasks and how they support those tasks are provided additional training. Commanders assess each subordinate unit, identify specific leader's training requirements, and direct a re-training plan as necessary. Commanders re-assess subordinates upon completion of the retraining efforts through a method of their choosing.

1-34. During retraining, the units should focus on tasks where the leaders failed to demonstrate knowledge or proficiency based on the training and evaluation outlines and unit SOP. Units should also consider retraining associated, supporting collective tasks and drills such that the leader's understanding is reinforced by using a holistic scenario. This enables the leader to develop a more complete understanding of the task and performance measures and highlights critical second and third-order effects.

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Chapter 2

Situational Training Exercise—Virtual

This chapter describes the requirements of Company, Table II, Situational Training Exercise-Virtual (STX-V), and how the exercises integrate into the unit training plan following the structure of the IWTS (see figure 2-1). Chapter 2 provides descriptive guidelines for Company, Table II, and provides the purpose, method, and end state for the training event.

The STX-V is a short, scenario-driven, mission-oriented tactical exercise that trains a single, collective task or a group of related battle drills and collective tasks within a virtual environment.

EVENT OVERVIEW

2-1. STX-Vs provide the leader with a method to train and practice specific tasks using doctrinally approved TTP, and reinforce the use and validation of their unit SOPs. Although mission oriented (based on the higher headquarters OPORD), a STX-V is not used to train all tasks required for an operation. STX-Vs require leader tasks (such as planning, controlling, and reporting) that build unit proficiency that enables execution of mission essential, supporting, and critical tasks on demand during operations.

2-2. Company, Table II, STX-V (see figure 2-1) is a pre-live fire, virtual environment training event that serves to build unit proficiency in specific, commander determined critical tasks that directly support the unit's mission-essential tasks. The STX-V provides the commander with multiple, virtual iterations of missions and tasks that reinforce the TTP the unit employs to execute its missions. Commanders use their unit SOP and the appropriate training and evaluation outlines to develop subordinate leaders' and elements' movement and maneuver, and to a limited degree, their marksmanship lethality.

	Table I	***Table II***	***Table III***	***Table IV***	***Table V***	***Table VI***
Company	TEWT	STX-V	STX	FTX	FCX	CALFEX
Days Required	1.0	1.0	4.0	5.0	1.0	2.0
Training Days Remaining on Critical Path	13.0	12.0	8.0	3.0 CTP	2.0	LFPG
Multi-echelon indicates the training days are provided as part of the company training strategy. STX-V and STX lanes may be executed during similar events for the battalion provided that training, assessment, and retraining for the company is provided prior to the higher echelon task.						
Legend						
CALFEX	combined arms live-fire exercise		LFPG	live-fire proficiency gate		
CTP	collective task proficiency		STX	situational training exercise		
FCX	fire coordination exercise		STX-V	situational training exercise-virtual training environment		
FTX	field training exercise		TEWT	tactical exercise without troops		

Figure 2-1. Company, Table II, STX-V

2-3. STX-V events use commander-developed scenarios in a virtual environment that includes the following:

- Soldiers, crews, and subordinate units.
- Employment of virtual simulations or weapons and systems.
- Training at a real or accelerated tempo.
- Virtual training space.
- Exceptional after action review (AAR) capability.

PURPOSE

2-4. The purpose of the exercise in Company, Table II, STX-V ensures the unit's assigned and attached subordinate elements demonstrate proficiency in a virtual environment of commander-selected, critical, supporting collective tasks. STX-V enables the unit to execute their mission-essential tasks properly. Company, Table II, provides a virtual learning environment for leaders to synchronize and execute fire and maneuver, integrate indirect and direct fires, execute critical tasks, and complete various combat reporting requirements prior to conducting the tasks in a live environment.

2-5. The exercises in Company, Table II, STX-V serve as a prerequisite for all collective, company-level, live-fire events. The event may be integrated into a higher echelon constructive training event, such as a command post exercise or fire coordination exercise (known as FCX).

METHOD

2-6. The method of the exercise in Table II, STX-V uses a simulated, virtual environment that is immersive in nature to train, assess, and retrain collective units on tactical maneuver, movement, and engagement techniques at a reduced, full, or accelerated tempo. The exercise in Table II uses commander-defined scenarios to replicate the appropriate stimulus to subordinate units. The scenario inspires a reaction from the units that includes the timely and accurate execution of their mission essential, critical, collective, and individual tasks. The commander-designed scenario includes sufficient tactical stimulus to train and evaluate subordinate units operating as a cohesive formation in a virtual battlespace.

2-7. The exercise in Table II, STX-V is required for each assigned or attached subordinate unit, conducted between T-6 and T-X of the live-fire training event or density. For formations that do not have a simulation system, commanders should use the time to conduct the training in a live environment at a reduced tempo with the formation using their assigned equipment.

END STATE

2-8. In a virtual environment, the company, with its subordinate assigned or attached elements, has successfully demonstrated their ability to execute mission essential, critical, or directed tasks or battle tasks that the organization is expected to conduct during combat or deployed operations. The commander successfully instructs the mission essential and supporting collective tasks, validates the subordinate unit's SOP, reinforces previous mission-essential task training, and builds confidence with the unit by integrating warfighting functions and enablers.

2-9. The commander is satisfied with their subordinate's ability to execute all supporting collective and battle tasks that directly support the unit's mission-essential tasks. The unit's SOPs are updated as appropriate.

PLANNING CONSIDERATIONS

2-10. The exercise listed in Company, Table II, STX-V, is a simulation-based demonstration of employing the element to its primary capabilities. The exercise is a commander-designed scenario using authorized simulations systems that specifically teach and train the supporting collective tasks and mission-essential tasks for the unit. The commander's scenario focuses on the critical skills of mission command, integrating warfighting functions, maneuver, fire control and distribution, and synchronization for the unit to achieve proficiency. The company commander uses the unit's tactical SOPs and the applicable training and evaluation outlines to guide and assess the unit during Table II. STX-V.

2-11. The following paragraphs provide a guide to developing Table II, STX-V events using the eight-step training model. Units typically develop and execute this training with limited support from their higher headquarters.

PLAN

2-12. Table II, STX-V is for all subordinate units and elements within the company prior to any collective live-fire event. This training event is required for all subordinate units that are assigned or attached to the company as a—

- Maneuver element.
- Enabling specialty unit.
- Warfighting function small unit.

2-13. Each company is authorized a minimum of 5 training days (40 hours) per year to conduct Table II, STX-V training. Leaders should make every attempt to conduct a minimum of one 8-hour, single day iteration of Table II, STX-V prior to Table III, Situational Training Exercise (STX).

Note. The company SOP should integrate and directly support the battalion and brigade SOPs. These SOPs, maneuver doctrine, and the associated training and evaluation outlines are primary references during the execution of Company and Troop, Tables I through VI.

2-14. For planning purposes, commanders should consider the following information when building their Table II, STX-V scenario for training:

- Prerequisites. The Table II exercise does not have any directed prerequisites. Commanders may elect to conduct Table II as a multi-echelon event and integrate Platoon Table II, Platoon STX-V to maximize the training benefit and resources. It is recommended that subordinate leaders (squad and platoon) participate in the company and troop-level TEWT prior to execution of their Table II, STX-V training.
- Table duration. At least one 8-hour iteration of Table II is conducted between T-6 and T-execution of the company-level live-fire event. Companies should maximize their use of their available virtual systems in garrison prior to entering the field portion of their training plan.
- Environment and conditions. Units conduct Table II in the virtual environment on an approved virtual or simulations system. Units that do not have a primary virtual system may conduct Table II with TADSS in a live environment in a suitable size training area. When possible, units should replicate the same terrain and environment that will be utilized during the live-fire events during their simulation training.
- Training days required. Units are provided a minimum of 5 training days per company for collective simulations training. Training time is provided across the fiscal year or training year. Commanders must include at least one, 8-hour iteration of Table II between T-6 and T-X.
- Frequency. Table II is conducted prior to company live-fire training as directed by the higher headquarters. Most units complete Table II once per year, unless multiple company-size, live-fire densities are scheduled across the fiscal year or training year. The CATS resources 5, 8-hour training days for company-level STX-V events.
- Throughput. Commanders should use systems that accommodate their entire organization with associated attached enablers to maximize the virtual system's capabilities.
- Primary and alternate virtual systems. Figure 2-2, page 2-4, lists primary and alternate virtual systems that support tactical scenarios.

BCT	*Organization Type*	*CCTT*	*RVTT*	*VBS3*	*TADSS (DEVICE-BASED)*
ABCT	Armor Company	PRIMARY		ALTERNATE	
	Mechanized Infantry Company	PRIMARY		ALTERNATE	
	Reconnaissance Troop	PRIMARY		ALTERNATE	
SBCT	Rifle Company			PRIMARY	ALTERNATE
	Weapons Company		PRIMARY	ALTERNATE	
	Reconnaissance Troop (Motorized)		PRIMARY	ALTERNATE	
	Reconnaissance Troop (Dismounted)				PRIMARY
IBCT	Rifle Company			ALTERNATE	PRIMARY
	Weapons Company		PRIMARY	ALTERNATE	
	Reconnaissance Troop (Dismounted)			ALTERNATE	PRIMARY
	Reconnaissance Troop (Motorized)		PRIMARY	ALTERNATE	ALTERNATE

Note. TADSS, no system available. Units execute with laser-based (device-based), with blanks and appropriate adapters, or dry with limited pyrotechnics.

Legend

ABCT	Armored brigade combat team	RVTT	reconfigurable vehicle tactical trainer
BCT	brigade combat team	SBCT	Stryker brigade combat team
CCTT	close combat tactical trainer	TADSS	training aids, devices, simulations, and simulators.
IBCT	Infantry brigade combat team	VBS3	virtual battle space

Figure 2-2. Primary and alternate virtual systems by unit

2-15. Table II trains the mission-essential tasks and supporting collective tasks critical to the tactical success of the company. Commanders should create their Table II using the universal task list and task sets that support the company mission-essential tasks. Focus should be on critical tasks necessary to achieve proficiency when executing their mission-essential tasks. This provides the commander with the ability to—

- Focus on critical tasks that directly affect the unit's mission success.
- Ensure the unit understands how warfighting functions integrate into their scheme of maneuver.
- Support command training guidance at the platoon and company level early in the training plan.

SCENARIO REQUIREMENTS

2-16. Commanders develop STX-V scenarios based on their assessment of the unit's tactical proficiency, command training guidance, and critical collective tasks that directly affect the success of the company to accomplish its mission. Commanders select all the tasks trained during Table II and create a virtual training scenario that replicates the threat and sets realistic conditions to replicate the appropriate initiation of the collective tasks.

2-17. The virtual system's operating staff develops the scenario to leverage the training system's variety of capabilities. Commanders include enablers and specialty units available within the battalion into their scenarios when practical.

2-18. Commanders design their scenarios in multiple lanes, phases, or stages, where each portion of the scenario trains one or two supporting collective tasks of a mission-essential task in a progressive manner. Successful completion of each lane (based on the commander's assessment using the SOP and training and evaluation outlines as guides) moves the formation tactically to the next lane.

2-19. Commanders brief the training audience on the tasks for each lane for Table II. This builds their proficiency such that they execute the tasks based on tactical situations on demand based intuitively during Tables IV, V, and VI, respectively.

2-20. Table II scenarios include training on commander-selected tasks specific to the warfighting functions listed in figure 2-3, page 2-6. Commanders integrate these tasks as appropriate across the STX-V lanes as logically and as frequently as practical. Commanders should include multiple repetitions of those selected tasks during both the day and night phase of the training scenario.

2-21. Each warfighting function includes optional or required tasks that commanders integrate into their training scenario. For special purpose weapons, commanders determine the number of iterations the special purpose weapons are integrated for both day and night. Commanders select from the special purpose weapons available to them. The commanders determine the use of the special purpose weapons depending on the scenario.

2-22. Commanders integrate the tasks as appropriate where deemed most beneficial. The units integrate warfighting functions during limited and unlimited visibility conditions across the entire Table II training scenario event, not on each maneuver task trained.

Note. Commanders may choose to integrate specific warfighting function tasks during Table II, STX-V that can significantly increase the company's proficiency for Table IV, FTX and Table VI, CALFEX evaluations. The commander may also elect to integrate additional tasks listed within figure 2-3, page 2-6, that are deemed beneficial to the company training to obtain the proficiency level on the desired tasks selected by the commander. In doing so, this enables a unit to maximize training opportunities on commander-selected tasks using a progressive training model needed to achieve the desired end sate prior to evaluation.

For example, during a five-day, Table II, STX-V with the close combat tactical trainer, the commander selects call for indirect fire during the company attack day phase where they identify a subordinate platoon receiving priority of fires. On day three of the STX-V, the commander includes training for each subordinate platoon to conduct a call-for-fire illumination mission. Call for fire is incorporated into the training during the STX-V day operations (high explosive [HE] and smoke) and night operations (illumination).

MISSION COMMAND	*SQUAD*	*SECTION and PLATOON*	*COMPANY and TROOP*
Graphics Overlay	Required	Required	Required
OPORD	Required	Minimum 1	Minimum 2
FRAGORD	Optional	Minimum 2	Minimum 4
Conduct a Rehearsal	Required	Required	Required
Operate a Command Post			Required
MOVEMENT AND MANEUVER			
Engineers			Required
Breach Obstacle (Offense)			Required
Integrate Obstacle (Defense)			Required
Direct Fire Support		Required	Required
Employ Snipers		Optional	Required
Special Purpose Weapons*	Minimum 1	Minimum 2	Minimum 3
Conduct Quartering Party Activities		Optional	Required
Conduct a Dismounted Tactical Road March*		Required	Required
Conduct a Mounted Tactical Road March**		Required	Required
Occupy an Assembly Area	Optional	Required	Required
Conduct Tactical Movement	Required	Required	Required
FIRE SUPPORT			
Close Air Support			Optional
Attack Aviation			Optional
Field Artillery			Required
Mortars (Company or Battalion)			Required
Air Defense or Counterfire			Optional
INTELLIGENCE			
UAS/UGS			Required
Digital Icon Population		Required	Required
Digital Reports			Required
PROTECTION			
CBRN	Required	Required	Required
Maintain Operational Security	Required	Required	Required
Perform Field Sanitation Functions	Optional	Optional	Required
Conduct Risk Management	Required	Required	Required
SUSTAINMENT			
CASEVAC	Required	Required	Required
MEDEVAC			Required
Conduct Consolidation and Reorganization	Required	Required	Required
Conduct LOGPAC Support			Required

*Dismounted units only
**Mounted units only

Legend

CASEVAC	casualty evacuation	MEDEVAC	medical evacuation
CBRN	chemical, biological, radiological, and nuclear	OPORD	operation order
FRAGORD	fragmentary order	UAS	unmanned aircraft system
LOGPAC	logistics package	UGS	unmanned ground system

Figure 2-3. Integration of warfighting functions and tasks, Table II, STX-V

TRAIN THE TRAINERS

2-23. Units execute Company, Table II in a variety of ways. Typically, each platoon conducts training independently prior to the Company, Table II. The primary trainers are the battalion and company commander with the platoon leaders, platoon sergeants, first sergeant, and the executive officer providing assistance as necessary. The battalion commander assesses the performance of the company and the company or troop commander assesses the subordinate unit's performance.

2-24. The commander must ensure the subordinate platoon leadership has the unit SOP or tactical SOPs, the selected high-payoff collective tasks for training and evaluation, and their respective training and evaluation outlines. The platoon leadership is responsible to train their platoons on why and how the unit conducts the supporting collective and battle tasks to support the unit's mission-essential task.

2-25. Training in preparation for Table II is designed for the section or platoon key leaders to instruct the contents and purpose, and how the Soldier uses the unit's tactical SOPs. Each assigned or attached member of the small unit is evaluated on the content, procedures, actions, and use of the unit SOP through their demonstrated performance of those tasks within the simulation system.

2-26. Commanders conduct a briefing of the event to illustrate how the unit should execute the STX-V scenarios. Units prepare the trainers by providing the following:

- Commander's training objectives.
- Scenario and lane concept with collective tasks to be trained.
- Rules of engagement for the training event.
- Review of the training and evaluation outlines of all the tasks to be trained.
- Review of supporting and individual tasks that directly support or complement the supporting collective tasks.
- Information and timing of scenarios or lanes where key warfighting functions are integrated.
- Risk assessment.
- Identify supporting doctrinal publications for use as primary references.

RECON THE SITE

2-27. Company, Table II, STX-V uses an authorized virtual training system. Commanders schedule the facility as far in advance as practical following the respective installation's policies and procedures. Once the method of training and evaluation is established, commanders should secure the training location and appropriate TADSS, equipment, or systems that enhance the training event.

2-28. Once scheduled, the commander and platoon leaders conduct a reconnaissance of the training facility to—

- Verify sufficient systems are available and operational to support the entire unit.
- Ensure multiple iterations or rotations through the scenario can be achieved with appropriate retraining opportunities.
- Ensure sufficient administrative areas are available to support group discussions, briefings, and AARs (such as a sand table or terrain board, terrain board kits, overhead projector with screen, digital communications system capabilities, and so forth).
- Confirm appropriate warfighting function integration capabilities into the concept of the training lanes (see figure 2-4, page 2-9).
- Verify the simulation system has the ability to incorporate engineers, direct fire support, special purpose weapons, and sniper teams into the scenario as the commander requires. The simulation may not support those functions with an immersive capability but should have the ability to provide notional actions with frequency modulation (FM), analog, or digital means to create the appropriate level of coordination, communication, and decision-making stimulus. (Movement and maneuver.)
- Identify the level of fire support that can be included into the training scenario. This includes integration of the company and battalion mortar assets, as well as any fire support provided from within the brigade combat team (BCT). Most facilities provide a fire support station that the fire

support officer (FSO) or fire support team (FIST) can provide notional support through proper call-for-fire actions. The FSO or FIST can provide fires synchronization through the exercise control center or instructor and operator station to enhance the scenario's combat realism. (Fire support.)

- The unit should identify the capabilities of the simulation system to incorporate analog and digital reporting, information, and icon populations. The higher headquarters battalion or brigade intelligence staff officer can serve to provide the scenario a threat template that is appropriate to the unit's mission and build a more robust and effective scenario. The supporting military intelligence company can provide notional or simulation injected feeds replicating Shadow or other unmanned systems for scenario development, as appropriate. (Intelligence.)
- Verify the facility has the ability to support the unit's training while in a chemical environment, based on the scenario design. For immersive systems, verify chemical, biological, radiological, and nuclear (CBRN) protective systems that can be incorporated or must be provided notionally. Chemical alarms, mission-oriented protective posture, vehicle system CBRN system simulated capabilities, and so forth should be identified. (Protection.)
- Verify casualty evacuation and medical evacuation (MEDEVAC) notional capabilities in support of the training scenario. Units mostly include only FM reporting and request procedures for training purposes. (Sustainment.)
- Identify command post capabilities of the facility, as well as analog and digital systems integrated into the simulations suites. Identify any external tactical operations center (TOC) configuration that can be incorporated for higher headquarters staff integration, as appropriate. (Mission command.)
- Verify simulation system or facility can replicate the unit's desired terrain and environmental conditions.

MOVEMENT AND MANEUVER		*Recon the Training Site to Accommodate*
ENGINEERS	REQUIRED	Engineers should provide their designated leadership for the training event to provide simulations instructor and operator support, as appropriate.
BREACH OBSTACLE (OFFENSE)	MISSION DEPENDENT	Engineer leadership should develop offense and defense scenario support at the simulation's instructor or operator or exercise control center station.
INTEGRATE OBSTACLE (DEFENSE)		
DIRECT FIRE SUPPORT	REQUIRED	For simulation systems that do not provide dismounted Soldier stations, the units should provide sufficient Soldiers to conduct notional FM traffic or role players, as the scenario dictates.
SPECIAL PURPOSE WEAPONS		
FIRE SUPPORT		
CLOSE AIR SUPPORT	REQUIRED	Units can coordinate for JTAC support for call for fire mission to close air support and attack aviation. JTAC personnel can assist evaluation of proper call-for-fire procedures as necessary.
ATTACK AVIATION		
FIELD ARTILLERY		The unit's FSO or FIST provides evaluation of call-for-fire procedures. Units can include mortar sections or platoons establish firing positions and conduct drills on demand while supporting the unit's STX-V scenarios.
MORTARS (COMPANY OR BATTALION)		
ELECTRONIC WARFARE ASSETS	OPTIONAL	Units request higher level EW capabilities at commander's discretion. Unit employs organic or notional EW systems to build SA. Unit leaders request and incorporate EW information into their maneuver planning and operations. This provides EW personnel within the brigade with valuable training opportunities during maneuver operations.
INTELLIGENCE		
UAS/UGS*	REQUIRED	Brigade Shadow Team can provide notional support via FM with limited simulated video feed in support of intelligence operations during the scenario.
DIGITAL ICON POPULATION		When available, the unit should include reporting mission situation reports, contact reports, far target locate tasks, and other digital messaging during the scenarios.
DIGITAL REPORTS		
PROTECTION		
CBRN	REQUIRED	Units should include CBRN tasks to their scenarios to exercise the unit's ability to function in a degraded capacity.
AIR DEFENSE OR COUNTERFIRE	OPTIONAL	The unit's FSO or FIST can provide notional air defense and radar function to support the unit's scenario as necessary.
SUSTAINMENT		
CASEVAC	REQUIRED	Units are required to rehearse their CASEVAC and MEDEVAC TTP to verify their SOPs during STX-V. Units should include the higher headquarters' medical platoon to assist as appropriate.
MEDEVAC		
MISSION COMMAND		
OPORD	2 MINIMUM	Units must exercise their ability to send and receive OPORD, FRAGORDs, and overlays in an administrative role, as well as during the training scenarios via analog or digital means.
FRAGORD	4 MINIMUM	
GRAPHICS OVERLAY	REQUIRED	

Legend

CASEVAC	casualty evacuation	MEDEVAC	medical evacuation
CBRN	chemical, biological, radiological, and nuclear	OPORD	operations order
EW	electronic warfare	SA	situational awareness
FIST	fire support team	SOP	standard operating procedure
FM	frequency modulation	STX-V	situational training exercise-virtual
FRAGORD	fragmentary order	TTP	tactics, techniques, and procedures
FSO	fire support officer	UAS	unmanned aircraft system
JTAC	joint terminal attack controller	UGS	unmanned ground system

Figure 2-4. Warfighting function integration, examples

ISSUE THE ORDER

2-29. Commanders can issue an OPORD, a WARNORD, or use the training schedule as necessary. The training unit must ensure all supporting staff or enablers have sufficient time for coordination and preparation prior to the training event. WARNORDs to external organizations must include sufficient reaction time for the appropriate personnel and equipment. The WARNORD should include the appropriate tasks, required leaders, and equipment needed, as well as the unit's training timeline including walk-throughs, rehearsals, and AARs.

2-30. The order should include the list of tasks to evaluate during the event, as well as the method of evaluation. Commanders should provide sufficient time for subordinate leaders to train tasks and skills, and ensure the appropriate training resources are available and accessible. Upon receipt, subordinate leaders that have SOPs for their organizations must ensure their procedures support and complement the higher headquarters publication.

REHEARSE

2-31. The unit conducts a rehearsal of the training and evaluation event with all training resources, materials, and equipment available. During the rehearsal, commanders ensure their unit has sufficient time is provided for their unit to train to the specified standard including AARs and retraining and validating any optional scenarios that increase complexity when warranted.

2-32. The rehearsal provides the commander with an opportunity to verify the tasks selected for Table II are consistent with the tasks, actions, and TTP of the higher organization. For maneuver units that are expected to cross-attach to an external unit, the rehearsal provides an opportunity for the commander to synchronize the unit SOP with the tactical SOP of their gaining unit or attached personnel or organizations.

2-33. Units should rehearse the training event from start to finish, and confirm—

- Training scenarios are available to the facility instructor and operators.
- Proofing the scenarios.
- Analog and digital systems of the training facility are available and accessible, and how any external systems integrate into the event execution.
- Additional observer-controller/trainer (known as OC/Ts) and required training support packages to enable multiple iterations.
- Appropriate doctrinal publications are available for reference.
- Sufficient administrative areas are available.
- AAR capabilities are reviewed, including—
  - Play-back capability (audio, video, digital mapping).
  - Graphic overlays.
  - Terrain boards and sand tables.
  - Integrated warfighting function capabilities (live and simulation).
  - Process for conducting direct fire support.
  - Methods and actions required to provide fire support.
  - Method of providing attack aviation and close air support (CAS) during the scenario, as required.
- Process used to incorporate intelligence activities into the scenario.
- Sufficient immersive training stations are available and operational to support the training audience.
- Location of retraining for subordinate units as necessary.
- Any uniform requirements or considerations required by the facility.
- Reproduction capabilities are at the facility particularly printing capabilities to support the evaluation process.

2-34. Once the unit completes the walk-through and rehearsal, the commander makes necessary adjustments to the plan and issues FRAGORDs as necessary.

EXECUTE

2-35. When the unit arrives at the training location, they should reduce the amount of administration time as much as possible. When the entire unit is available at the training location, the unit should—

- Conduct a safety briefing for the training event.
- Provide a conduct of the event briefing to establish the sequence of events for the training day.
- Conduct any simulations training required by the facility to operate the system.
- Transition to the proper uniform for the training event.
- Occupy the appropriate simulations stations or integrated warfighting function workstations.
- Assign OC/Ts as appropriate.
- Issue the OPORD for the training mission.
- Execute the training scenario.

2-36. As the STX-V scenarios are generally built in a progressive manner, the unit executes simulation training lanes progressively. As the commander directs, the training unit conducts informal AARs of each progressive scenario within the training mission. Once the training unit completes the mission through a specific training objective or phase within the operation, the commander conducts a formal AAR prior to issuing a FRAGORD for the next mission or mission task.

2-37. During training, the assigned OC/T, executive officer, and first sergeant review the subordinate unit's performance following the unit SOP, prescribed TTP, and the appropriate training and evaluation outlines.

2-38. Units should increase the analog and digital stimulus to the training units to increase the complexity of the training event based on their observations. Commanders should sustain the tempo of the events to reinforce the need to execute supporting collective tasks rapidly on demand rather than with a canned approach to training.

EVALUATE THE TRAINING

2-39. Table II is a prerequisite for the unit to conduct along with the associated subordinate and attached elements. The unit should include all assigned and attached Soldiers in the training event based on how the commander determines the unit will fight to support the combatant commander. The intent of Table II is to train the organization, its subordinate units, and the attached elements to the unit on supporting collective tasks that the commander deems critical to their success.

2-40. Periodically, after training scenarios are complete, the commander directs the unit to conduct—

- An informal AAR, facilitated by the assigned OC/T, commander, executive officer, and first sergeant, as appropriate.
- A formal AAR led by the commander using the training notes provided by the OC/Ts, executive officer, first sergeant, the facility instructor and operators, and others.

2-41. With the input from the OC/T and unit leadership, the commander provides retraining opportunities as necessary, including additional scenarios. At the completion of Table II, key leaders discuss with their senior leader any shortcomings, gaps, or disconnects between SOPs by echelon, and determine any corrective actions.

2-42. Observer and controllers as trainers should provide clear and articulate comments and insight on the positive and negative actions of the subordinate units they observed. OC/Ts use the training and evaluation outlines to guide them through the evaluation process and use the doctrinal publications to support their comments.

2-43. The OC/T and unit leadership should review the training and evaluation outlines, training notes, and observations to determine which tasks require additional attention through the remainder of the training density. They also can identify where additional complexities and tactical dilemmas can be induced during training where mastery has been demonstrated.

2-44. The commander should share the overall performance of the unit, including the observations with the entire training unit. This allows the subordinate units to learn from other unit's best practices, procedures, and tactics, as well as from their shortcomings or mistakes. The commander should identify leaders within

the organization that demonstrated superior performance and tactical competence by assigning them as OC/Ts during future training events, internal and external to the organization.

2-45. At the completion of Table II, commanders, executive officers, and first sergeants should gain insight to where their unit's SOPs are working and where they need additional attention. If time is available, commanders should capture where the SOPs require attention, update, and provide those changes or revisions to the unit prior to executing any live-fire event. Table II provides a simulated tactical experience for the unit and provides clear indications where SOP functions need improvement.

RETRAIN

2-46. Commanders identify the unit or subordinate unit that requires retraining of specific tasks during the AAR with input from the OC/Ts, executive officer, first sergeant, attached leaders, and the facility instructor or operators. Once the commander identifies the retraining needs of the unit, they should execute a retraining event of the scenario. This may consist of—

- The entire company executing the training scenario again.
- A select subordinate unit executing the training scenario.
- Rotating subordinate units through different mission tasks to support the supporting collective task.
- Minor tactical adjustments for the unit or subordinate units. The commander may opt to discuss different methods to complete the task followed by backbriefs using terrain models or sand tables rather than executing the simulation scenario.

2-47. Once the commander is satisfied with the unit's demonstrated performance, the commander should review the unit SOP and TTP for required updates, revisions, or modifications again. The commander should assess which components of the unit's SOP and TTP need attention during the upcoming STX lanes conducted during Table III.

Chapter 3

Situational Training Exercise

This chapter describes the requirements of Company, Table III, Situational Training Exercise (STX) and how they integrate into the unit training plan following the structure of the IWTS. Chapter 3 provides descriptive guidelines for the Company, Table III and provides the purpose, method, and end state for the training event.

STXs are short, scenario-driven, mission-oriented tactical exercises that train a single collective task (training and evaluation outlines) or a group of related battle drills and collective tasks (training and evaluation outlines), typically executed on designated training lanes. STXs provide the leader with a method to train using doctrinally approved tactics and techniques.

EVENT OVERVIEW

3-1. Unlike a battle drill, a STX does not establish the method of execution, but rather the training audience's leadership works through tactical dilemmas while executing mission-essential tasks. STXs may be modified based on the factors of mission, enemy, terrain and weather, troops and support available-time available, civil considerations (METT-TC). STXs typically incorporate live opposing forces (OPFORs) that provide a challenging, realistic, and situationally reactive, dynamic threat to the scenario.

3-2. Individual groups of related tasks are trained in STX lanes. Multiple lanes are used to build proficiency in a progressive manner during Company, Table III, STX (see figure 3-1). There is no limit to the number of lanes a unit can include while performing Company, Table III, STX.

	Table I	***Table II***	***Table III***	***Table IV***	***Table V***	***Table VI***
Company	TEWT	STX-V	STX	FTX	FCX	CALFEX
Days Required	1.0	1.0	4.0	5.0	1.0	2.0
Training Days Remaining on Critical Path	13.0	12.0	8.0	3.0 CTP	2.0	LFPG
Multi-echelon indicates the training days are provided as part of the company training strategy. STX-V and STX lanes may be executed during similar events for the battalion provided that training, assessment, and retraining for the company is provided prior to the higher echelon task.						
Legend						
CALFEX	combined arms live-fire exercise		LFPG	live-fire proficiency gate		
CTP	collective task proficiency		STX	situational training exercise		
FCX	fire coordination exercise		STX-V	situational training exercise-virtual training environment		
FTX	field training exercise		TEWT	tactical exercise without troops		

Figure 3-1. Company, Table III, STX

3-3. Company, Table III, STX is a pre-live fire, live environment training event that serves to build unit proficiency in specific, commander determined critical tasks that directly support the unit's mission-essential tasks. Company, Table III provides the commander with multiple progressive iterations of supporting collective tasks that reinforce the TTP the unit employs to execute its mission-essential tasks. Commanders use their unit SOP and the appropriate training and evaluation outlines to develop subordinate leader's and element's movement and maneuver, and to a limited degree, their marksmanship lethality (TADSS-based).

3-4. STXs use commander developed scenarios in live environments using TADSS that include—

- Soldiers, crews, and units with their assigned equipment, weapons, systems, and platforms.
- Employment of their assigned weapons and systems with supported laser-based TADSS.
- Training at a combat-realistic tempo.
- A live environment training area sufficient in size for offensive movement and maneuver.

PURPOSE

3-5. The STX ensures the unit, with its assigned and attached subordinate elements, demonstrates mission-essential task and supporting collective task proficiency in a live environment. The unit synchronizes and executes fire and maneuver, integrates indirect and direct fires, conducts critical tasks, and completes various combat reporting requirements prior to conducting the tasks under live-fire conditions.

3-6. STX lanes provide focused training on critical supporting collective and battle tasks that directly support the unit's mission-essential tasks. They enable the unit to execute those trained tasks based on the tactical situations and dilemmas presented during the FTX.

METHOD

3-7. Company STXs use training areas with multiple training lanes or phases that train collective, small units on tactical maneuver, movement, and engagement techniques at a real-time, full-tempo to build mission-essential task proficiency. Company STXs use commander-defined scenarios to replicate the appropriate stimulus that inspires, initiates, or instigates the desired reaction. The desired reaction includes the timely and accurate execution of critical, supporting, collective, and individual tasks.

3-8. Table III is required for each assigned or attached subordinate unit, conducted between T-6 and T-X of the live-fire training event or density. Commanders use progressive lanes consisting of tactically grouped supporting collective tasks to challenge the unit with various tactical dilemmas.

END STATE

3-9. The unit along with subordinate assigned or attached units have successfully demonstrated in a live environment their ability to execute mission essential, critical, or directed supporting collective tasks and battle drills conducted during decisive action operations. The commander sufficiently instructed the unit on the mission essential and supporting collective tasks, validated the subordinate unit's SOP to ensure synchronization and consistency, reinforced previous training, and built confidence by integrating warfighting functions and enablers during the execution of mission-essential tasks.

3-10. The commander is confident in the abilities of the subordinate leaders and elements to execute those trained tasks to standard on demand based on the tactical situation. The unit is prepared for collective training against a trained, unscripted, and motivated opposing force.

PLANNING CONSIDERATIONS

3-11. Table III, STX is a live environment, hands-on training event utilizing TADSS. Table III includes using blank ammunition, pyrotechnics, and battle effects simulators. This event trains and evaluates the element's ability to execute critical tasks using their organic weapons, systems, and equipment during day and limited visibility conditions, and while operating in a chemical environment.

3-12. The unit and its subordinate elements use Company, Table III, STX to prepare for the FTX external evaluation (known as EXEVAL) of the unit's mission-essential tasks (Table IV).

PLAN

3-13. Company, Table III, STX is training designed for all subordinate units and elements within the company prior to any collective live-fire event. The training event is required for all subordinate units that are assigned, attached, or designated to the company as a—

- Maneuver element.
- Enabling specialty unit.
- Cross-attached, warfighting function small unit.

3-14. Each company has 4 training days (96 hours) per year to conduct Table III. For planning purposes, commanders should consider the following information when building their Table III scenario for training:

- Prerequisites. There are no directed prerequisites for Table III; however, the unit should have completed Tables I and II prior to executing the company STX. Commanders may choose to integrate Platoon, Table III, STX at the beginning of the company STX as a multi-echelon event to reinforce and build upon previous training of the supporting collective tasks.
- Table duration. Table III requires a minimum of two and a maximum of 4 training days (96 hours). It is conducted between T-6 and T-X of the company live-fire event. Companies should maximize their use of their available TADSS prior to entering the field portion of their training plan.
- Environment and conditions. Units conduct Table III in a live environment and in an approved training area sufficient in size to accommodate the unit during offensive and defensive operations. Units conduct the training in a series of training lanes or phases at full tempo. Units include a trained and equipped OPFOR when appropriate.
- Frequency. Units conduct Table III prior to company live-fire training a minimum of once per fiscal year. Units may execute multiple, shorter duration events depending on their training plan.
- Throughput. Commanders should consider the number of STX lanes developed for the training event and ensure sufficient time is available to train and re-train as appropriate. The throughput of the entire company through the training lanes are dependent upon the complexity and length of individual lanes, amount of training area available, OPFOR and OC/T availability, and other outside influences.
- Primary training facilities. Primary training facilities are training locations that support the unit's mission by unit type, collective tasks trained, weapons and system engagement ranges (when practical), as well as depth and speed of movement and maneuver required during the scenario. Refer to TC 25-1 to identify the general land and training area requirements for the unit type.

3-15. The purpose of Table III is to train the mission-essential tasks and supporting collective tasks, which are critical to the tactical success of the company. Commanders should create their Table III scenario using the task sets and supporting collective tasks that directly support their mission-essential tasks.

SCENARIO REQUIREMENTS

3-16. To accomplish their mission, the brigade develops STX lane scenarios based on the commander-to-commander dialogue, their assessment of the unit's tactical proficiency, command training guidance, and critical collective tasks that directly impact the success of the company. Commanders select all the tasks that are trained during Table III, and design a series of training lane scenarios that replicate the threat, collective tasks for training, and set realistic conditions for the operating environment.

3-17. Units integrate enablers and specialty units into their scenarios. The training lanes should support the follow-on FTX, FCX, and live-fire exercise (known as LFX), or CALFEX while reinforcing the various SOPs and previous collective training events.

3-18. Commanders design their scenarios in multiple lanes, phases, or stages, where each portion of the scenario trains one or two collective tasks in a progressive manner. Successful completion of each lane (based on the commander's assessment using the SOP and training and evaluation outlines as a guide) moves the formation tactically to the next lane or phase.

3-19. The Table III scenarios include training on commander-selected tasks specific to the warfighting functions listed in figure 3-3, page 3-6. Commanders integrate these tasks as appropriate across the STX lanes. The scenario should include multiple repetitions of those selected tasks during the day and night phase to increase proficiency.

3-20. Each warfighting function includes optional or required tasks that commanders integrate into their training scenario. For special purpose weapons, commanders determine the number of iterations the special purpose weapons are integrated during both day and night. Commanders select from the special purpose weapons available to them, as well as how the scenario initiates the use of those special purpose weapons.

Note. Not all maneuver units have special purpose weapons associated or available to their organization.

3-21. Commanders integrate tasks as appropriate. Units conduct the warfighting function integrated tasks during limited and unlimited visibility (night and day) conditions across the entire Table III training scenario event, not on each maneuver task trained (see figure 3-3, page 3-6).

For example, during a four-day STX at a local training area, the commander selects call for indirect fire during the company attack day phase where they identify a subordinate platoon that receives priority of fires. On day two of the STX, the commander includes training for each subordinate platoon to conduct a call-for-fire illumination mission. The commander incorporated call for fire into the training during STX day operations (HE and smoke) and night operations (illumination).

3-22. Conducting STX lanes at the company level requires a significant amount of training areas, not only for the trained unit (blue force), but also to provide sufficient stand-off, movement, and maneuver space to support a trained OPFOR. Units must consider training areas with sufficient space to develop the tactical situation for both blue force and an OPFOR.

3-23. Typically, units conduct STX lanes in a progressive manner, either sequentially or in rotating task groups. The amount of training area available, the number of mission-essential tasks to train, the employed weapon system and unit capabilities, and other factors impact the method the unit uses to progress from one lane to subsequent lanes.

Note. Commanders may choose to integrate specific warfighting function tasks during Table III, STX that can significantly increase the company's proficiency for Table IV, FTX and Table VI, CALFEX evaluations. The commander may also elect to integrate additional tasks listed within figure 3-2 that are deemed beneficial to the company training in order to obtain the proficiency level on the desired tasks selected by the commander. In doing so, this enables a unit to maximize training opportunities on commander-selected tasks using a progressive training model needed to achieve the desired end state prior to evaluation.

MISSION COMMAND	*SQUAD*	*SECTION and PLATOON*	*COMPANY and TROOP*
Graphics Overlay	Required	Required	Required
OPORD	Required	Minimum 1	Minimum 2
FRAGORD	Optional	Minimum 2	Minimum 4
Conduct a Rehearsal	Required	Required	Required
Operate a Command Post			Required
MOVEMENT AND MANEUVER			
Engineers			Required
Breach Obstacle (Offense)			Required
Integrate Obstacle (Defense)			Required
Direct Fire Support		Required	Required
Employ Snipers		Optional	Required
Special Purpose Weapons*	Minimum 1	Minimum 2	Minimum 3
Conduct Quartering Party Activities		Optional	Required
Conduct a Dismounted Tactical Road March*		Required	Required
Conduct a Mounted Tactical Road March**		Required	Required
Occupy an Assembly Area	Optional	Required	Required
Conduct Tactical Movement	Required	Required	Required
FIRE SUPPORT			
Close Air Support			Optional
Attack Aviation			Optional
Field Artillery			Required
Mortars (Company or Battalion)			Required
Air Defense or Counterfire			Optional
INTELLIGENCE			
UAS/UGS			Required
Digital Icon Population		Required	Required
Digital Reports			Required
PROTECTION			
CBRN	Required	Required	Required
Maintain Operational Security	Required	Required	Required
Perform Field Sanitation Functions	Optional	Optional	Required
Conduct Risk Management	Required	Required	Required
SUSTAINMENT			
CASEVAC	Required	Required	Required
MEDEVAC			Required
Conduct Consolidation and Reorganization	Required	Required	Required
Conduct LOGPAC Support			Required

*Dismounted units only
**Mounted units only

Legend

CASEVAC	casualty evacuation	MEDEVAC	medical evacuation
CBRN	chemical, biological, radiological, and nuclear	OPORD	operation order
FRAGORD	fragmentary order	UAS	unmanned aircraft system
LOGPAC	logistics package	UGS	unmanned ground system

Figure 3-2. Integration of warfighting functions and tasks, Table III, STX

SEQUENTIAL STX LANES

3-24. When training area availability is limited, commanders must maximize the space available to ensure units can train and assess multiple tasks. Placing STX lanes in a progressive, sequential manner can provide a continuous battlespace for the training unit, while the OPFOR resets and prepares for the next unit to enter the scenario (see figure 3-3, page 3-6).

For example, the unit executes training on a sequential STX lane due to limited training space given (see figures 3-3 and 3-4). Iteration 1: Company Alpha has completed maintenance and mission preparations and is first to execute the lane. Company Bravo conducts maintenance and mission preparations while Company Charlie provides OPFOR support for Company Alpha. Iteration 2: Upon completion of the lane, Company Alpha assumes responsibility of OPFOR support for Company Bravo's iteration as Company Charlie conducts maintenance and mission preparations. Iteration 3: Upon completion of the lane, Company Bravo assumes responsibility of OPFOR support for Company Charlie's iteration to complete the cycle.

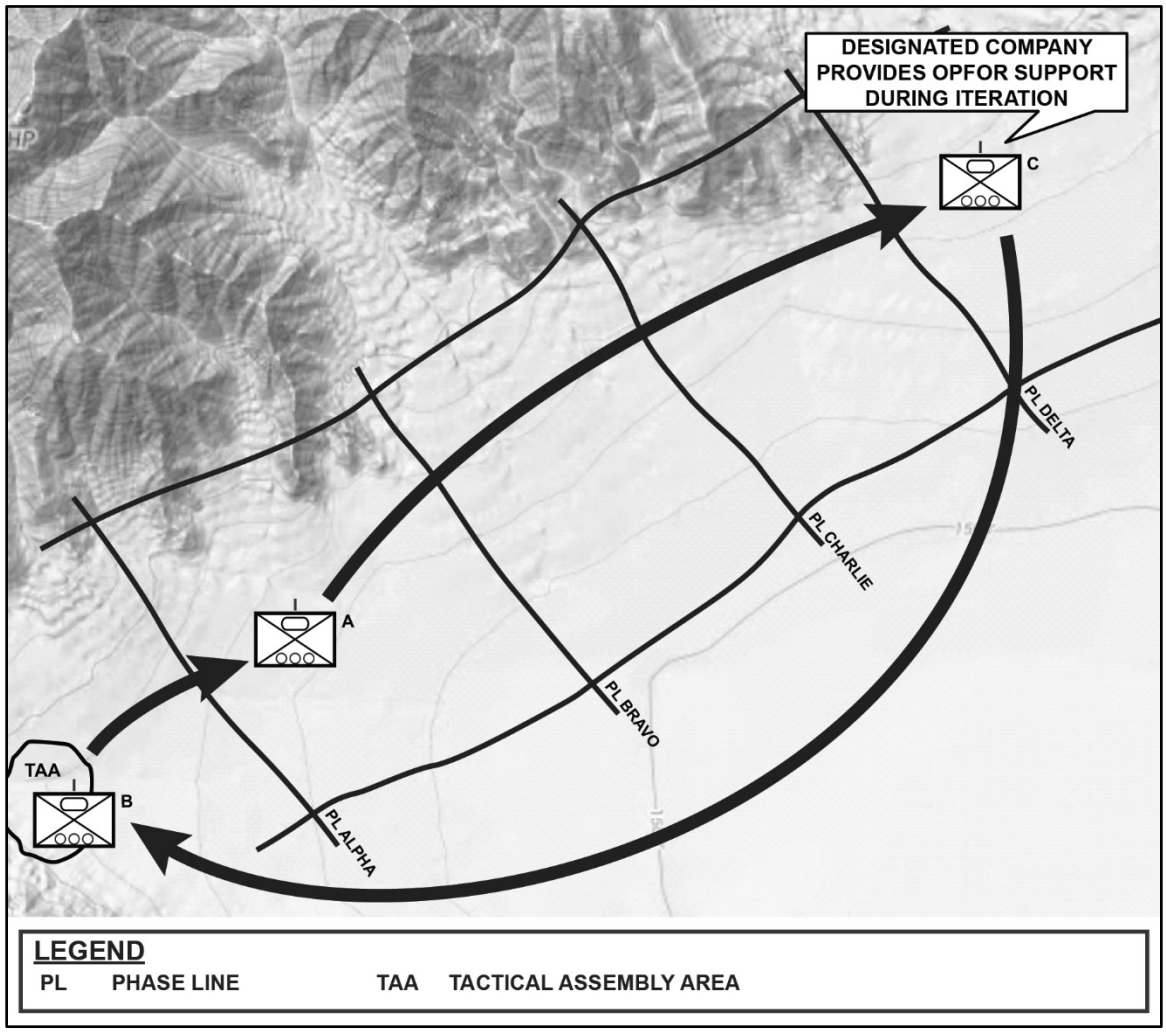

Figure 3-3. Sequential STX lane rotation, example

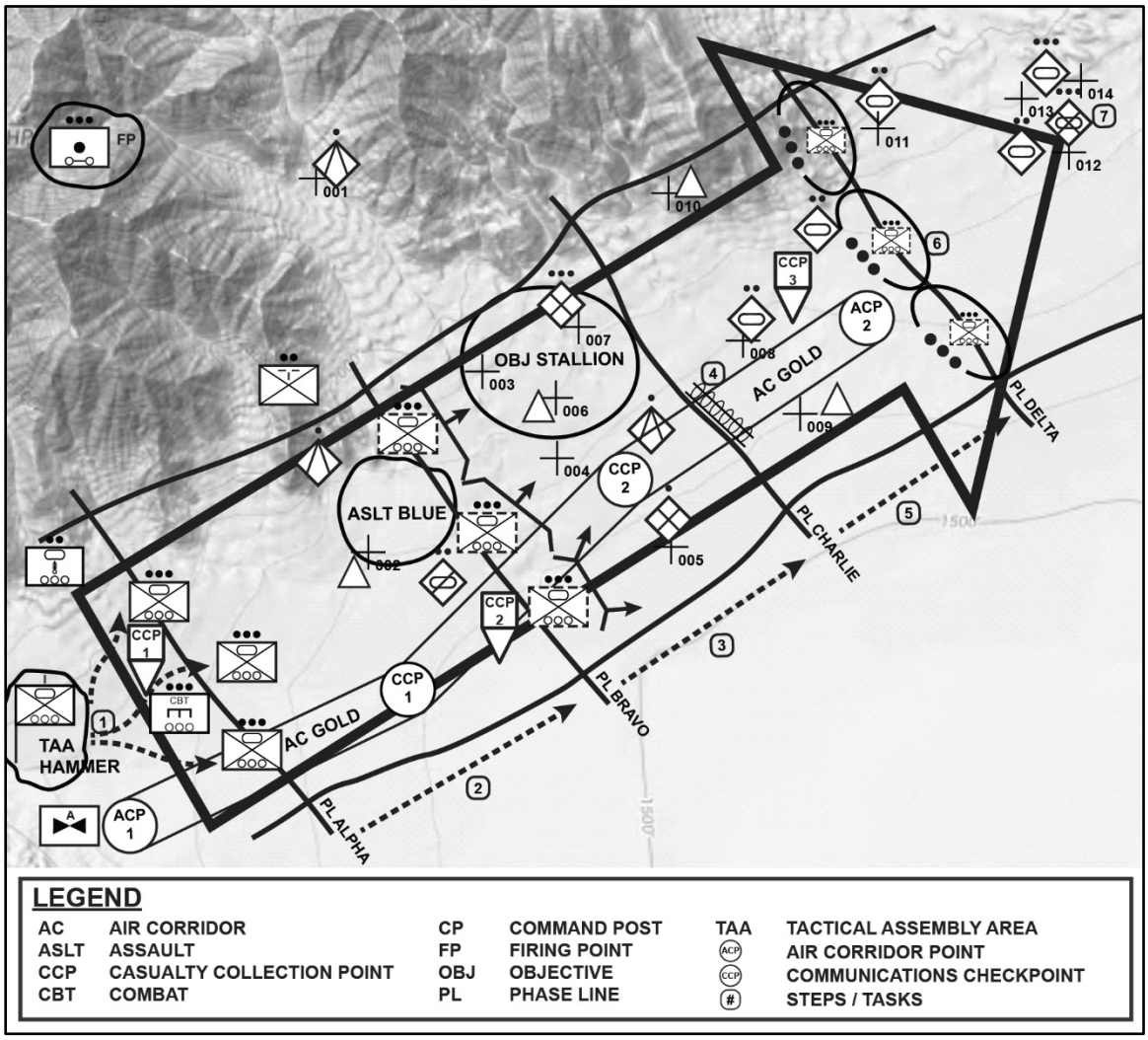

Figure 3-4. Sequential STX lane, example

ROTATING TASK GROUPS

3-25. When space is available, units can set up several larger training sites, each with independent, opposing forces. This allows training and evaluation of several collective tasks in random order. When there are several training sites, the commander has the flexibility to initiate OPFOR actions that change the training unit's decision-making process, thereby altering the sequence of the tasks trained on the lane (see figure 3-5, page 3-8). This enables a more realistic series of tactical dilemmas for the unit to solve and allows more freedom of maneuver.

3-26. Using several training sites provides a more robust and dynamic threat presentation to the training unit, however, it requires more OPFOR resources, preparatory training for the OPFOR, and more training areas to support the commander's flexibility.

For example, the unit executes training on a rotating task group STX lane on several training sites (see figures 3-5 and 3-6.) Iteration 1: Company Alpha (Lane A) and Company Charlie (Lane B) are the first to conduct operations. Company Bravo provides OPFOR support for both companies during this iteration. Iteration 2: Company Alpha provides OPFOR support, Company Charlie executes Lane A with Company Bravo on Lane B. Iteration 3: Company Alpha executes Lane B with Company Bravo executing Lane A. Company Charlie provides OPFOR support during the final iteration to complete the cycle.

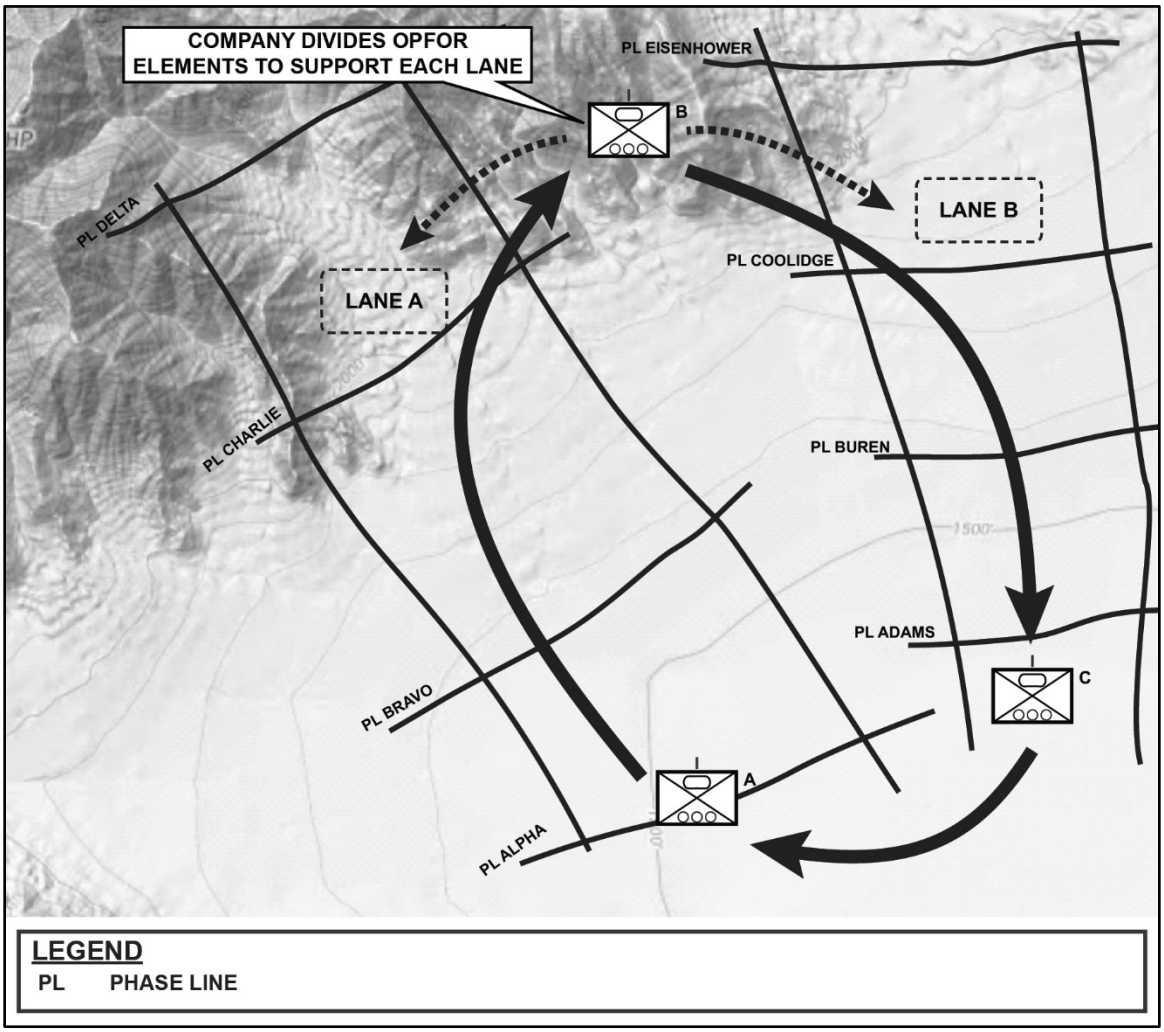

Figure 3-5. Rotating task group lane rotation, example

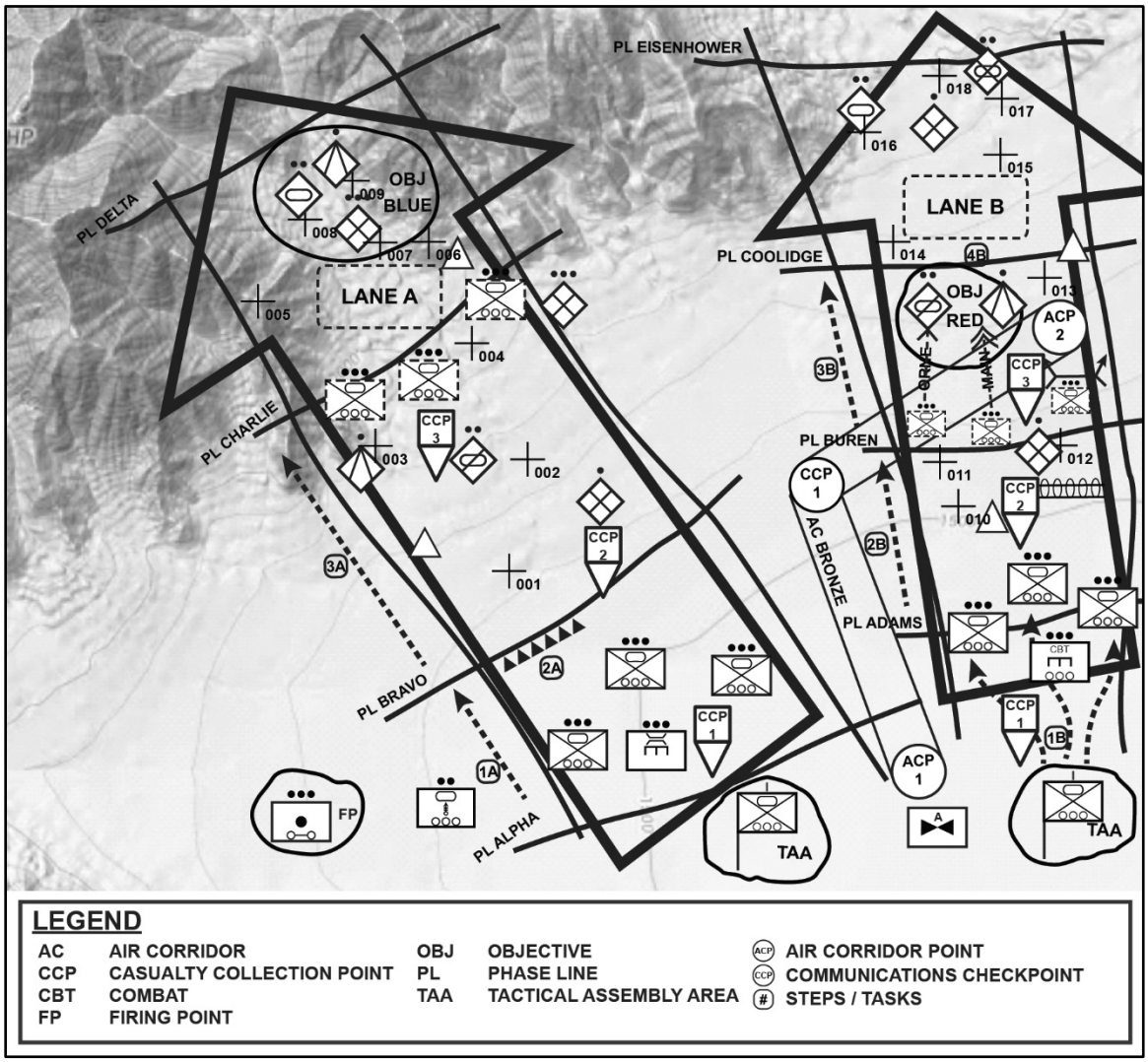

Figure 3-6. Rotating task groups STX lane

TRAIN THE TRAINERS

3-27. Units execute the company STX in a variety of ways. Typically, each platoon conducts training (platoon STX) independently prior to the company STX. The primary trainers during the company STX are the brigade commander with the staff, specialty units, and OC/Ts providing oversight and assistance as necessary.

Note. Much like crew platform evaluators, the OC/Ts for any collective exercise provide exceptional training for the OC/T as a leader, second only to executing the task with their organization. Units should dedicate sufficient time to OC/T certification to leaders who can provide experienced mentorship, with the complete understanding that their OC/T task is also exceptional training for them.

3-28. Units include the higher headquarters staff and specialty elements (mortars, scouts, sniper teams) into the training and execution of the company STX when appropriate. This allows the subordinate leaders and Soldiers to understand the battalion or squadron's staff functions, processes, and procedures, which broadens their knowledge of the unit's operations and capabilities.

3-29. Units provide the following to prepare the trainers:

- Commander's training objectives.
- Scenario and lane concept with collective tasks to be trained.
- Rules of engagement for the training event.
- Review of training and evaluation outlines of all the tasks to be trained.
- Review of supporting and individual tasks that directly support or complement the supporting collective tasks.
- Conduct of the event brief. Commanders provide how the unit executes the STX lanes.
- Where key warfighting functions are integrated into the scenarios or lanes.
- Risk assessment.
- Identification of supporting doctrinal publications for use as primary references.
- TADSS, pyrotechnics, blanks, and battle effects simulators used during the training event.

RECON THE SITE

3-30. Commanders use an authorized training area or series of training areas for the Table III, STX exercise. Commanders follow the installation's policies and procedures to formally schedule the training location as far in advance as practical. Once commanders have established the method of training and evaluation, they should secure the training location and appropriate TADSS, equipment, or systems that enhance the training event.

3-31. Once scheduled, the commander, training developers, subordinate commanders, and platoon leaders conduct a reconnaissance of the training areas to—

- Verify sufficient space is available to support the entire unit through multiple training lanes.
- Ensure multiple iterations or rotations through the scenario can be achieved with appropriate retraining opportunities.
- Ensure sufficient administrative areas are available to support group discussions, briefings, and AARs.
- Provide sand table or terrain board.
- Provide terrain board kits.
- Confirm appropriate warfighting function integration capabilities into the concept of the training lanes (figure 3-7).
- Verify the training area has the ability to incorporate engineers, direct fire support, special purpose weapons, and sniper teams into the scenario, as the commander directs. Identify authorized dig locations and required permits within the training area. Identify restricted terrain, environmental considerations, and any no-go areas within the training sites. (Movement and maneuver.)
- Identify the level of fire support that can be included into the training scenario. The FSO or FIST can provide fires synchronization to enhance the scenario's combat realism. (Fire support.)
- Serve to provide the scenario with a threat template that is appropriate to the unit's mission and build a more robust and effective scenario (higher headquarters battalion or brigade intelligence staff officer). The supporting military intelligence company can provide notional or simulation injected feeds replicating Shadow or other unmanned systems for scenario development, as appropriate. (Intelligence.)
- Verify the training area has the ability to support the unit's training while in a chemical environment, based on the scenario design. (Protection.)
- Verify casualty evacuation and MEDEVAC notional capabilities in support of the training scenario. Units mostly include only FM reporting and request procedures for training purposes. (Sustainment.)
- Identify command post capabilities and locations in the training areas. Identify any external TOC configuration that can be incorporated for higher headquarters staff integration, as appropriate. (Mission command.)

MOVEMENT AND MANEUVER		*Recon the Training Site to Accommodate*
ENGINEERS	REQUIRED	Engineers should provide their designated leadership for the training event to provide simulations instructor and operator support, as appropriate.
BREACH OBSTACLE (OFFENSE)	MISSION DEPENDENT	Engineer leadership should develop offense and defense scenario support at the simulation's instructor or operator or exercise control center station.
INTEGRATE OBSTACLE (DEFENSE)		
DIRECT FIRE SUPPORT	REQUIRED	For simulation systems that do not provide dismounted Soldier stations, the units should provide sufficient Soldiers to conduct notional FM traffic or role players, as the scenario dictates.
SPECIAL PURPOSE WEAPONS		
FIRE SUPPORT		
CLOSE AIR SUPPORT	REQUIRED	Units can coordinate for JTAC support for call for fire mission to close air support and attack aviation. JTAC personnel can assist evaluation of proper call-for-fire procedures as necessary.
ATTACK AVIATION		
FIELD ARTILLERY		The unit's FSO or FIST provides evaluation of call-for-fire procedures. Units can include mortar sections or platoons establish firing positions and conduct drills on demand while supporting the unit's STX-V scenarios.
MORTARS (COMPANY OR BATTALION)		
ELECTRONIC WARFARE ASSETS	OPTIONAL	Units request higher level EW capabilities at commander's discretion. Unit employs organic or notional EW systems to build SA. Unit leaders request and incorporate EW information into their maneuver planning and operations. This provides EW personnel within the brigade with valuable training opportunities during maneuver operations.
INTELLIGENCE		
UAS/UGS	REQUIRED	Brigade Shadow Team can provide notional support via FM with limited simulated video feed in support of intelligence operations during the scenario.
DIGITAL ICON POPULATION		When available, the unit should include reporting mission situation reports, contact reports, far target locate tasks, and other digital messaging during the scenarios.
DIGITAL REPORTS		
PROTECTION		
CBRN	REQUIRED	Units should include CBRN tasks to their scenarios to exercise the unit's ability to function in a degraded capacity.
AIR DEFENSE OR COUNTERFIRE	OPTIONAL	The unit's FSO or FIST can provide notional air defense and radar function to support the unit's scenario as necessary.
SUSTAINMENT		
CASEVAC	REQUIRED	Units are required to rehearse their CASEVAC and MEDEVAC TTP to verify their SOPs during STX-V. Units should include the higher headquarters' medical platoon to assist as appropriate.
MEDEVAC		
MISSION COMMAND		
OPORD	2 MINIMUM	Units must exercise their ability to send and receive OPORD, FRAGORDs, and overlays in an administrative role, as well as during the training scenarios via analog or digital means.
FRAGORD	4 MINIMUM	
GRAPHICS OVERLAY	REQUIRED	

Legend

CASEVAC	casualty evacuation	MEDEVAC	medical evacuation
CBRN	chemical, biological, radiological, and nuclear	OPORD	operations order
EW	electronic warfare	SA	situational awareness
FIST	fire support team	SOP	standard operating procedure
FM	frequency modulation	STX-V	situational training exercise-virtual
FRAGORD	fragmentary order	TTP	tactics, techniques, and procedures
FSO	fire support officer	UAS	unmanned aircraft system
JTAC	joint terminal attack controller	UGS	unmanned ground system

Figure 3-7. Warfighting function integration, examples

ISSUE THE ORDER

3-32. Commanders can issue an OPORD, WARNORD, or use the training schedule as necessary. The training unit must ensure all supporting staff or enablers have sufficient time for coordination and preparation prior to the training event. The WARNORD should include the appropriate tasks, required leaders, and equipment needed, as well as the unit's training timeline including walk-through, rehearsals, and AARs. WARNORDs for external organizations must include sufficient reaction time for the appropriate personnel and equipment needed.

3-33. The OPORD or WARNORD should include the list of tasks that commanders evaluate during the event, and the method of evaluation. Commanders should provide sufficient time for subordinate leaders to train the tasks and skills listed in the order. Commanders should ensure the appropriate training resources are available and accessible. Upon receipt, subordinate leaders that have SOPs for their organizations must ensure their procedures support and complement the higher headquarters publication.

REHEARSE

3-34. The unit uses all training resources, materials, and equipment available to conduct rehearsals of training events. During the rehearsal, commanders ensure their unit has sufficient time to train to the specified standard including AARs and retraining time. Commanders ensure their unit verifies optional scenarios that increase complexity when warranted.

3-35. Commander use the rehearsal as an opportunity to verify the tasks selected for Table III are consistent with the tasks, actions, and TTP of the higher organization. For maneuver units that expect to cross-attach to an external unit, the rehearsal is an opportunity for the commander to synchronize the unit SOP with the tactical SOP of their gaining unit or attached personnel or organizations.

3-36. Units should rehearse the training event from start to finish, and confirm—

- The OPFOR understands the training scenarios.
- Sufficient space is available to provide stand-off distances for the unit and OPFOR to build the appropriate tempo of each STX lane.
- Analog and digital systems are operational within the organization and to the higher headquarters regardless of their location.
- Additional OC/T training support packages are complete and provide for multiple iterations.
- Sufficient administrative areas are available.
- AAR capabilities are reviewed.
- Available warfighting function enablers are integrated with the unit or appropriate subordinate unit.
- Process for conducting direct fire support tasks.
- Methods and actions required to provide fire support.
- Integration of attack aviation and CAS during the scenario as required.
- Process used to incorporate intelligence activities into the scenario.
- Location of retraining for subordinate units as necessary.

3-37. Once the unit completes the walk-through and training rehearsal, the commander makes any necessary adjustments to the plan and issues FRAGORDs as necessary.

EXECUTE

3-38. Once the unit arrives at the training location, they should—

- Conduct a safety briefing for the training event.
- Provide a conduct of the event briefing to establish the sequence of events for the training day.
- Conduct sensitive item checks prior to executing training.
- Assign OC/Ts as appropriate.
- Issue the OPORD for the training mission.
- Occupy the appropriate STX lane as the commander directs.
- Execute the training scenario.

3-39. The training unit conducts informal AARs of each progressive scenario within the training mission as the commander directs. Once the training unit completes the mission through a specific training objective or phase of the operation, the commander conducts a formal AAR prior to issuing a FRAGORD for the next mission or mission task.

3-40. During training, the assigned OC/T, executive officer, and first sergeant review the subordinate unit's performance. They follow the unit SOP, prescribed TTP, and the appropriate training and evaluation outlines.

3-41. Units should escalate the analog and digital stimulus to the training units to increase the complexity of the training event based on their observations. Commanders should sustain the tempo of the events to reinforce the need to execute supporting collective tasks rapidly and on demand rather than with a canned approach to training.

3-42. During execution, commanders consider increasing the difficulty, complexity, or rigor to the training events by various means. Figure 3-8, page 3-14, lists examples of tactical stressors that commanders can instigate.

Mission Stimulus	*Driver*	*Branch*	*Sequel*	*Desired Outcome*
Increase OPFOR direct-fire engagements.	X			Change direction, orientation of fires, call-for-fire, CAS requests. Challenge ammunition consumption, fire control and distribution, and increased calls for support.
Issue FRAGORDs directing the unit to change the mission, orientation, or direction rapidly.		X	X	Consolidation and reorganization, movement to next phase or lane, retraining.
Increase OPFOR tactical movement or responses.	X	X		Change direction, orientation of fires, call-for-fire, CAS requests. Challenge ammunition consumption, fire control and distribution, and increased calls for support.
Direct trainers to assess battle damage or casualties within the unit.	X	X	X	Exercise CASEVAC, MEDEVAC, and maintenance recovery procedures. Unit continues mission with reduced combat power.
Reduce time to prepare for follow-on mission (change of mission, rotation to another training lane).			X	Change to hasty operations, re-supply, consolidation and reorganization tasks during tactical movement or ongoing operations.
Inject chemical hazards.	X	X		React to chemical conditions. Initiate decontamination procedures. Reduced situational awareness/visibility.
Increase OPFOR indirect fires.	X	X	X	Exercise displacement criteria, react to indirect fires, reporting procedures.
Additional threat icon populations.	X			Decision making information injects. Confirm or deny tasks. Changes or alterations to the concept of the operation.
Increased FM and digital traffic requiring action.	X			Battle drills, change to sectors of observation or fires, change to movement and maneuver techniques.
Assess friendly combat power reduction (OC/T initiated).	X			Exercise maintenance and recovery operations. Formation or order of battle changes during operations. Changes to lead element/vehicle/leader.
Increase or vary the forms of threat contact.	X			Exercise reporting procedures, react to contact drills, counter-fires, indirect fire, call for support.
Unit experiences electronic warfare effects*	X	X		Conduct counter-EW battle drills, employ PACE plan, determine required changes to scheme of maneuver and execute.
*Denotes that stressor should be used on non-live-fire events (Table III and Table IV.)				

Legend

CAS	close air support	OC/T	observer-coach/trainer
CASEVAC	casualty evacuation	OPFOR	opposing force
EW	electronic warfare	PACE	primary, alternate, contingency, and emergency
FM	frequency modulation	MEDEVAC	medical evacuation
FRAGORD	fragmentary order		

Figure 3-8. Tactical stressors, examples

EVALUATE THE TRAINING

3-43. The unit should include all assigned and attached Soldiers and elements in the training event based on how the commander determines the unit should execute their mission-essential tasks to support the combatant commander. The intent of STXs is to train the organization, including its subordinate and attached units, on mission-essential tasks and specific supporting collective tasks that the commander deems critical.

3-44. Periodically after training scenarios are complete, the commander directs the unit to conduct—

- An informal AAR, facilitated by the assigned OC/T, commander, executive officer, and first sergeant, as appropriate.
- A formal AAR, led by the commander using the training notes provided by the OC/Ts, executive officer, first sergeant, the facility instructor and operators, and others.

3-45. At the completion of the training event, key leaders discuss with their senior leaders any shortcomings, gaps, or disconnects among echelon SOPs, and determine corrective actions if any. With the input from the OC/T and unit leadership, the commander provides retraining opportunities as necessary, including additional scenarios.

Note. At the completion of the company training strategy, the key leaders and their commander shall assess their performance during all six training events (Table I through VI), review their SOPs, and validate their accuracy and effectiveness for continued use.

3-46. OC/Ts should provide clear and articulate comments and insight about the positive and negative actions of the subordinate units they observed. OC/Ts should use the training and evaluation outlines to guide them through the evaluation process and use the doctrinal publications to support their comments.

3-47. The OC/T and unit leadership should review the training and evaluation outlines and training notes and observations to determine which tasks require additional attention through the remainder of the training density. They also can identify where additional complexities to the scenario can be induced during training where mastery has been demonstrated.

3-48. The OC/T should share the overall performance of the unit, including the observations, with the entire training unit. This allows the subordinate units to learn from other unit's best practices, procedures, and tactics, and at times from their shortcomings or mistakes. The commander should identify leaders within the organization that demonstrate superior performance and tactical competence and assign them as OC/Ts for future training events, internal and external to the organization.

3-49. At the completion of Company, Table III, STX, commanders, executive officers, and first sergeants should gain insight to where their unit's SOPs are working and where they need additional attention. If time is available, commanders should update and provide those changes or revisions to the unit prior to executing any live-fire event.

RETRAIN

3-50. Commanders identify the unit or subordinate unit that requires retraining of specific tasks during the AAR with input from the OC/Ts, executive officer, first sergeant, attached leaders, and the facility instructor and operators. Once the commander identifies the retraining needs of the unit, they should execute a retraining event of the scenario. This may consist of—

- The entire company executing the training scenario again.
- A select subordinate unit executing the training scenario.
- Rotating subordinate units through different mission tasks to reinforce the supporting collective task.
- Minor tactical adjustments for the unit or subordinate units. The commander may opt to discuss different methods to complete the task followed by backbriefs using terrain models or sand tables rather than executing the entire training scenario.

3-51. Once the commander is satisfied with the unit's demonstrated performance, they should review the unit SOP and TTP for required updates, revisions, or modifications again. The commander should assess which components of the unit's SOP and TTP need additional attention during the upcoming FTX, FCX, and CALFEX.

Chapter 4

Field Training Exercise

This chapter describes the requirements of Company, Table IV, FTX. The chapter describes how the requirements integrate into the unit training plan following the structure of the IWTS. Chapter 4 provides descriptive guidelines for the Company, Table IV, FTX, and provides the purpose, method, and end state for the training event.

An FTX is a high-cost, high-overhead exercise conducted under simulated combat conditions in the field using laser-based TADSS, pyrotechnics, and battle effects to train a unit's mission-essential tasks. An FTX culminates in an EXEVAL of the unit's proficiency in executing the mission-essential tasks and the supporting collective tasks that the evaluation commander selects. The battalion uses the military decision-making process to develop company and troop training events during the FTX, FCX, and CALFEX described in chapters 4, 5, and 6.

EVENT OVERVIEW

4-1. The FTX supports training at squad, section, platoon, company, battalion, and brigade levels. The FTX integrates the total force in a realistic combat environment and supports a demanding, effective EXEVAL of the unit's mission-essential tasks and collective task proficiency (see figure 4-1, page 4-2).

4-2. An FTX involves the entire combined arms force, and encompasses training such as battle drills, crew drills, supporting collective tasks, and mission-essential tasks to reinforce Soldier, team, squad, crew, and collective training integration. The FTX provides the ability to—

- Demonstrate proficiency maneuvering the entire formation in time and space.
- Build tactical planning skills to develop tactical situations rapidly.
- Integrate and leverage available battlefield intelligence in a timely manner to influence the developing decisive actions.
- Evaluate the unit holistically to doctrinal standards, concepts, and TTP.
- Employ integrated warfighting functions to provide an unfair advantage and overmatch to subordinate units.
- Develop and overcome situations with real-time information in a demanding and rigorous series of tactical dilemmas.
- Build unit cohesion, effectiveness, and esprit de corps.
- Train and mentor subordinate leaders on maneuver tasks, skills, and actions.
- Identify training weaknesses for the development of future training plans.

4-3. The company FTX provides significant training value to the key leaders and subordinates within the organization. The FTX trains and enables the leaders, subordinate elements, and attached elements to—

- Move and maneuver units realistically.
- Employ organic weapons systems effectively.
- Build teamwork and cohesion.
- Plan and coordinate supporting fires.
- Plan and coordinate logistical activities to support tactical operations.
- Integrate warfighting functions and enablers.
- Build tactical experience and understanding.

	Table I	*Table II*	*Table III*	*Table IV*	*Table V*	*Table VI*
Company	TEWT	STX-V	STX	FTX	FCX	CALFEX
Days Required	1.0	1.0	4.0	5.0	1.0	2.0
Training Days Remaining on Critical Path	13.0	12.0	8.0	3.0 CTP	2.0	LFPG
Multi-echelon indicates the training days are provided as part of the company training strategy. STX-V and STX lanes may be executed during similar events for the battalion provided that training, assessment, and retraining for the company is provided prior to the higher echelon task.						
Legend:						
CALFEX	combined arms live-fire exercise		LFPG	live-fire proficiency gate		
CTP	collective task proficiency		STX	situational training exercise		
FCX	fire coordination exercise		STX-V	situational training exercise-virtual training environment		
FTX	field training exercise		TEWT	tactical exercise without troops		

Figure 4-1. Company, Table IV, FTX

4-4. Company, Table IV, FTX is a live-environment training event that builds unit proficiency in the unit's mission-essential tasks and specific, commander determined critical tasks that directly support the unit's mission. Company, Table IV is an event the commander uses to evaluate the unit's execution of their mission-essential tasks during combat realistic scenarios against a trained and capable near-peer opposing force.

4-5. This event enables the training unit to exercise its supporting collective tasks that reinforce the TTP that the unit employs to execute their mission-essential tasks on demand where the commander acts upon the various stimulus and dilemmas presented by a free-acting opposing force. Commanders use their unit SOP and the appropriate training and evaluation outlines to develop subordinate leaders and element's movement and maneuver, and to a limited degree, marksmanship lethality (TADSS-based).

4-6. FTXs use commander-developed scenarios in live environments using TADSS that include—

- Soldiers, crews, small units, and enablers.
- Assigned weapons, platforms, systems, and small units.
- Training at a combat realistic, fast-paced tempo.
- A live-environment training area.

PURPOSE

4-7. Table IV, FTX is a training and EXEVAL of a unit with its assigned and attached subordinate elements that demonstrate proficiency executing their mission-essential tasks in a live environment. Table IV includes assessing their ability to synchronize and execute fire and maneuver, integrate indirect and direct fires, conduct critical supporting collective tasks, and complete various combat reporting requirements.

4-8. The FTX is an externally evaluated assessment of the unit's proficiency conducting their assigned mission-essential tasks. The evaluation team uses the appropriate training and evaluation outlines for the unit's mission-essential tasks and supporting collective tasks to determine the unit's proficiency.

METHOD

4-9. The FTX uses a training area sufficient in size to replicate an operating environment to train maneuver units on tactical maneuver, movement, and engagement techniques at a real time full tempo. The FTX uses a commander-defined scenario and missions to execute their mission -essential tasks. The FTX's scenario provides a timely and accurate execution of critical, supporting collective and individual tasks to subordinate units.

4-10. The commander-designed scenario includes sufficient, tactical stimulus to train and evaluate subordinate units operating together in a combat-realistic live environment while using the appropriate laser-based training system and other TADSS. Evaluations are conducted by a trained and certified OC/T team utilizing the approved training and evaluation outlines as an evaluation tool.

END STATE

4-11. The subordinate units assigned or attached to the organization have successfully demonstrated in a live environment their ability to execute their mission-essential tasks. Table IV trains and evaluates the mission essential and supporting collective tasks to their subordinate units in a live environment using realistic scenarios and a trained OPFOR.

4-12. For the commander, Table IV provides a means to—

- Validate the subordinate unit's SOP to ensure synchronization and consistency with the unit SOP.
- Reinforce previous training focused on critical skills and tasks with multiple training iterations.
- Build confidence by integrating warfighting functions and enablers.

PLANNING CONSIDERATIONS

4-13. Company, Table IV, FTX is a live environment, training event where companies train then evaluate their mission-essential task proficiency. Once unit training is complete, the unit conducts an EXEVAL exercise to determine their proficiency executing their mission-essential tasks and supporting collective tasks.

4-14. The training scenarios use laser-based training devices, blank ammunition, pyrotechnics, and battle effects simulators, as well as an appropriately trained and equipped OPFOR. The EXEVAL utilizes the training and evaluation outlines for all maneuver mission-essential tasks and collective tasks.

PLAN

4-15. Table IV, FTX is training designed for the company and troop with all assigned or attached subordinate units and elements. This training event is the required EXEVAL to meet the requirements of the maneuver company collective task proficiency gate, as identified in AR 350-1 and AR 220-1.

4-16. Each company is authorized a minimum of 5 training days (120 hours) per year to conduct Table IV training according to the CATS. Units may conduct Table IV, FTX before or after Table VI, CALFEX depending on the training area and facility availability, the commander's intent, or the unit training plan's needs.

Note: Table IV, FTX is not a prerequisite to conduct Table VI, CALFEX.

4-17. For planning purposes, commanders should consider the information in paragraphs 4-18 through 4-24 and the information below when building their Table IV scenario for training:

- Prerequisites. Complete Company Tables I, II, and III prior to conducting Table IV to ensure the unit is adequately trained on the mission essential and critical supporting collective tasks prior to the EXEVAL.
- Table duration. The FTX is a multi-day (5 training days), complex, rigorous training event that provides increased stressors, stimulus, and tactical dilemmas to the maneuver unit.
- Environment and conditions. Units conduct FTX in the live environment on an approved training area sufficient in size to accommodate the unit during offensive and defensive operations, including maneuver space for the assigned trained and equipped OPFOR. Units conduct the FTX during day, night, and limited visibility.
- Training days required. Successful completion of Table IV requires a minimum of 5 training days per company. The training days include preparatory, tactical training to build on the STX lanes during Table III and provide sufficient time for an effective tactical EXEVAL.
- Frequency. Most units complete a five-day FTX once per year. The unit may complete an FTX more than once a year if multiple, company-size, live-fire densities are scheduled across the fiscal year or training year as directed by the higher headquarters.
- Throughput. Brigade commanders should consider the number of companies conducting Table IV. If sufficient training space is available, all companies can complete Table IV exercises simultaneously using multiple training areas. For installations with training area constraints, units may conduct Table IV exercises in a rotational fashion one company at a time. Units may conduct Table IV exercises in noncontiguous training areas when necessary to increase throughput of the battalion overall. Regardless of the number of simultaneous FTX events, units must ensure sufficient time is available to train, evaluate, and re-train, as appropriate.
- Primary training facilities. Training areas that support the unit's mission by type unit, collective tasks trained, weapons and system engagement ranges (when practical), as well as depth and speed of movement and maneuver required during the scenario are required. Refer to TC 25-1 to identify the general land and training area requirements for the unit type and task.

SCENARIO REQUIREMENTS

4-18. To accomplish their mission, commanders develop the FTX scenario based on their assessment of the unit's tactical proficiency, command training guidance, and critical collective tasks that directly affect the success of the company. Commanders select all appropriate mission-essential tasks for evaluation and craft a scenario with varying branches and sequels that replicates the threat, collective tasks for training, and realistic conditions.

4-19. Units include available enablers and specialty units within the battalion into their scenarios. The training mission should support future battalion, collective training events while reinforcing the unit SOP and previous collective training events.

4-20. Commanders design their scenarios in multiple phases, or stages, where each portion of the scenario specifically trains one or two collective tasks in a progressive manner. Successful completion of each phase (based on the commander's assessment using the SOP, training, and evaluation outlines as a guide) moves the formation tactically to a continuation of the mission, branch, or sequel. The commander selects the level of stimulus, rigor, and dilemma complexity based on their assessment of the unit's demonstrated performance.

4-21. The FTX scenario must include training and evaluation opportunities for all the unit's tactical mission-essential tasks, as well as any commander-selected tasks specific to the warfighting functions listed in figure 4-3, page 4-9. Commanders integrate these tasks as appropriate across the FTX scenario, during day and night phases of training.

4-22. Each warfighting function includes optional or required tasks that commanders integrate into their training scenario. Commanders integrate those tasks as appropriate or where deemed most beneficial and realistic using various forms of contact or information. The unit conducts the warfighting function integrated tasks during limited and unlimited visibility (night and day) conditions across the entire FTX training scenario event—not on each maneuver mission-essential task trained.

For example, during a five-day FTX at a local training area, the commander selects call for indirect fire during the company attack day phase, where the commander identifies a subordinate platoon that receives priority of fires. On day two of the FTX, the commander includes training for each subordinate platoon to conduct a call-for-fire illumination mission. Call for fire is incorporated into the training during FTX day operations (HE and smoke) and night operations (illumination), meeting one of the warfighting function integration requirements.

4-23. Units are required to integrate the warfighting functions during the day and night phase at least once for evaluation purposes. They are not required to include them on every training day. This allows the unit to tailor the training and evaluation across the full training days available and progressively increase the rigor and complexity of the tactical situations presented based on their observations (see figure 4-2, page 4-6).

4-24. Conducting FTX at the company level requires a significant amount of training area for the trained unit to provide sufficient standoff and maneuver space to support a trained and equipped OPFOR. Each day, the unit may opt to alter the primary direction of the mission to vary the battlespace of the training unit. Simply changing the orientation and direction of an attack from 1 training day or phase to another allows the unit to maximize the training land available.

MISSION COMMAND	*SQUAD*	*SECTION and PLATOON*	*COMPANY and TROOP*
Graphics Overlay	Required	Required	Required
OPORD	Required	Minimum 1	Minimum 2
FRAGORD	Optional	Minimum 2	Minimum 4
Conduct a Rehearsal	Required	Required	Required
Operate a Command Post			Required
MOVEMENT AND MANEUVER			
Engineers			Required
Breach Obstacle (Offense)			Required
Integrate Obstacle (Defense)			Required
Direct Fire Support		Required	Required
Employ Snipers		Optional	Required
Special Purpose Weapons*	Minimum 1	Minimum 2	Minimum 3
Conduct Quartering Party Activities		Optional	Required
Conduct a Dismounted Tactical Road March*		Required	Required
Conduct a Mounted Tactical Road March**		Required	Required
Occupy an Assembly Area	Optional	Required	Required
Conduct Tactical Movement	Required	Required	Required
FIRE SUPPORT			
Close Air Support			Optional
Attack Aviation			Optional
Field Artillery			Required
Mortars (Company or Battalion)			Required
Air Defense or Counterfire			Optional
INTELLIGENCE			
UAS/UGS			Required
Digital Icon Population		Required	Required
Digital Reports			Required
PROTECTION			
CBRN	Required	Required	Required
Maintain Operational Security	Required	Required	Required
Perform Field Sanitation Functions	Optional	Optional	Required
Conduct Risk Management	Required	Required	Required
SUSTAINMENT			
CASEVAC	Required	Required	Required
MEDEVAC			Required
Conduct Consolidation and Reorganization	Required	Required	Required
Conduct Logistics Package (LOGPAC) Support			Required

*Dismounted units only
**Mounted units only

Legend

CASEVAC	casualty evacuation	OPORD	operation order
CBRN	chemical, biological, radiological, and nuclear	UAS	unmanned aircraft system
FRAGORD	fragmentary order	UGS	unmanned ground system
MEDEVAC	medical evacuation		

Figure 4-2. Warfighting functions and task integration requirements, Table IV, FTX

PREPARE

4-25. Units execute the FTX in a variety of ways. The primary trainer is the brigade commander with supporting staff and assigned OC/Ts. Units evaluate the Table IV event externally and require the brigade to coordinate for trained OC/Ts.

Note. Units are not authorized to self-evaluate. The EXEVAL portion of the FTX requires that the higher headquarters schedule and coordinate for the appropriate number and type of OC/T for evaluation purposes.

4-26. As the evaluation officer, the brigade commander must ensure the unit SOP or tactical SOP, the selected high-payoff collective tasks for training and evaluation, and their respective training and evaluation outline is available to the subordinate leadership. The company commander and platoon leadership are responsible for training the company and platoons on the why and how the unit conducts the collective tasks to support the unit's mission-essential task that it directly supports.

4-27. Units include the higher headquarters staff and specialty elements (mortars, scouts, sniper teams) into the training and execution of Table IV, when appropriate. This allows the subordinate leaders and Soldiers to understand the battalion or squadron's staff functions, processes, and procedures to broaden their knowledge of the unit's operations and capabilities. The integration of the specialty elements enables the unit to meet some of the warfighting function integration requirements.

4-28. Units provide the following to prepare the trainers:

- Commander's training objectives.
- Scenario concept with collective tasks to be trained and evaluated.
- Rules of engagement for the training event.
- Review of the training and evaluation outlines of the mission-essential tasks evaluated.
- Review of supporting and individual tasks that directly support or complement the supporting collective and mission-essential tasks.
- Conduct of the event brief. Commanders provide how the unit will execute the FTX.
- Risk assessment.
- Identification of supporting doctrinal publications for use as primary references.
- TADSS, pyrotechnics, blanks, and battle effects simulators used during the training event.

RECON THE SITE

4-29. The Table IV, FTX uses an authorized training area or series of training areas. Commanders schedule the training location as far in advance as practical following the installation's policies and procedures. Once the method of training and evaluation is established, commanders should secure the training location and appropriate TADSS, equipment, or systems that enhance the training event.

4-30. Once scheduled, the commander and platoon leaders conduct a reconnaissance of the training areas to—

- Verify sufficient space is available to support the training unit including branches and sequels.
- Ensure multiple iterations or rotations through the scenario can be achieved with appropriate retraining opportunities.
- Ensure sufficient administrative areas are available to support group discussions, briefings, and AARs.
- Provide sand table or terrain board.
- Provide terrain board kits.
- Confirm appropriate warfighting function integration capabilities into the concept of the training event (see figure 4-3).
- Verify the training area has the ability to incorporate engineers, direct fire support, special purpose weapons, and sniper teams into the scenario, as the commander directs. Identify authorized dig locations and required permits within the training area. Identify restricted terrain, environmental considerations, and any no-go areas within the training sites. (Movement and maneuver.)
- Identify the level of fire support that can be included into the training scenario. The FSO or FIST provide fires synchronization and realism. Units should include a fire marker plan to enhance the battle effects of the mission, where appropriate. (Fire support.)
- Provide the scenario a threat template that is appropriate to the unit's mission and build a more robust and effective scenario (higher headquarters battalion or brigade intelligence staff officer). The supporting military intelligence company can provide notional or simulation injected feeds replicating Shadow or other unmanned systems for scenario development, as appropriate. (Intelligence.)
- Verify the training area has the ability to support the unit's training while in a chemical environment, based on the scenario design. (Protection.)
- Verify casualty evacuation and MEDEVAC notional or live capabilities in support of the training scenario. (Sustainment.)
- Identify command post capabilities and locations in the training areas. Identify any external TOC configuration that can be incorporated for higher headquarters staff integration, as appropriate. (Mission command.)
- Identify one obstacle intent and the type of breach the unit should conduct to achieve the training objectives (hasty, deliberate, bypass and report, and so forth).

MOVEMENT AND MANEUVER		*Recon the Training Site to Accommodate*
ENGINEERS	REQUIRED	Engineers should provide their designated leadership for the training event to provide simulations instructor and operator support, as appropriate.
BREACH OBSTACLE (OFFENSE)	MISSION DEPENDENT	Engineer leadership should develop offense and defense scenario support at the simulation's instructor or operator or exercise control center station.
INTEGRATE OBSTACLE (DEFENSE)		
DIRECT FIRE SUPPORT	REQUIRED	For simulation systems that do not provide dismounted Soldier stations, the units should provide sufficient Soldiers to conduct notional FM traffic or role players, as the scenario dictates.
SPECIAL PURPOSE WEAPONS		
FIRE SUPPORT		
CLOSE AIR SUPPORT	REQUIRED	Units can coordinate for JTAC support for call for fire mission to close air support and attack aviation. JTAC personnel can assist evaluation of proper call-for-fire procedures as necessary.
ATTACK AVIATION		
FIELD ARTILLERY		The unit's FSO or FIST provides evaluation of call-for-fire procedures. Units can include mortar sections or platoons establish firing positions and conduct drills on demand while supporting the unit's STX-V scenarios.
MORTARS (COMPANY OR BATTALION)		
ELECTRONIC WARFARE ASSETS	OPTIONAL	Units request higher level EW capabilities at commander's discretion. Unit employs organic or notional EW systems to build SA. Unit leaders request and incorporate EW information into their maneuver planning and operations. This provides EW personnel within the brigade with valuable training opportunities during maneuver operations.
INTELLIGENCE		
UAS/UGS	REQUIRED	Brigade Shadow Team can provide notional support via FM with limited simulated video feed in support of intelligence operations during the scenario.
DIGITAL ICON POPULATION		When available, the unit should include reporting mission situation reports, contact reports, far target locate tasks, and other digital messaging during the scenarios.
DIGITAL REPORTS		
PROTECTION		
CBRN	REQUIRED	Units should include CBRN tasks to their scenarios to exercise the unit's ability to function in a degraded capacity.
AIR DEFENSE OR COUNTERFIRE	OPTIONAL	The unit's FSO or FIST can provide notional air defense and radar function to support the unit's scenario as necessary.
SUSTAINMENT		
CASEVAC	REQUIRED	Units are required to rehearse their CASEVAC and MEDEVAC TTP to verify their SOPs during STX-V. Units should include the higher headquarters' medical platoon to assist as appropriate.
MEDEVAC		
MISSION COMMAND		
OPORD	2 MINIMUM	Units must exercise their ability to send and receive OPORD, FRAGORDs, and overlays in an administrative role, as well as during the training scenarios via analog or digital means.
FRAGORD	4 MINIMUM	
GRAPHICS OVERLAY	REQUIRED	

Legend

CASEVAC	casualty evacuation	MEDEVAC	medical evacuation
CBRN	chemical, biological, radiological, and nuclear	OPORD	operations order
EW	electronic warfare	SA	situational awareness
FIST	fire support team	SOP	standard operating procedure
FM	frequency modulation	STX-V	situational training exercise-virtual
FRAGORD	fragmentary order	TTP	tactics, techniques, and procedures
FSO	fire support officer	UAS	unmanned aircraft system
JTAC	joint terminal attack controller	UGS	unmanned ground system

Figure 4-3. Warfighting function integration, examples

ISSUE THE ORDER

4-31. Commanders can issue an OPORD, a WARNORD, or use the training schedule as necessary. The training unit must ensure all supporting staff or enablers have sufficient time for coordination and preparation prior to the training event.

4-32. WARNORDs to external organizations must include sufficient reaction time for the appropriate personnel and equipment. The WARNORD should include the appropriate tasks, required leaders, and equipment needed, as well as the unit's training timeline including walk-through, rehearsals, and AARs.

4-33. The OPORD or WARNORD should include the list of tasks evaluated during the event and the method of evaluation. Commanders should provide sufficient time for subordinate leaders to train the tasks and skills listed in the order. Commanders should ensure the appropriate training resources are available and accessible. Upon receipt, subordinate leaders that have SOPs for their organizations must ensure their procedures support and complement the higher headquarters publication.

REHEARSE

4-34. The unit conducts a rehearsal of the training event with all training resources, materials, and equipment available. During the rehearsal, commanders ensure sufficient time is provided for their unit to train to the specified standard, including AARs, retraining time, and verify optional scenarios that increase complexity when warranted.

4-35. For maneuver units that expect to cross-attach to an external unit, the rehearsal is an opportunity for the commander to synchronize the unit SOP with the tactical SOP of their gaining unit or attached personnel or organizations.

4-36. Units should rehearse the training event from start to finish and confirm—

- Training scenarios are understood by the OPFOR.
- Sufficient space is available to provide standoff distances for the unit and OPFOR to build the appropriate tempo of each mission or phase of the operation.
- Analog and digital systems are operational within the organization and to the higher headquarters regardless of their location.
- Additional OC/Ts training support packages are complete and provide for multiple iterations.
- Appropriate doctrinal publications are available for reference.
- Sufficient administrative areas are available.
- AAR capabilities are reviewed.
- Available warfighting function enablers are integrated with the unit or appropriate subordinate unit.
- Process for conducting direct fire support tasks.
- Methods and actions required to provide fire support.
- Integration of attack aviation and CAS during the scenario as required.
- Process used to incorporate intelligence activities into the scenario.
- Location of retraining for subordinate units as necessary.

4-37. The commander makes any necessary adjustments to the plan and issues FRAGORDs once the unit completes the walk-through and training rehearsal.

EXECUTE

4-38. Once the unit arrives at the training location, they should—

- Conduct a safety briefing for the training event.
- Provide a conduct of the exercise briefing to establish the sequence of events, timelines, and other training synchronization information.
- Conduct sensitive item checks prior to executing training.
- Occupy the appropriate assembly area or battle position as the commander directs.
- Assign observer and controller with trainers as appropriate.
- Issue the OPORD for the training mission.
- Execute the training scenario.

4-39. The training unit conducts informal AARs of each progressive scenario within the training mission as the commander directs. Once the training unit completes the mission through a specific training objective or phase of the operation, the commander conducts a formal AAR prior to issuing a FRAGORD for the next mission or mission task.

4-40. During training, the assigned OC/T, commander, and staff review the subordinate unit's performance. They follow the relevant doctrine, unit SOP, prescribed TTP, and the appropriate training and evaluation outlines.

4-41. Units should escalate the analog and digital stimulus to the training units to increase the complexity of the training event based on their observations. Commanders sustain the tempo of the events to reinforce the need to execute supporting collective tasks rapidly and on demand rather than with a canned, one-task-at-a-time approach to training used during the STX lanes.

4-42. During execution, commanders consider increasing the difficulty, complexity, or rigor to the training events by various means using scenario branches or sequels. Examples of tactical stressors that commanders can instigate are listed below:

- Increase OPFOR indirect fires.
- Direct additional OPFOR engagements to provide additional tactical dilemmas.
- Issue FRAGORDs directing the unit to change the mission rapidly.
- Direct trainers to assess battle damage or casualties within the unit.
- Increase OPFOR tactical responses and pressures to challenge ammunition consumption, fire control, distribution, and increased calls for support.
- Introduce chemical environments into specific phases of a mission.
- Alter the composition of the OPFOR.
- Add neutral noncombatants to the scenario.

ASSESS

4-43. The unit should include all assigned and attached Soldiers and elements in the training event based on the commander's determination of how the unit shall fight to support the combatant commander. The intent of the FTX is to provide an EXEVAL of the organization, its subordinate units, and attached elements on their mission-essential tasks and supporting collective tasks that the commander deems critical to their success.

4-44. Periodically after completing a phase, branch, or sequel of the training scenario, the commander may direct the unit to conduct—

- An informal AAR facilitated by the assigned OC/T, commander, and staff, as appropriate.
- A formal AAR led by the commander using the training notes provided by the OC/Ts, executive officer, operations officer, and command sergeant major.

4-45. At the completion of the training event, key leaders discuss with their senior leaders any shortcomings, gaps, or disconnects between SOPs by echelon, and determine any corrective actions. With the input from the OC/T and unit leadership, the commander provides retraining opportunities as necessary, including additional scenarios.

Note. At the completion of the company training strategy, the key leaders and their commander assess their performance during all six training events (Table I through VI), review their SOPs, and validate their accuracy and effectiveness for continued use.

4-46. OC/Ts should provide clear and articulate comments and insight on the positive and negative actions of the subordinate units they observed. OC/Ts use the training and evaluation outlines to guide them through the evaluation process, and use a variety of doctrinal publications to support their comments, discussions, and critiques of the unit observed.

4-47. The OC/T and unit leadership should review the training and evaluation outlines, training notes, and observations, to determine which tasks require additional attention through the remainder of the training density. They also can identify where additional complexities and tactical challenges can be induced during training where mastery has been demonstrated.

4-48. The commander should share the overall performance of the unit, including the observations, with the entire training unit. This allows the subordinate units to learn from other unit's best practices, procedures, and tactics, and at times from their shortcomings or mistakes. The commander should identify leaders within the organization that have demonstrated superior performance and tactical competence by assigning them as OC/Ts during future training events, internal and external to the organization.

4-49. At the completion of the FTX, commanders gain insight to where their unit's SOPs are working and where they need additional attention. If time is available, commanders should capture where the SOPs require attention, update, and provide those changes or revisions to the unit prior to executing any live-fire event.

4-50. Commanders identify the unit or subordinate unit that requires retraining of specific tasks during the AAR with input from the OC/Ts, staff, attached leaders, and the facility instructor operators. Once the commander identifies the retraining needs of the unit, they should execute a retraining event of the scenario. For minor tactical adjustments for the unit or subordinate units, the commander may opt to discuss different methods to complete the task, followed by back-briefs using terrain models or sand tables, rather than executing the entire training scenario. A retraining event of the scenario may consist of the following:

- The entire company executing the training scenario again.
- A select subordinate unit executing the training scenario.
- Rotating subordinate units through different mission tasks to support the supporting collective task.

Chapter 5
Fire Coordination Exercise

Chapter 5 describes the requirements of the FCX. The chapter discusses how the exercise integrates into the unit training plan following the structure of the IWTS. Units can use the descriptive guidelines in this chapter for the company FCX. This chapter details the purpose, method, and end state for the training event.

An FCX is a live-fire training event. The training event is designed to train commanders, staffs, and key leaders in planning, integrating, and synchronizing direct and indirect fires, CAS, attack aviation, and other warfighting functions to support maneuver under live-fire conditions. Typically, an FCX is a reduced force exercise at a reduced tempo. At a minimum, key leaders and fire support personnel represent the units. Units may use subcaliber devices, pyrotechnics, or battle effects simulators as substitutes for full-caliber munitions that represent the appropriate combat effects.

EVENT OVERVIEW

5-1. Live-fire training exercises provide an excellent environment for the simultaneous performance of multi-echelon training activities to evaluate and sustain the skills of Soldiers, leaders, teams, and units. Exercises simulate battle conditions to train leaders under mission-unique conditions and standards for training, evaluating, and applying the best TTP to the mission being trained (see figure 5-1). The FCX requires minimal troop support. Units can train at home station to provide commanders, leaders, and staffs with realistic training in the art of command of synchronizing combat power during operations.

	Table I	*Table II*	*Table III*	*Table IV*	*Table V*	*Table VI*
Company	TEWT	STX-V	STX	FTX	FCX	CALFEX
Days Required	1.0	1.0	4.0	5.0	1.0	2.0
Training Days Remaining on Critical Path	13.0	12.0	8.0	3.0 CTP	2.0	LFPG
Multi-echelon indicates the training days are provided as part of the company training strategy. STX-V and STX lanes may be executed during similar events for the battalion provided that training, assessment, and retraining for the company is provided prior to the higher echelon task.						
Legend						
CALFEX	combined arms live-fire exercise		LFPG	live-fire proficiency gate		
CTP	collective task proficiency		STX	situational training exercise		
FCX	fire coordination exercise		STX-V	situational training exercise- virtual training environment		
FTX	field training exercise		TEWT	tactical exercise without troops		

Figure 5-1. Company, Table V, FCX

5-2. Units conduct the exercises in the Company, Table V, FCX in a live environment under live-fire conditions. Units conduct the FCX with key leaders and enablers to build proficiency of the unit's synchronization and coordination of fire and maneuver across multiple warfighting functions. The FCX verifies and validates the leader's proficiency with critical collective and supporting collective tasks that the unit performs in a combat environment when executing their mission-essential tasks.

5-3. During the FCX, leaders must build and demonstrate proficiency with individual and collective tasks. These tasks support integration and synchronization of direct and indirect fires, CAS, attack aviation, and other warfighting function enablers while executing mission-essential tasks on a reduced scale. Table V is a key training event conducted prior to the echelon's live-fire exercise EXEVAL.

PURPOSE

5-4. The purpose of the FCX is to provide a focused training event for the unit's leaders to synchronize direct and indirect fires, CAS, attack aviation, and other integrated warfighting functions. The leaders train while operating in the offense or defense at a reduced tempo using full or subcaliber training munitions.

5-5. The FCX requires a reduced force replicating the critical subordinate elements. The FCX builds leader skills in the integration, timing, coordination, and execution of critical live-fire actions.

METHOD

5-6. The FCX is commander designed for a limited size force (typically key leaders and integrated enabler leadership). During the exercise, the force executes critical direct and indirect fires, ground to air coordination, and other critical tasks on a live-fire facility or established training area.

5-7. Table V is the commander's training event to validate the subordinate leader's ability to synchronize fires, coordination within the unit's battlespace. Also, Table V is a training event to integrate key enablers into a reduced tempo live-fire event prior to conducting a full-scale, combined arms LFX.

END STATE

5-8. Organizations train to a level of proficiency that allows them to accomplish their combat or deployed operation successfully. The unit and its subordinate assigned or attached elements must demonstrate (in a live environment under live-fire conditions) their ability to execute mission essential, critical, or directed tasks. Units must adequately demonstrate their proficiency on commander-selected collective tasks, procedures, drills, and battle tasks that synchronize direct fires, indirect fires, and other enablers.

5-9. The FCX provides a means for the commander to—

- Instruct the mission essential and supporting collective tasks to their subordinate units in a live environment under live-fire condition using realistic scenarios.
- Validate the subordinate unit's SOP to ensure synchronization and consistency with the unit SOP.
- Reinforce previous training focused on critical skills and tasks with multiple training iterations.
- Build confidence integrating warfighting functions and enablers during a live-fire event.
- Ensure timing for direct and indirect fires synchronizes effectively to promote fire and maneuver of the organization.

PLANNING CONSIDERATIONS

5-10. Company, Table V, FCX is a live-fire event that trains commanders, staffs, and key leaders in planning and integrating direct fires, indirect fires, attack aviation, and CAS to support maneuver. At a minimum, units execute Table V as a reduced force exercise; key leaders, key subordinate leaders, and fire support personnel with their organic platforms and systems represent units. Units may substitute full caliber munitions with subcaliber ammunition and devices based on resources available or restrictions beyond the evaluation commander's control.

5-11. The FCX requires the integration of specific warfighting functions by echelon and stresses the synchronization of fire and maneuver at a reduced tempo. The FCX builds upon skills trained and tested during Table I, II, and III and prepares the company for the CALFEX, trained at full-tempo.

PLAN

5-12. Planning begins with identifying whom to train during the FCX. Next, the commander conducts a training assessment to determine who needs additional training. By referencing the appropriate mission-essential task and universal task list, the commander can identify and incorporate each task's conditions and standards into the training plan.

5-13. Once complete, the commander establishes the training objectives for the FCX. The unit commanders develop an OPORD for the mission in advance of the training event. The unit commanders use an OPORD to develop an event list and timeline. The commanders tie the event list and timeline to the specific direct and indirect fire, mission command, and warfighting functions integrated into the training event. This process allows commanders to focus their training resources on the tasks selected for training during the training assessment process.

Note. Company, Table V, FCX is developed and coordinated at the brigade level. This chapter uses the plan, prepare, execute, and assess operations process as an outline for units developing their Table V event.

5-14. Company, Table V, FCX is a complex training event for the company and troop prior to Company, Table VI, CALFEX. This training event is for all Soldiers who are assigned, attached, or designated to the company as a member of a—

- Subordinate unit.
- Assigned specialty unit.
- Cross-attached enabler small unit (based on the specified task that is to be trained).

Note. Commanders have the option to execute Table V with key leaders and attached enabler leadership representing their subordinate element only Commanders can conduct the FCX at full-scale with all personnel, equipment, and full-caliber munitions, if resources are available.

5-15. During the planning process, commanders must be familiar with the following general information related to the company FCX:

- Prerequisites. All subordinate units, attachments, and integrated warfighting function enablers must be qualified to perform their core tasks according to applicable training strategies in their designated field of expertise in order to provide those skills during the company and troop-level FCX.
- Condemnation criteria. Table V is relevant only to the current training density and may not be used to meet any prerequisites beyond that training density.

- Environment and conditions. The FCX is conducted in the live environment, under live-fire conditions. The unit rehearses through sand tables, walk-throughs, or other methods based on the commander's intent and guidance. Units must plan for sufficient resources and coordinate with external enablers to ensure resources are forecasted and available. Typically, this training event is executed with key leaders and attached enabler leadership. Although the entire unit is present, typically only a portion of the unit fires training ammunition for synchronization and effects.
- Training days required. Each company-size element is authorized a minimum of 1 training day to conduct the FCX. Additional days may be required for retraining as necessary.
- Frequency. When directed, units conduct the FCX annually as part of their company-training plan.
- Throughput. A battalion can expect to complete one company-size element per day on the training facility as follows:
  - Day 1, unit preparation and rehearsal.
  - Day 2, day and night fire coordination live-fire execution.

Note. Primary and alternate facilities. The FCX may be conducted on a digital range facility (digital multipurpose range complex, digital air-ground integration range, battle area complex), on a large, maneuver live-fire range, or on a safety certified training area. Units may use multiple ranges and training areas simultaneously to support the size and structure of their formation synchronized by the unit's mission command nodes, installation support, and other methods.

5-16. Planning includes the identification and allocation of ammunition; petroleum, oil, and lubricants (POL); equipment; and support personnel. Coordination of facilities and resources is a continuous process through execution. Prerequisite individual and collective training continue throughout the planning phases.

5-17. Detailed planning by the evaluation commander's headquarters focuses on the training objectives and development of the scenario. The evaluation commander's specified mission may be the same primary mission for each company, or it may vary between companies based on their mission-essential task assessments, capabilities, combatant commander guidance, or other requirements. The commander's initial guidance may specify the exercise tasks or develop as the commander designs the scenario.

5-18. Each unit, with their specific weapon systems, involved in the upcoming CALFEX must be included in the planning process. The following is a discussion of the key considerations for the different types of units, enablers, and warfighting functions. The unprecedented ground mobility of stabilized weapon system platforms necessitates the design of deep ranges to maximize the use of their advanced capabilities. Targets on ranges are heated (thermalized) to facilitate acquisition by weapon system platforms and sensors.

Note. See Appendix B for detailed, scenario development requirements for all live-fire training events. Appendix B applies to Table IV, FTX; Table V, FCX; and Table VI, CALFEX, as well as any unit developed live-fire training events or exercises that utilize a scenario to guide the training unit through specific tasks.

5-19. Units are required to integrate the warfighting functions during the day and night phase at least once for evaluation purposes (see figure 5-2). They are not required to include them on every training day. This allows the unit to tailor the training and evaluation across the full training days available and progressively increase the rigor and complexity of the tactical situations presented based on their observations.

Note. Commanders may choose to integrate specific warfighting function tasks during Table V, FCX that can significantly increase the company's proficiency for Table VI, CALFEX evaluations. The commander may also elect to integrate additional tasks listed within figure 5-2 that are deemed beneficial to the company training in order to obtain the proficiency level on the desired tasks selected by the commander. In doing so, this enables a unit to maximize training opportunities on commander-selected tasks using a progressive training model needed to achieve the desired end state prior to evaluation.

MISSION COMMAND	*SQUAD*	*SECTION and PLATOON*	*COMPANY and TROOP*
Graphics Overlay	Required	Required	Required
OPORD	Required	Minimum 1	Minimum 2
FRAGORD	Optional	Minimum 2	Minimum 4
Conduct a Rehearsal	Required	Required	Required
Operate a Command Post			Required
MOVEMENT AND MANEUVER			
Engineers			Required
Breach Obstacle (Offense)			Required
Integrate Obstacle (Defense)			Required
Direct Fire Support		Required	Required
Employ Snipers		Optional	Required
Special Purpose Weapons*	Minimum 1	Minimum 2	Minimum 3
Conduct Quartering Party Activities		Optional	Required
Conduct a Dismounted Tactical Road March*		Required	Required
Conduct a Mounted Tactical Road March**		Required	Required
Occupy an Assembly Area	Optional	Required	Required
Conduct Tactical Movement	Required	Required	Required
FIRE SUPPORT			
Close Air Support			Optional
Attack Aviation			Optional
Field Artillery			Required
Mortars (Company or Battalion)			Required
Air Defense or Counterfire			Optional
INTELLIGENCE			
UAS/UGS			Required
Digital Icon Population		Required	Required
Digital Reports			Required
PROTECTION			
CBRN	Required	Required	Required
Maintain Operational Security	Required	Required	Required
Perform Field Sanitation Functions	Optional	Optional	Required
Conduct Risk Management	Required	Required	Required
SUSTAINMENT			
CASEVAC	Required	Required	Required
MEDEVAC			Required
Conduct Consolidation and Reorganization	Required	Required	Required
Conduct LOGPAC Support			Required
*Dismounted units only **Mounted units only			
Legend CASEVAC casualty evacuation CBRN chemical, biological, radiological, and nuclear FRAGORD fragmentary order LOGPAC logistics package		MEDEVAC medical evacuation OPORD operation order UAS unmanned aircraft system UGS unmanned ground system	

Figure 5-2. Integration of warfighting functions and tasks, Table V, FCX

AMMUNITION REQUIREMENTS

5-20. The ammunition requirements are listed by the weapon, system, or element that participates in the training event (appendix A). The unit may adjust training ammunition requirements based on resources available within their training accounts, but should not be less than those quantities listed.

Note. Commanders may elect to conduct the "dry, blank, and live" method based on the resources available and current proficiency of the unit that is training to mitigate risk during the live-fire training events.

5-21. Not all weapons, systems, or platforms are resourced training ammunition for the company-level FCX. Units should review their training ammunition accounts to determine the appropriate amount of munitions for their event. Most training strategies provide sufficient ammunition during the previous echelon's training, such that harvested munitions (first round hit savings), can be utilized for the FCX. Harvested ammunition are munitions that typically are turned-in after the previous training events, sometimes referred to as first round hit savings.

5-22. Refer to appendix A to review the minimum training munitions requirements for each training event. The quantities listed in appendix A are recommended munitions quantities and may not reflect the authorized munitions found in DA PAM 350-38 for the fiscal year. The recommended munitions quantities are provided to create the most realistic and effective training event. Units should refer to DA PAM 350-38 to identify the fiscal year's authorizations for each event by weapon type and to review the commander's intent and munitions expected for use during the training event. Units should augment the quantities listed with munitions they have within their Total Ammunition Management Information System account.

5-23. The intent of the mortar training ammunition requirements is to provide a minimum of two call-for-fire missions during the day phase and two fire missions during the night phase (minimum one illumination mission). The day phase includes smoke and HE.

5-24. Ammunition listed above is to support one complete maneuver battalion through the company FCX. Units should focus on one day and night fire mission for each company or troop. Units should focus additional munitions on training during the upcoming CALFEX, unless additional, indirect fire synchronization training is required. The BCT commander must approve additional training ammunition to support the maneuver company's Table V.

5-25. Units must prepare to issue and turn-in large quantities of small arms ammunition. Typically, units provide small arms ammunition in larger quantities to the training unit so the Infantry Soldiers can experience a combat-realistic weight burden. Units should only provide small arms ammunition to modified table of organization and equipment combat arms firers that are part of the training maneuver unit. Units should not provide ammunition to non-combat arms Soldiers unless required by specific scenario events.

RANGE REQUIREMENTS

5-26. Maneuver installations have various training facilities to support the company FCX. No matter the installation, multiple facilities, training areas, and dedicated and temporary impact areas are required to conduct the FCX to standard.

5-27. The Army's family of maneuver ranges provides a vast array of capabilities that provide a combat realistic scenario. Each installation and their facilities have limitations and restrictions. Units must fully understand the capabilities, limitations, constraints, and restrictions that affect their training event's development and execution.

5-28. Refer to TC 25-8 for detailed information on live-fire range capabilities, limitations, layout, and general targetry information. Refer to DA PAM 385-63 and AR 385-63 for surface danger zones (known as SDZs), weapon danger zones personnel requirements, and other live-fire information. Units must review the appropriate range regulations and Department of the Army pamphlets, as well as their local range regulations, policies, and procedures during their planning process to ensure their training scenarios are viable and safe.

PREPARE

5-29. The company and troop's training strategy events completed prior to the FCX provide preparation for Table V. Units should maximize the platoon and company training plans, as well as the Table V rehearsal period (typically Day 1) to prepare for the live-fire portion of Table V, FCX. Units should ensure subordinate unit training plans support the critical, supporting collective tasks and critical leader tasks that support the company and troop FCX and CALFEX. Units should ensure subordinate unit training plans are integrated into their unit training plan.

5-30. Units preparing to execute company training events use their SOP throughout the training density. Commanders use the SOP to validate the subordinate unit's SOP and to confirm the higher headquarters SOP is supported. The subordinate elements of the training unit should be aware of the purpose, method, and end state of Table V and how their training plans support the unit's mission-essential tasks.

RESOURCE THE TRAINING

5-31. The FCX requires the unit to coordinate and secure the following resources (see appendix A and appendix B for detailed information):

- Full and subcaliber training munitions.
- Demolitions.
- Pyrotechnics.
- Battle effects simulators.
- Live-fire facility or safety certified training area based on unit composition (see TC 25-8 and TC 25-1 for additional information).
- Training areas for unit assembly area activities prior to and after FCX execution.
- Maneuver areas that support the tactical scenario for the FCX prior to and after live fire.

5-32. Units must plan and secure resources early to ensure availability and accessibility during the training event. Ammunition resources must be forecasted a minimum of 90 days in advance of training to allow sufficient time for shipment to the servicing ammunition supply point.

TRAIN AND REHEARSE THE OBSERVER-CONTROLLER TRAINERS

5-33. The training and certification of the OC/Ts is critical during the preparation phase. The OC/Ts must be tactically and technically proficient in the task they are to evaluate. The OC/Ts must conduct an effective AAR that facilitates self-discovery of key issues for the unit, establishes cause and effect, solves or leads to solving the problems identified, and fosters an environment for continuous improvement.

5-34. OC/Ts have an important role in ensuring live-fire training is conducted safely and are a key mitigation measure in the risk assessment process. As such, OC/Ts must be thoroughly familiar with the weapons that will be employed and must understand their effects. They must be familiar with the range to include firing limits, firing points, maneuver boxes, target locations, and indirect fire targets. To ensure safe live-fire maneuver, OC/Ts must know all fire control measures used in the FCX including phase lines, target reference point (TRP) locations, azimuths for firing, triggers and signals that drive shifting or ceasing fires, and any other controls the commander chooses to employ.

5-35. Additionally, the OC/Ts should reference and visualize applicable doctrine, training and evaluation outlines, and TTP during the conduct of the AAR to facilitate understanding. They must be completely familiar with the conditions and standards of the tasks trained and must know the evaluated units' tactical SOPs.

TRAIN UNIT LEADERS ON RELATED TTP

5-36. Training unit leaders on the related TTP is key to the successful execution of the FCX. Unit commanders ensure their subordinate leaders train on the tasks, conditions, and standards of the FCX. Training should include a review of the appropriate training and evaluation outlines and related TTP for the mission and tasks.

5-37. A series of officer, professional development sessions, or other informal training seminars is one method for training subordinate leaders. These should include junior leader seminars, officer professional development and noncommissioned officer professional development classes to best educate the junior leaders prior to the event.

LEADERS REHEARSAL

5-38. Rehearsals help leaders and subordinates understand the conduct of events and their responsibilities. Rehearsals help the organization synchronize training with times, places, logistics, and training support. A rehearsal of a concept drill helps leaders visualize an event as it unfolds as well as likely branches and sequels if leaders must adjust the training. Leaders conduct rehearsals using the various levels and techniques described in ADP 7-0.

5-39. Units use sand tables or terrain models to reinforce subordinate leader understanding of the conduct training event, as well as rehearsing the critical collective tasks trained during the FCX. The rehearsals should include digital and analog stimulus and drivers that initiate action by the training unit, including the various branches and sequels developed.

5-40. The operations officer uses rehearsals to verify the conduct of the range events, movement and control of reconnaissance elements, and to synchronize maneuver unit actions. In addition, rehearsals help the operations officer to proof the scenario stimulus events or actions that drive the training unit to the appropriate tasks, drills, or actions.

EXECUTE

5-41. Commanders should limit the firing elements to leaders only. The FCX does not require the entire unit participate, but if the training footprint supports it, the entire unit should tactically participate with leader elements completing the live-fire tasks.

5-42. Units complete Table V prior to Table VI, CALFEX. Depending on the higher headquarters training plan, units can execute Table V before or after Table IV, Field Training Exercise. Units may execute Table V in a manner that fits the commander's plan and range facility, training area availability, and accessibility.

5-43. Table V consists of 1 training day and one multi-echelon preparation day. The FCX has a day and a night phase with multiple progressive actions determined by the commander. An example flow for the company FCX is—

- Day 1, day phase:
  - Assembly area occupation.
  - Assembly area activities.
  - Tactical movement to the range facility or authorized training area; walk through or rehearsal.
  - Establishing hasty defensive positions.
  - Scenario rehearsal.
  - Fire coordination, distribution, and synchronization rehearsal.
  - Reconsolidation and reorganization rehearsal.
  - Tactical movement to an assembly area or battle position not on the training facility.
  - Day AAR.
  - Day assembly area activities.
- Day 1, night phase:
  - Preparation for night operations.
  - Tactical movement to the range facility or authorized training area.
  - Establishing hasty defensive positions.
  - Scenario rehearsal.
  - Fire coordination, distribution, and synchronization rehearsal.
  - Reconsolidation and reorganization rehearsal.
  - Tactical movement to an assembly area or battle position not on the training facility.
  - Night after AAR.
  - Night assembly area activities.
- Day 2, day phase:
  - Assembly area activities.
  - Tactical movement to the range facility or authorized training area.
  - Establishing hasty defensive positions.
  - Scenario execution.
  - Fire coordination, distribution, and synchronization.
  - Reconsolidation and reorganization.
  - Tactical movement to an assembly area or battle positions not on the training facility.
  - Day AAR.
- Day 2, night phase:
  - Preparation for night operations.
  - Tactical movement to the range facility or authorized training area.
  - Establishing hasty defensive positions.
  - Scenario execution.
  - Fire coordination, distribution, and synchronization.
  - Reconsolidation and reorganization.
  - Tactical movement to an assembly area or battle position not on the training facility.
  - Night AAR.

ASSESS

5-44. At the completion of each phase of Table V, key leaders discuss with their senior leader any shortcomings, gaps, or disconnects between SOPs by echelon, actions that require additional training or synchronization efforts, missing tasks or actions that should be included, and determine any corrective actions necessary. Commanders use the AAR process to educate junior leaders and subordinates to reinforce the training objectives, identify shortfalls and corrective measures, as well as identify strengths within their formation.

PREPARE AND CONDUCT THE AFTER ACTION REVIEW

5-45. The evaluation process for an FCX is continuous. The AAR is informal and focuses on the tasks, conditions, and standards selected for training. The training evaluations and subsequent AARs are integral to the training management process.

Note. FM 7-0 provides a detailed description of the AAR process.

5-46. Commanders review the notes from the various OC/Ts, subordinate leaders, fire support officers, and others to determine the proficiency of the participating key leaders and their ability to execute the critical synchronization and maneuver tasks. Once complete with the review, the commander assesses the organization's ability to complete the tasks at the reduced tempo, identifies key areas to retrain at the company level, and develops a retraining plan, as appropriate.

CONDUCT RETRAINING

5-47. Corrective training allows participants to translate observations and evaluation into corrective action. Additional training allows the participants to apply the lessons learned during the execution and AAR. Leaders understand that during the training event, participants may not perform the all the evaluated tasks to the desired standard. Therefore, during the short-range and near-term planning process, commanders provide flexibility within the training events that facilitate additional training immediately following the AAR.

5-48. The FCX focuses on the very basic level of training–the coordination of direct and indirect fires with maneuver and mission command. Once a unit has successfully demonstrated performance on the selected tasks, the unit prepares to move on to more complex, rigorous, and demanding collective training events.

Chapter 6

Combined Arms Live-Fire Exercise

This chapter describes the requirements of Company, Table VI, CALFEX and how it integrates into their unit training plan following the structure of the IWTS. Units use the descriptive guidelines in this chapter to conduct Company, Table VI CALFEX. This chapter provides the purpose, method, and end state for the training event.

EVENT OVERVIEW

6-1. A CALFEX is an externally, evaluated maneuver live-fire event that measures a unit's proficiency in executing a mission-essential task. A CALFEX evaluates the commander and the unit's ability to integrate organic weapons systems, subordinate units, and multiple warfighting functions at full-tempo using full-caliber ammunition. Attached units employ their associated weapons systems.

6-2. CALFEXs provide an excellent environment for the simultaneous performance of multi-echelon training activities to evaluate and sustain the skills of Soldiers, leaders, teams, staffs, and units. Figure 6-1 illustrates where the company CALFEX falls within the overall company and troop training strategy.

	Table I	***Table II***	***Table III***	***Table IV***	***Table V***	***Table VI***
Company	TEWT	STX-V	STX	FTX	FCX	CALFEX
Days Required	1.0	1.0	4.0	5.0	1.0	2.0
Training Days Remaining on Critical Path	13.0	12.0	8.0	3.0 CTP	2.0	LFPG
Multi-echelon indicates the training days are provided as part of the company training strategy. STX-V and STX lanes may be executed during similar events for the battalion provided that training, assessment, and retraining for the company is provided prior to the higher echelon task.						

Legend

CALFEX	combined arms live-fire exercise	LFPG	live-fire proficiency gate
CTP	collective task proficiency	STX	situational training exercise
FCX	fire coordination exercise	STX-V	situational training exercise- virtual training environment
FTX	field training exercise	TEWT	tactical exercise without troops

Figure 6-1. Company, Table VI, CALFEX

6-3. Exercises simulate operational environment conditions to train leaders under mission-unique conditions and standards for training, evaluating, and applying the best TTP to the mission being trained. This exercise may use minimal troop support. Units can execute the event at home station to provide commanders, leaders, and staffs with realistic practice in executing wartime missions. Goals associated with live-fire training exercises, including the CALFEX are—

- Sustain Soldier, leader, and collective skills.
- Develop and sustain mission command skills.
- Increase combat realism with complex and challenging conditions and effects.

6-4. Units conduct Company, Table VI, CALFEX in a live environment under live-fire conditions. Units conduct the CALFEX with all subordinate elements and enablers to build proficiency of the unit's synchronization and coordination of fire and maneuver across multiple warfighting functions. The CALFEX verifies and validates the leader's proficiency on critical, collective, and supporting collective tasks that the unit performs in a combat environment.

6-5. During Table VI, leaders must demonstrate proficiency with individual and collective tasks. These tasks support integration and synchronization of direct and indirect fires, CAS, attack aviation, and other warfighting function enablers. Table VI is the maneuver company's LFPG, required to progress to battalion and above live-fire training events.

PURPOSE

6-6. The purpose of a CALFEX is to provide a focused training event for the unit's leaders to synchronize direct and indirect fires, CAS, attack aviation, and other integrated warfighting functions, while operating in the offense or defense, at a full, combat-realistic tempo using full-caliber training munitions. The CALFEX is conducted with a day and night phase to ensure mission-essential task proficiency in varying visibility conditions.

6-7. The CALFEX is the unit's LFPG. It must be successfully completed, day and night, prior to advancing to a battalion or higher CALFEX.

METHOD

6-8. Table VI is designed for a maneuver company-size unit with all associated or attached elements. The unit executes direct and indirect fires, ground to air coordination, and other critical tasks on a live-fire facility or established training area. The unit conducts a training mission replicating a minimum of one mission-essential task, day and night.

6-9. The CALFEX is externally evaluated by a trained and certified OC/T team using the approved training and evaluation outlines. The evaluation commander determines the overall unit proficiency of the live-fire mission-essential task using the training and evaluation outlines provided by the OC/T team.

END STATE

6-10. Units train to a level of proficiency that allows them to accomplish their combat mission or deployment operation successfully. The training unit (with all assigned or attached subordinate elements) must demonstrate (in a live environment, under live-fire conditions) their ability to execute mission essential, critical, or directed tasks. For the commander, Table VI, CALFEX (EXEVAL) provides a means to—

- Evaluate the mission essential and supporting collective tasks to their subordinate units in a live environment under live-fire conditions using realistic scenarios.
- Validate the subordinate unit's SOP to ensure synchronization and consistency with the unit SOP.
- Reinforce previous training focused on critical skills and tasks with multiple training iterations.
- Build confidence integrating warfighting functions and enablers.
- Ensure timing for direct and indirect fires is synchronized to promote fire and maneuver of the organization.

PLANNING CONSIDERATIONS

6-11. Company, Table VI, CALFEX is an externally evaluated maneuver live-fire event that measures a unit's proficiency in executing a series of supporting collective tasks and at least one mission-essential task. Table VI evaluates the key and subordinate leader's ability to integrate organic weapons systems, subordinate units, and multiple warfighting functions in combat realistic conditions, both day and night. Table VI uses full caliber training ammunition on an authorized live-fire facility or safety certified training area.

6-12. Table VI is the company's externally evaluated LFPG. The LFPG provides commanders with a common standard to create an unbiased assessment of the element's overall proficiency. Successful completion of the LFPG is required to progress to any higher echelon, live-fire event.

CONCEPT

6-13. A CALFEX is a costly, resource-intensive exercise in which combined arms teams maneuver and employ organic and supporting weapon systems, enablers, and warfighting functions. A CALFEX is the most realistic measure of combined arms combat readiness and is an integral part of every maneuver unit's training program.

6-14. Commanders must be aware of the limitations of the CALFEX particularly concerning flank maneuvering while firing on live-fire ranges. Available terrain on the installation range facilities rarely supports this type of maneuver. Use of nonfiring maneuver areas, in conjunction with live firing ranges, assists in achieving realism and adds tactical training not possible on live-fire ranges alone.

6-15. Commanders should use LFXs to train certain aspects of combat readiness, such as distribution, coordination, and synchronization of fires. Commands should try to link multiple, digital, multipurpose range facilities (digital, multipurpose range complex; digital, multipurpose training range; digital, air-ground integration range). Commanders should synchronize, coordinate, and control coordination of all warfighting function enablers available whether at the same ranges, multiple facilities, or at a variety of live-fire ranges for maximum training value whenever possible.

6-16. For an exercise of this nature to be effective, it must involve detailed planning and careful resourcing. Commanders should integrate supplementary missions and a wide range of supporting tasks into the exercise. Resources, including ammunition, personnel, equipment, maneuver areas, and firing ranges must be programmed and coordinated early in the planning process to ensure that units can conduct the exercise day and night.

6-17. This information is not intended to supersede the live-fire program at the collective training centers, but to complement it. Certain planning aspects described herein address common constraints at Army installations worldwide. These same constraints may be relaxed at the collective training center because of the nature of the terrain and to enhance realism.

TRAINING METHODOLOGY

6-18. Command elements (battalion, brigade, or division) participate in all aspects of planning, execution, and evaluation of CALFEX participants. They receive reports from the maneuvering company team, issue FRAGORDs, portray the friendly and enemy situation throughout the battlefield, and coordinate the maneuver and support of sustainment unit elements not under the company's span of control. If the exercise actively integrates sustainment tasks, the command elements provide mission control, and direct and support resupply and reconstitution. A CALFEX must have a minimum of three different weapon system platforms participating in the event (such as mobile gun system [known as MGS], Stryker Infantry carrier vehicle [known as ICV], and mortars).

6-19. The primary trainer during a company CALFEX is the brigade commander. Their participation reinforces the chain of command and provides first-hand observation of the subordinate staff, commanders, and supporting assets. A CALFEX gives units the opportunity to accomplish multi-echelon, combined arms training and evaluation throughout the battalion task force.

6-20. The training objective of a CALFEX is to accomplish a designated combat mission (attack, defend, movement to contact) with full-caliber ammunition, a realistic target array, and required support and

sustainment unit assets. The CATS contains applicable standards for the selected mission as modified by local conditions and the commander's guidance. For additional information concerning the development of the CALFEX scenario, see appendix B.

PLAN

6-21. Planning begins with identifying whom to train during the CALFEX. Next, the commander conducts a training assessment to determine which tasks and subtasks need additional training. The unit references the appropriate mission-essential task and universal task list to identify and incorporate each task's conditions and standards into the training plan, and to integrate them into the event's scenario.

6-22. Once complete, the commander establishes the training objectives for the CALFEX. The unit commander and staff develop an OPORD for the mission in advance of the training event. The unit uses an OPORD to develop an event list and timeline that is tied to the specific direct and indirect fire, mission command, and warfighting functions integrated into the training event. This process allows commanders to focus their training resources on the tasks selected for training during the training assessment process.

Note. The Company, Table VI, CALFEX is developed and coordinated at the brigade level. This chapter uses the plan, prepare, execute, and assess operations process as an outline for units developing their Table VI event.

6-23. Table VI, CALFEX, is a complex training event for the company and troop. This training event is for all Soldiers that are assigned or designated as follows:

- Assigned as a member of the company or troop.
- Attached as a member of a specialty unit or cross-attachment small unit to the company or troop.

6-24. During the planning process, commanders must be familiar with the following information:

- Prerequisites. All subordinate units, attachments, and integrated warfighting function enablers must be qualified to perform their core tasks prior to providing those skills for the company and troop.
- Condemnation criteria. Table VI proficiency assessment is condemned when any of the following conditions are met:
  - Rule 1, time. Twelve months has elapsed since completing the proficiency gate.
  - Rule 2, key leader turnover. When two of the following key leaders that participated in the proficiency event are no longer assigned to the organization: commander, executive officer, or first sergeant.
  - Rule 3, commander assessment. A senior commander in the chain of command determines the unit no longer maintains proficiency for any reason.
  - Rule 4, subordinate element proficiency. When the minimum number of subordinate elements (one level down) fail to maintain their proficiency as described in the respective training publication.
  - Rule 5, specialty proficiency. When a unit has specifically assigned specialty units (scout platoon, mortar platoon, mortar section, sniper team, and so forth) within its formation that the commander specifically controls, the minimum number of those specialty units that fail to maintain their proficiency. This includes failing to maintain the required training or special skill identifiers (ASI B1, Infantry Mortar Leader's Course graduate for example).
- Environment and conditions. The CALFEX is conducted in a live environment under live-fire conditions. The unit is required to rehearse using sand tables, walk-through, or other methods based on the commander's intent and guidance prior to live-fire execution. Units must plan for sufficient resources for their unit and coordinate with external enablers to ensure sufficient resources are forecasted and available.
- Training days required. Each company-size element is authorized 2 training days to conduct the CALFEX. Additional days may be required for retraining, as necessary.
- Frequency. CALFEX is conducted once annually as part of their company training plan for maneuver units unless specifically directed otherwise.

- Throughput. A battalion can expect to complete one company-size element per day on the training facility as follows:
  - Day 1, unit preparation and rehearsal.
  - Day 2, day and night mission execution.
- Primary and alternate facilities. The CALFEX may be conducted on a digital range facility (digital multipurpose range complex, digital air-ground integration range, battle area complex), on a large maneuver live-fire range, or on a safety certified training area. Units may conduct a CALFEX using a combination of facilities and training areas as authorized by the installation.

6-25. Planning includes the identification and allocation of ammunition, POL, equipment, and support personnel. Coordination of facilities and resources is a continuous process through execution. Prerequisite individual and collective training continue throughout the planning phases.

6-26. Detailed planning by the evaluation commander's headquarters focuses on the training objectives and development of the scenario. The mission specified by the evaluation commander may be the same primary mission for each company or it may vary between companies based on their mission-essential task assessments. The exercise tasks may be specified in the commander's initial guidance or developed as the scenario is designed.

6-27. See Appendix B for detailed, scenario development requirements for all live-fire training events. Appendix B applies to Table IV, FTX; Table V, FCX; and Table VI, CALFEX, as well as any unit-developed, live-fire training events or exercises that utilize a scenario to guide the training unit through specific tasks.

6-28. Units are required to integrate the warfighting functions during the day and night phase at least once for evaluation purposes (see figure 6-2, page 6-6). They are not required to include them on every training day. This allows the unit to tailor the training and evaluation across the full training days available and progressively increase the rigor and complexity of the tactical situations presented based on their observations.

MISSION COMMAND	*SQUAD*	*SECTION and PLATOON*	*COMPANY and TROOP*
Graphics Overlay	Required	Required	Required
OPORD	Required	Minimum 1	Minimum 2
FRAGORD	Optional	Minimum 2	Minimum 4
Conduct a Rehearsal	Required	Required	Required
Operate a Command Post			Required
MOVEMENT AND MANEUVER			
Engineers			Required
Breach Obstacle (Offense)			Required
Integrate Obstacle (Defense)			Required
Direct Fire Support		Required	Required
Employ Snipers		Optional	Required
Special Purpose Weapons*	Minimum 1	Minimum 2	Minimum 3
Conduct Quartering Party Activities		Optional	Required
Conduct a Dismounted Tactical Road March*		Required	Required
Conduct a Mounted Tactical Road March**		Required	Required
Occupy an Assembly Area	Optional	Required	Required
Conduct Tactical Movement	Required	Required	Required
FIRE SUPPORT			
Close Air Support			Optional
Attack Aviation			Optional
Field Artillery			Required
Mortars (Company or Battalion)			Required
Air Defense or Counterfire			Optional
INTELLIGENCE			
UAS/UGS			Required
Digital Icon Population		Required	Required
Digital Reports			Required
PROTECTION			
CBRN	Required	Required	Required
Maintain Operational Security	Required	Required	Required
Perform Field Sanitation Functions	Optional	Optional	Required
Conduct Risk Management	Required	Required	Required
SUSTAINMENT			
CASEVAC	Required	Required	Required
MEDEVAC			Required
Conduct Consolidation and Reorganization	Required	Required	Required
Conduct LOGPAC Support			Required
*Dismounted units only **Mounted units only			
Legend CASEVAC casualty evacuation CBRN chemical, biological, radiological, and nuclear FRAGORD fragmentary order LOGPAC logistics package MEDEVAC medical evacuation OPORD operation order UAS unmanned aircraft system UGS unmanned ground system			

Figure 6-2. Warfighting functions and task integration requirements, Table VI, CALFEX

AMMUNITION REQUIREMENTS

6-29. The minimum ammunition requirements are listed in appendix A by the weapon, system, or element that participates in the training event. The unit may adjust the ammunition requirements based on resources available within their training accounts, but should not be less than those quantities listed.

Note. Commanders may elect to conduct the "dry, blank, and live" method based on the resources available and current proficiency of the unit that is training to mitigate risk during the live-fire training events.

6-30. Not all weapons, systems, or platforms are resourced adequate training ammunition for the company-level CALFEX's complexity. Units should review their training ammunition accounts and determine the appropriate amount of munitions for their event. Most training strategies provide sufficient ammunition during the previous training events so that the CALFEX can utilize the harvested munitions (first round hit savings). Harvested ammunition are munitions that are turned-in typically after the previous training events, sometimes referred to as first round hit savings.

6-31. The intent of the mortar ammunition requirements is to provide a minimum of two call-for-fire missions during the day phase with smoke and HE, and two fire missions during the night phase (minimum one illumination mission). The training ammunition resource requirements listed in appendix A are sufficient to support all companies within the battalion or squadron supported. The recommended ammunition resources listed in appendix A support the company CALFEX. Units should focus on one fire mission day and night for each company or troop.

Note. Units must be prepared to issue and turn-in large quantities of small arms ammunition. Typically, units provide small arms ammunition in larger quantities to the training unit to provide a combat-realistic weight burden to the dismounted Infantry Soldiers. Units should only provide small arms ammunition to those modified table of organization and equipment combat arms firers that are part of the training maneuver unit. Units should not provide ammunition to noncombat arms Soldiers unless specific scenario events require it.

RANGE REQUIREMENTS

6-32. Maneuver installations have various training facilities that can support the company CALFEX. The Army's family of maneuver ranges provide combat realistic scenarios. Each installation's facilities have limitations and restrictions. Units must fully understand the capabilities, limitations, constraints, and restrictions that directly impact their training event's development and execution.

6-33. Refer to TC 25-8 for detailed information on live-fire range capabilities, limitations, layout, and general targetry information. Refer to DA PAM 385-63 for SDZ, personnel requirements, and other live-fire information. Units must review the appropriate range regulations and Department of the Army pamphlets, including their local range regulations, policies, and procedures during their planning process to ensure their training scenarios are viable and safe.

PREPARE

6-34. Company, Tables I through IV provide preparation for Table VI, CALFEX. Units should maximize the platoon and company training plans and the Table VI rehearsal period (typically Day 1) to prepare for execution. Units should ensure subordinate, unit training plans that support the critical supporting collective tasks and the critical leader tasks that support the company CALFEX are integrated into their training plans, respectively.

6-35. Units preparing to execute company training events use their SOP throughout the training density. Use of the unit SOP enables the commander to validate the subordinate unit's SOP and to confirm the higher headquarters SOP is effectively supported. The subordinate elements of the training unit should be aware of the purpose, method, and end state of Table VI. The subordinate elements should know how their training plans support the unit's mission-essential tasks.

RESOURCE THE TRAINING

6-36. This training event requires the following resources:

- Full or subcaliber training munitions.
- Demolitions.
- Pyrotechnics.
- Battle effects simulators.
- Live-fire facility or safety certified training area based on unit composition (see TC 25-8 and TC 25-1 for additional information).
- Training areas for unit assembly area activities prior to and after the FCX execution.
- Maneuver areas that support the tactical scenario for the FCX prior to and after live fire.

TRAIN AND REHEARSE THE OBSERVER-CONTROLLER TRAINERS

6-37. The training and certification of the OC/Ts is critical during the preparation phase. The OC/Ts must be tactically and technically proficient in the tasks they are to evaluate. The OC/Ts must be able to conduct an effective AAR that facilitates self-discovery of key issues for the unit, establishes cause and effect, solves or leads to solving the problems identified, and fosters an environment for continuous improvement.

6-38. Additionally, the OC/Ts should reference and visualize applicable doctrine and TTP during the conduct of the AAR to facilitate understanding. They must have a thorough understanding of the conditions and standards of the task that will be trained, and must know the evaluated units' tactical SOP.

6-39. OC/Ts have an important role in ensuring live-fire training is conducted safely and are a key mitigation measure in the risk assessment process. As such, OC/Ts must be thoroughly familiar with the weapons that will be employed and must understand their effects. They must be familiar with the range to include firing limits, firing points, maneuver boxes, target locations, and indirect fire targets. To ensure safe live-fire maneuver, OC/Ts must know all fire control measures used in the CALFEX including phase lines, TRP locations, azimuths for firing, triggers and signals that drive shifting or ceasing fires, and any other controls the commander chooses to employ.

TRAIN UNIT LEADERS ON RELATED TTP

6-40. Training unit leaders on the related TTP is key to the successful execution of the CALFEX. Unit commanders ensure their subordinate leaders are trained on the tasks, conditions, and standards of the CALFEX. This should include a review of the appropriate training and evaluation outlines and related TTP for the mission and tasks.

LEADERS REHEARSAL

6-41. Rehearsals help leaders and subordinates understand the conduct of events and their responsibilities. Rehearsals help the organization synchronize training with times, places, logistics, and training support. A rehearsal of a concept drill helps leaders visualize an event as it unfolds, as well as likely branches and sequels if leaders must adjust the training. Leaders conduct rehearsals using the various levels and techniques described in ADP 7-0.

6-42. Units use sand tables or terrain models to reinforce subordinate leader understanding of the conduct-training event, as well as rehearsing the critical collective tasks trained during the CALFEX. The rehearsals should include digital and analog stimulus and drivers that serve to initiate action by the training unit, including the various branches and sequels developed.

6-43. Rehearsals provide the operations officer with the ability to verify the conduct of the range events (movement and control of reconnaissance elements and synchronize maneuver unit actions). Units then proof the scenario stimulus events or actions that drive the training unit to the appropriate tasks, drills, or actions.

EXECUTE

6-44. The company conducts CALFEX with all assigned or attached subordinate units and enablers. The warfighting function enablers support the company during CALFEX. The company can execute the CALFEX before or after Table IV, Field Training Exercise, in a manner that best fits the commander's plan and range facility or training area availability and accessibility depending on the higher headquarters training plan.

6-45. Table VI consists of 2 training days. Each training day has a day and a night phase with multiple progressive actions determined by the commander. An example of a rudimentary flow for the company CALFEX is—

- Day 1, day phase:
  - Assembly area occupation.
  - Assembly area activities.
  - Tactical movement to the range facility or authorized training area; walk through or rehearsal.
  - Establishing hasty defensive positions.
  - Scenario rehearsal.
  - Fire coordination, distribution, and synchronization rehearsal.
  - Reconsolidation and reorganization rehearsal.
  - Tactical movement to an assembly area or battle positions not on the training facility.
  - Day AAR.
  - Day assembly area activities.
- Day 1, night phase:
  - Preparation for night operations.
  - Tactical movement to the range facility or authorized training area.
  - Establishing hasty defensive positions.
  - Scenario rehearsal.
  - Fire coordination, distribution, and synchronization rehearsal.
  - Reconsolidation and reorganization rehearsal.
  - Tactical movement to an assembly area or battle position not on the training facility.
  - Night AAR.
  - Night assembly area activities.
- Day 2, day phase:
  - Assembly area occupation.
  - Assembly area activities.
  - Tactical movement to the range facility or authorized training area.
  - Establishing hasty defensive positions.
  - Scenario execution.
  - Reconsolidation and reorganization.
  - Tactical movement to an assembly area or battle positions not on the training facility.
  - Day phase AAR.

- Day 2, night phase:
  - Preparation for night operations.
  - Tactical movement to the range facility or authorized training area.
  - Establishing hasty defensive positions.
  - Scenario execution.
  - Reconsolidation and reorganization.
  - Tactical movement to an assembly area or battle position not on the training facility.
  - Night phase AAR.

ASSESS

6-46. At the completion of each phase of Table VI, key leaders discuss any shortcomings, gaps, or disconnects between SOPs by echelon with their senior leaders. The discussion includes actions that require additional training or synchronization efforts, missing tasks or actions that should be included, and the determination and identification of any corrective actions necessary.

PREPARE AND CONDUCT THE AFTER ACTION REVIEW

6-47. The evaluation process is continuous and must be planned for the CALFEX. These evaluations are informal, and are focused on the tasks, conditions, and standards selected for training. Leaders at every level conduct training evaluations, which are integral to training management.

Note. FM 7-0 provides a detailed description of the AAR process.

6-48. Commanders review the notes from the various OC/T, subordinate leaders, fire support officers, and others to determine the proficiency of the participating key leaders and their ability to execute the critical synchronization and maneuver tasks. Once complete with the review, the commander assesses the organization's ability to complete the tasks at the reduced tempo, identifies key areas that must be retrained at the company level, and develops a retraining plan, as appropriate.

CONDUCT RETRAINING

6-49. Corrective training allows participants to translate observations and evaluation into corrective action. Additional training allows the participants to apply the lessons learned during the execution and AAR. Leaders understand that during the training event, participants do not typically perform all tasks to the desired standard. Therefore, during the short-range and near-term planning process, commanders provide flexibility within the training events that facilitate additional training immediately following the AAR.

6-50. Units may not continue with more advanced, higher echelon collective live-fire events unless they have successfully completed this event based on the evaluation criteria. Refer to appendix C for EXEVAL guidelines.

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Chapter 7
Company and Troop Proficiency

Two training event EXEVALs, Table IV, Company and Troop FTX, Collective Task Proficiency FTX, and Table VI, CALFEX, determine the overall company and troop proficiency. The commander uses these two externally evaluated events with the primary assessment tool to evaluate the unit's proficiency against an established standard as defined within the respective training publications, task training and evaluation outlines, and the unit's SOPs.

This chapter describes the principles and procedures for determining company and troop proficiency once the unit has completed the training plan. The chapter includes the proficiency rating condemnation criteria, methods to mitigate personnel loss, and various examples to manage the personnel turbulence between training densities.

COLLECTIVE TASK PROFICIENCY

7-1. The collective task proficiency is a gate used to assess the overall proficiency of a company or troop through the EXEVAL of their execution of all their supporting collective tasks and mission-essential tasks (see figure 7-1). This gate is not used to progress to higher echelon training by itself but indicates if the unit has the proficiency required to support the higher headquarters during tactical operations.

7-2. The unit uses Company, Table IV, FTX (see figure 7-1) to determine the company's collective task proficiency in its execution of its mission-essential tasks. It is an assessment of their collective supporting tasks and mission-essential tasks that support the battalion mission-essential tasks.

	Table I	***Table II***	***Table III***	***Table IV***	***Table V***	***Table VI***
Company	TEWT	STX-V	STX	FTX	FCX	CALFEX
Days Required	**1.0**	1.0	4.0	5.0	1.0	2.0
Training Days Remaining on Critical Path	13.0	12.0	8.0	3.0 CTP	2.0	LFPG
Multi-echelon indicates the training days are provided as part of the company training strategy. STX-V and STX lanes may be executed during similar events for the battalion provided that training, assessment, and retraining for the company is provided prior to the higher echelon task.						

Legend

CALFEX	combined arms live-fire exercise	LFPG	live-fire proficiency gate
CTP	collective task proficiency	STX	situational training exercise
FCX	fire coordination exercise	STX-V	situational training exercise- virtual training environment
FTX	field training exercise	TEWT	tactical exercise without troops

Figure 7-1. Table IV, Company and Troop FTX, collective task proficiency

7-3. The collective task proficiency events are externally evaluated using training and evaluation outlines and the unit's tactical SOPs. Figure 7-2 lists the EXEVAL requirements.

Small Unit	*EXEVAL Events*	*Evaluated Externally To*	*Evaluation Commander*
Company and Troop	Table IV, Field Training Exercise (FTX)	Battalion	Brigade Commander
Legend EXEVAL external evaluation			

Figure 7-2. Collective task proficiency external evaluation requirements

LIVE-FIRE PROFICIENCY GATE

7-4. Figure 7-3 is for all echelons and provides the EXEVAL that determines the LFPG, as appropriate. The LFPG for each echelon is described in detail within their respective training publication. Company, Table VI, CALFEX includes the tasks that must be successfully executed to standard to complete the training event.

	Table I	*Table II*	*Table III*	*Table IV*	*Table V*	*Table VI*
Company	**TEWT**	**STX-V**	**STX**	**FTX (CTP)**	**FCX**	**CALFEX (LFPG)**
Days Required	**1.0**	1.0	4.0	5.0	1.0	2.0
Training Days Remaining on Critical Path	13.0	12.0	8.0	3.0	2.0	
Multi-echelon indicates the training days are provided as part of the company training strategy. STX-V and STX lanes may be executed during similar events for the battalion provided that training, assessment, and retraining for the company is provided prior to the higher echelon task.						
Legend CALFEX combined arms live-fire exercise CTP collective task proficiency FCX fire coordination exercise FTX field training exercise LFPG live-fire proficiency gate STX situational training exercise STX-V situational training exercise- virtual training environment TEWT tactical exercise without troops						

Figure 7-3. Table VI, Company and Troop LFX, live-fire proficiency gate

7-5. The evaluation commander evaluates all LFPG externally to create an unbiased assessment of the demonstrated performance of the required tasks and skills. Within the company training strategy, the evaluation commander determines the appropriate evaluation method that meets their intent within the requirements stated in the training publication. Figure 7-4 provides external evaluation requirements for Table VI, CALFEX.

Small Unit	*EXEVAL Events*	*Evaluated Externally To*	*Evaluation Commander*
Company/Troop	Table VI, Combined Arms Live-Fire Exercise (CALFEX)	Battalion	BCT Commander
Legend BCT brigade combat team EXEVAL external evaluation			

Figure 7-4. Live-fire proficiency gate EXEVAL

Note. When a unit is training outside the continental United States and cannot meet the EXEVAL criteria above, the evaluation commander must approve the evaluation plan. The intent of the company-level gate EXEVAL is to provide subject matter expertise for a quality and objective evaluation to standard that creates an effective AAR to the firer and unit.

PROFICIENCY RATINGS

7-6. The weapons training publications provide guidance on the appropriate proficiency ratings awarded to a company. Commanders may award the following proficiency ratings for each of the unit's mission-essential tasks based on their performance during the collective task proficiency event (Table IV, FTX) and the LFPG (Table VI, CALFEX):

- T (fully trained). Unit has attained task proficiency to the Army standard, achieved a go in 90 percent or more of performance measures and leader performance measures, and has met 100 percent of all critical performance measures. The task is externally evaluated and meets the remaining requirements as outlined in the training and evaluation outline according to the objective task evaluation criteria matrix.
- T- (trained). Unit has attained advanced task proficiency free of significant shortcomings, achieved a go in 80 percent or more of performance measures and leader performance measures, and has met 100 percent of all critical performance measures. The unit's shortcomings require minimal training to meet the Army standard. The task is externally evaluated and meets the remaining requirements as outlined in the training and evaluation outlines according to the objective task evaluation criteria matrix.
- P (practiced). Unit has attained basic task proficiency with shortcomings, achieved a go in 65 percent or more of all performance measures, achieved 80 percent or more of all leader performance measures, and has met 100 percent of all critical performance measures. The unit's shortcomings require significant training to meet the Army standard. The task is not externally evaluated and meets the remaining requirements as outlined in the training and evaluation outlines according to the objective task evaluation criteria matrix.
- P- (marginally practiced). Unit has attained limited task proficiency with major shortcomings, achieved a go in 51 percent or more of all performance measures, achieved less than 80 percent of all leader performance measures, and has met less than 100 percent of all critical performance measures. The unit's shortcomings require complete retraining of the task to achieve the Army standard. The task is not externally evaluated and does not meet the remaining requirements as outlined in the training and evaluation outlines according to the objective task evaluation criteria matrix.
- U (untrained). The unit cannot perform the task. It achieved a go in less than 51 percent of all performance measures, less than 80 percent in all leader performance measures, and less than 100 percent in all critical performance measures. The unit requires complete training on the task to achieve the Army standard.

VALIDATION

7-7. Validation is a commander's option to execute the Army standard LFPG through the minimum requirements to achieve a passing result. The requirements for authorized validation events are defined in the appropriate training publication. Commander's use validation only in extreme circumstances where they require confirmation of successful completion of a LFPG.

7-8. Units actively participating in regionally aligned force missions, deployments, or other critical missions outside the continental United States have authorization to exercise the validation event option. The following rules apply to validation events:

- The Army command or equivalent commander authorizes the use of the validation event.
- The event may be executed 90 days after mission start through 30 days before mission complete only.
- The successful completion of the validation event extends the LFPG qualification period by six months.
- The event has one validation only authorized within a 24-month period.

SUSTAINING COMPANY PROFICIENCY

7-9. Once the company or troop completes their LFPG, the unit must consider how the condemnation criteria affects their proficiency. The following paragraphs describe how companies and troops maintain their proficiency, how to identify when a proficiency rating has triggered one or more condemnation criteria, and any options the senior commander has to mitigate those impacts.

COMPANY PROFICIENCY CONDEMNATION CRITERIA

7-10. Each company or troop follows up to five of the six condemnation criteria (chapter 1). Once the company achieves proficiency, if one or more of the following triggers exist, the element loses its proficiency rating as follows:

- Time. Twelve months has elapsed since completing the qualification.
- Key leader turnover. The required proficient Soldier is no longer assigned to the company-level organization.
- Commander assessment. Any commander in the organization's chain of command determines the unit no longer maintains proficiency for any reason.
- Subordinate element proficiency. When the minimum number of subordinate elements (one level down) fail to maintain their proficiency.
- Specialty proficiency. When a unit has specifically assigned specialty units (scout platoon, mortar platoon, sniper team and so forth) to its formation that the commander specifically controls, and the minimum number of those specialty units fail to maintain their proficiency. This includes the loss of any required additional skill identifier linked to any qualification or certification for a subordinate unit.

7-11. Units may not alter, change, or modify the condemnation criteria. Evaluation commanders have the option, based on their assessment of the element, to condemn any proficiency rating they are authorized to assign.

COMPANY TALENT MANAGEMENT

7-12. Commanders can mitigate the negative impacts to their unit's proficiency in a variety of methods. Leaders require talent management skills before, during, and after company training to ensure the unit maintains and sustains maximum proficiency within the larger organization. Subordinate unit proficiency has a direct impact on the unit's overall readiness.

7-13. To manage company and troop proficiency turbulence efficiently, the commander should consider the following:

- Select key leaders together. This maximizes the key leader's longevity and future proficiency ratings.
- Position by potential. Identify young leaders that have solid promotion potential. Place those leaders in the next higher position so they achieve proficiency in advance of their pending or expected promotion.
- Transfer trained key leaders together. Promotions may initiate inter-battalion transfers. Commanders should consider moving the newly promoted key leader and key leader combination together so the gaining unit within the battalion will benefit from maintaining proficient key leaders.
- Cross-train potential replacements. Units should invest first-round-hit ammunition savings, commonly referred to as ammunition harvesting, to cross training young leaders in key leader positions. In doing so, commanders can mitigate key leader turnover with trained and proficient leaders in stride with key leader turbulence.

7-14. Commanders have limited flexibility to mitigate key leader turbulence within companies or troops. Companies require a significant investment to build their proficiency. The senior commander may consider a turbulent company proficient when the commander and the minimum required subordinate leaders have—

- Previously achieved proficiency in their assigned position in a different organization during the previous qualification period.
- Demonstrated proficiency during a STX or similar training event outside the company training density.

- Successfully completed Company, Table I, TEWT, for the unit within the previous qualification period (regardless if they are a new arrival to the organization or not).
- Addressed the loss of a subordinate unit's proficiency rating prior to accepting any risk for the company.
- Have a certified proficient subordinate element assigned to the company in place of a similar element only. This is the least preferred method to manage section proficiency.

Note. Commanders can provide Table I and other events outside of the training density to assess the key leaders in their current positions as necessary.

PROFICIENCY MANAGEMENT

7-15. Paragraphs 7-21 through 7-27 (page 7-10 through page 7-14) describe the verification process and define a proficient company after the company completes their collective task proficiency and LFPG events successfully. Commanders manage collective proficiency by assessing the unit's key leaders, their subordinate leaders, and their subordinate unit proficiency to maintain and sustain the greatest amount of experience within their formation (see figure 7-5).

7-16. A *company* is a unit of two or more platoons, usually of the same type, with a headquarters and a limited capacity for self-support (ADP 3-90). A *troop* is a company-size unit in a Cavalry organization (ADP 3-90). These definitions provide the framework for managing unit proficiency using key leaders and proficient subordinate elements. Proficiency of the key leaders and subordinates are incorporated with time (atrophy), commander assessment, and specialty certifications to create the condemnation criteria rules of proficiency ratings.

Element	***Proficiency Requirement***
Company and Troop	A proficient company and troop is a certified commander ***or*** executive officer with the required minimum number of proficient subordinate maneuver elements and specialty units, which together have successfully completed Company Table IV (Field Training Exercise) and VI (Combined Arms Live-Fire Exercise), and have not met any of the condemnation criteria of the qualification period.

Figure 7-5. Company and troop proficiency

ARMOR COMPANY

7-17. A proficient Armor company is a crew proficient commander or executive officer with a minimum of two proficient subordinate elements that have successfully completed Company, Table IV, FTX, Collective Task Proficiency, and Table VI, CALFEX, Live-Fire Proficiency Gate. The Armor company has not met any of the condemnation criteria of the qualification period as shown in figure 7-6.

PROFICIENT COMPANY

A proficient company is a ***certified*** **commander or executive officer** with the required minimum number of **proficient subordinate maneuver elements and specialty units** that together have successfully completed Company, Table IV, Field Training Exercise and Table VI, Live-Fire Exercise and have not met any of the condemnation criteria of the qualification period.

Number of Assigned Specialty Units or Subordinate Maneuver Elements	Minimum Proficient Elements Required
9	6 of 9
8	5 of 8
7	5 of 7
6	4 of 6
5	4 of 5
4	3 of 4
3	2 of 3
2	2 of 2
1	1 of 1

Note: For this example, an Armor company consists of three Armor platoons.

Armor Company (Pure)

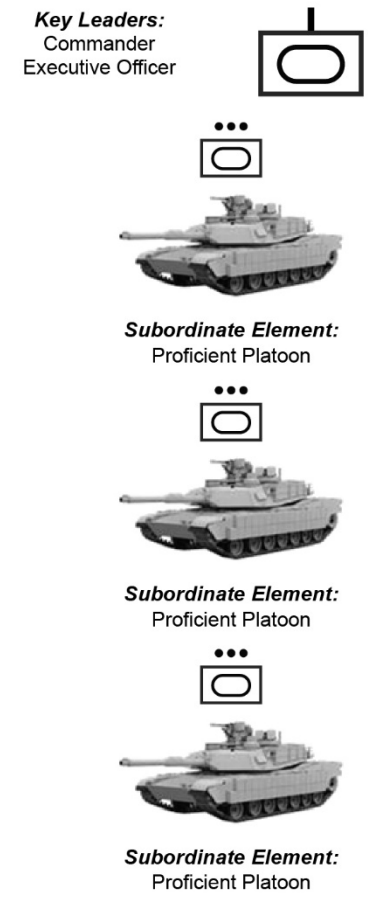


Figure 7-6. Proficient Armor company, example

7-18. Figure 7-7 provides an example of an uncertified Armor company. In the example, a new commander assumes command of the unit. Two subordinate elements (tank platoons) lose their proficiency rating due to key leader changes. The unit's personnel changes trigger Rule 4 of the condemnation criteria where the unit fails to maintain the minimum number of proficient subordinate units.

UNCERTIFIED COMPANY

Proficiency Condemnation Criteria:

- ☐ **1) Time -** 12 months have elapsed since the date of the qualification or certification was completed.
- ☐ **2) Key Leader Turnover -** minimum identified key leaders ***at echelon*** are no longer assigned to the positions within the small unit from their previous qualification or certification.
- ☐ **3) Commander Assessment -** a ***commander*** within the chain of command determines the small unit is no longer proficient for any reason.
- ■ **4) Subordinate Element Proficiency -** the minimum number of subordinate elements are no longer proficient.
- ☐ **5) Specialty Unit Proficiency -** subordinate specialty unit proficiency or required additional skill identifiers are not maintained.

In this example, a new commander has not led the company during external evaluation for Table IV or Table VI. The executive officer and first sergeant were certified during previous external evaluation. One of three (1/3) proficient platoons remain in the company.

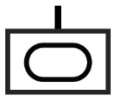
The company maintains its proficiency rating.

Number of Assigned Specialty Units or Subordinate Maneuver Elements	Minimum Proficient Elements Required
3	2 of 3

Note: For this example, an Armor company consists of three Armor platoons.

Armor Company (Pure)

Key Leaders:
Commander
First Sergeant
Executive Officer



The company commander assumes command of Headquarters and Headquarters Company (HHC). A new commander has assumed command.

Subordinate Element:
Proficient Platoon

- Platoon leader (with gunner) promoted and moves to another company, assigned as the executive officer.
- Gunner on wing tank promoted and reassigned as tank commander in another company.

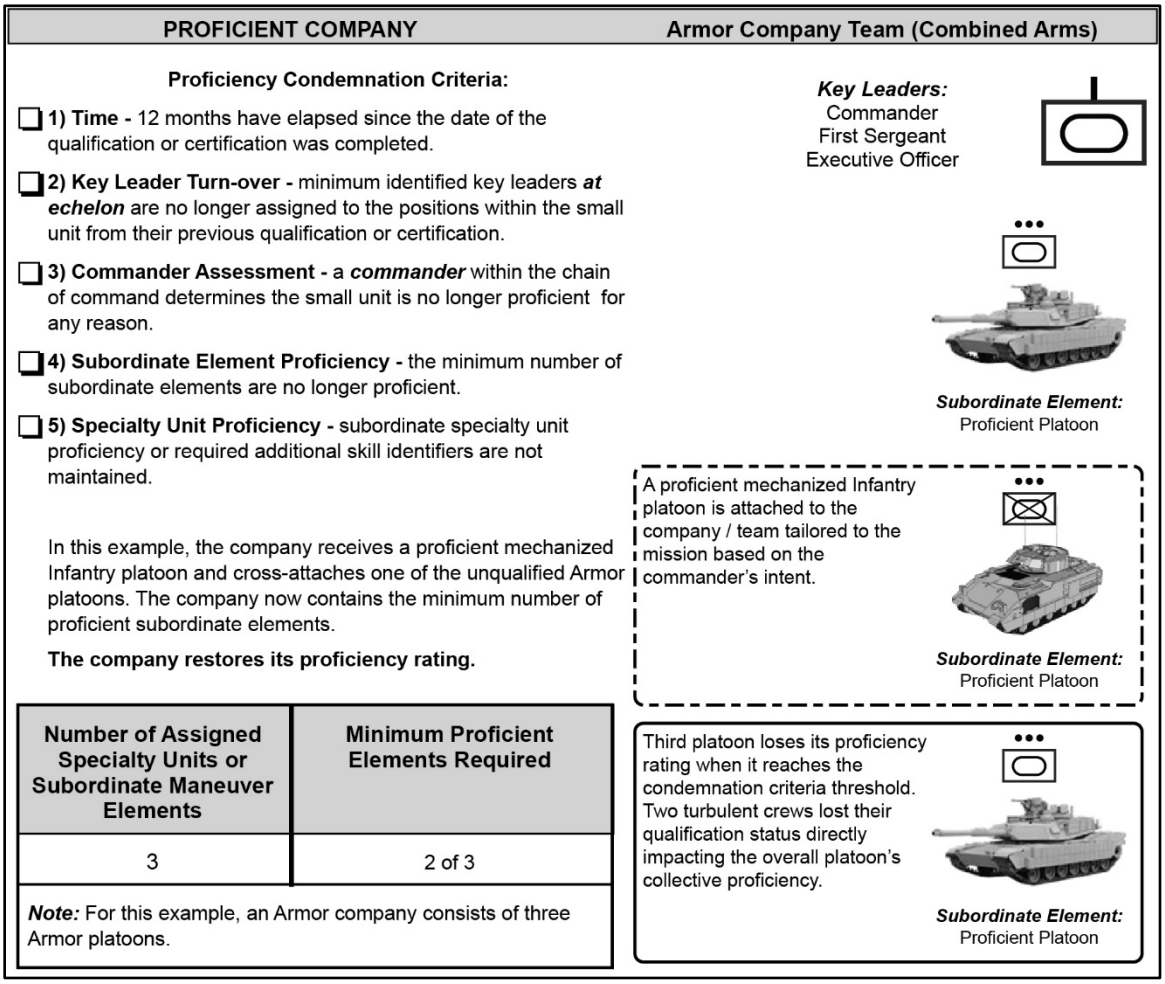
Subordinate Element:
Proficient Platoon

- Two wing tank commanders permanent change of station (PCS) to another installation.
- Platoon fails to maintain the minimum number of proficient subordinate elements.

Subordinate Element:
Proficient Platoon

Figure 7-7. Unqualified Armor company, example

7-19. In the continuation of the example (see figure 7-8), the company's executive officer remains within the company, ensuring the unit does not trigger Rule 2. The battalion commander cross-attaches a proficient Bradley platoon to the unit and sends one of the unqualified platoons to a different company. This causes the company, now organized as a team, to regain its proficiency rating where the required key leaders and minimum number of proficient subordinate elements are available.



Number of Assigned Specialty Units or Subordinate Maneuver Elements	Minimum Proficient Elements Required
3	2 of 3

Note: For this example, an Armor company consists of three Armor platoons.

Figure 7-8. Proficient company and team, example

INFANTRY COMPANY

7-20. A proficient Infantry company has a proficient key leader (commander or executive officer) with the minimum required, proficient subordinate elements and specialty units, that have successfully completed Company, Table IV, FTX, Collective Task Proficiency, and Table VI, CALFEX, Live-Fire Proficiency Gate. The company has not met any of the condemnation criteria of the qualification period. The commander or executive officer must maintain their crew proficiency rating, as appropriate (see figure 7-9).

PROFICIENT COMPANY

A proficient company is a ***certified*** **commander or executive officer** with the required minimum number of **proficient subordinate maneuver elements and specialty units** that together have successfully completed Company, Table IV, Field Training Exercise and Table VI, Combined Arms Live-Fire Exercise (CALFEX) and have not met any of the condemnation criteria of the qualification period.

Number of Assigned Specialty Units or Subordinate Maneuver Elements	Minimum Proficient Elements Required
3	2 of 3
2	2 of 2
1	1 of 1

Note: For this example, the Infantry company includes one sniper team (specialty unit).

IBCT Infantry Company

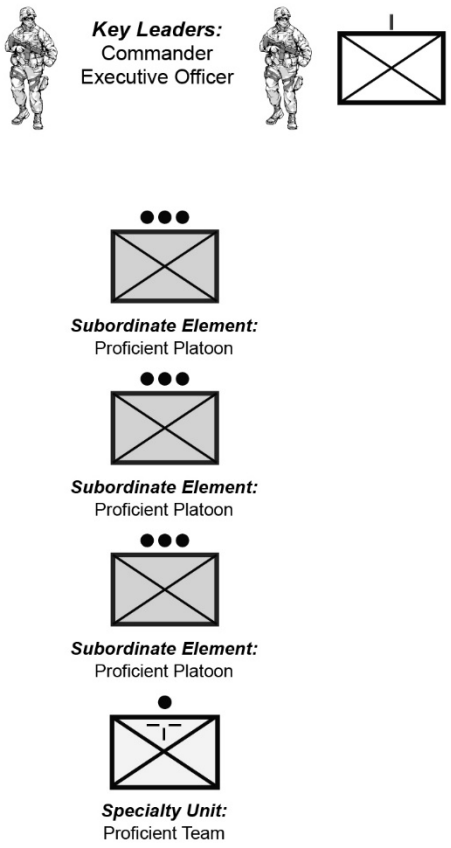
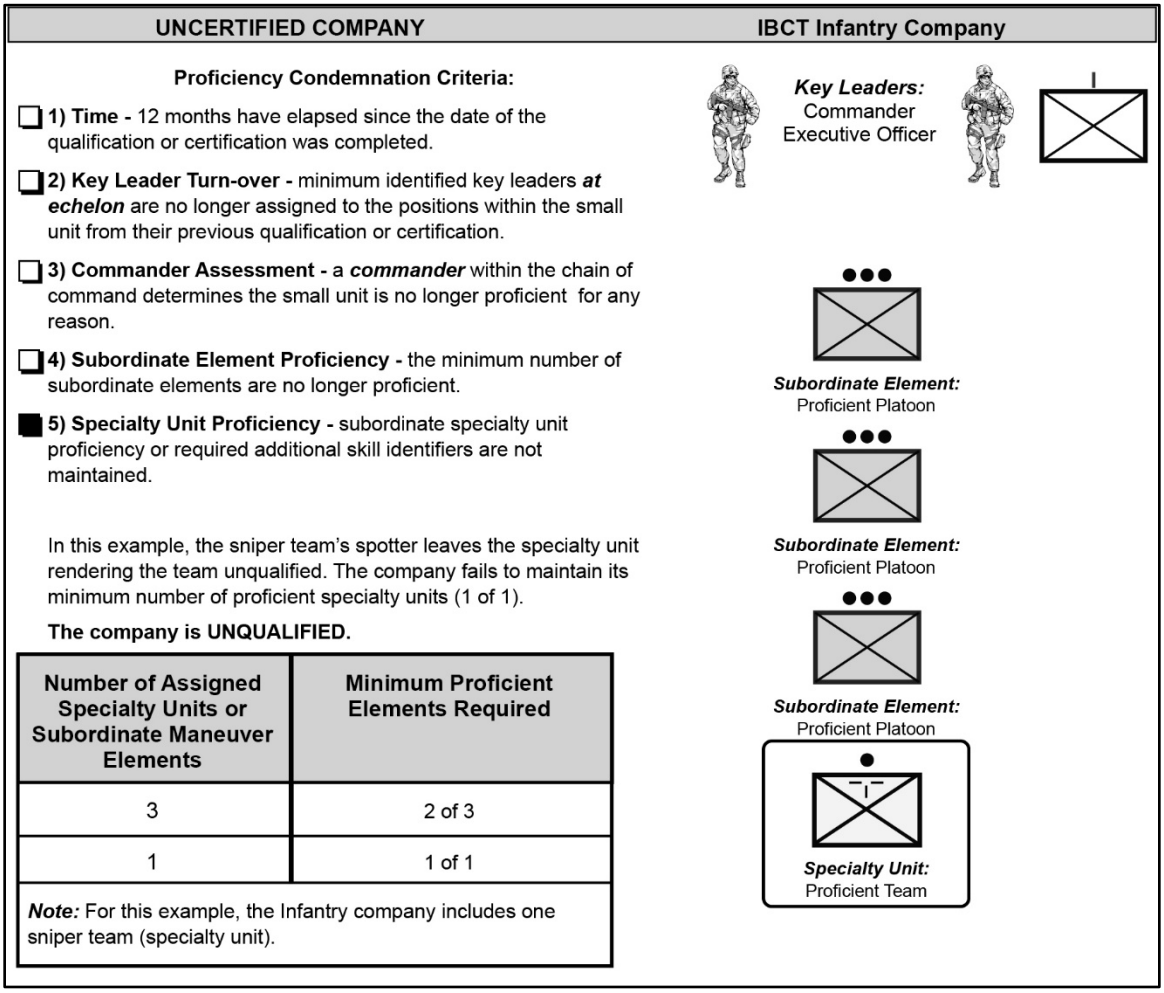


Figure 7-9. Proficient Infantry company, example

7-21. Figure 7-10 illustrates an instance where the attached sniper team, considered a specialty unit, loses its proficiency due to reassignment of the team's spotter. This causes the company to lose its proficiency rating when the move triggers Rule 5 of the unit's proficiency condemnation criteria by failing to maintain the required minimum number of proficient specialties.



Number of Assigned Specialty Units or Subordinate Maneuver Elements	Minimum Proficient Elements Required
3	2 of 3
1	1 of 1

Note: For this example, the Infantry company includes one sniper team (specialty unit).

Figure 7-10. Unqualified Infantry company, example

7-22. The commander can mitigate the loss of the sniper team's spotter by assigning another spotter. The commander can conduct retraining through qualification of the sniper team. Upon completion, the company restores its overall proficiency rating once the minimum required specialties are qualified (see figure 7-11).

PROFICIENT COMPANY

Proficiency Condemnation Criteria:

- ☐ **1) Time -** 12 months have elapsed since the date of the qualification or certification was completed.
- ☐ **2) Key Leader Turn-over -** minimum identified key leaders ***at echelon*** are no longer assigned to the positions within the small unit from their previous qualification or certification.
- ☐ **3) Commander Assessment -** a ***commander*** within the chain of command determines the small unit is no longer proficient for any reason.
- ☐ **4) Subordinate Element Proficiency -** the minimum number of subordinate elements are no longer proficient.
- ☐ **5) Specialty Unit Proficiency -** subordinate specialty unit proficiency or required additional skill identifiers are not maintained.

In this example, the sniper team's spotter has been replaced and completed the necessary retraining and qualifications. The company restores its minimum number of proficient specialty units (1 of 1) and restores the company's proficient rating.

The company restores its PROFICIENCY rating.

Number of Assigned Specialty Units or Subordinate Maneuver Elements	Minimum Proficient Elements Required
3	2 of 3
1	1 of 1
Note: For this example, the Infantry company includes one sniper team (specialty unit).	

IBCT Infantry Company

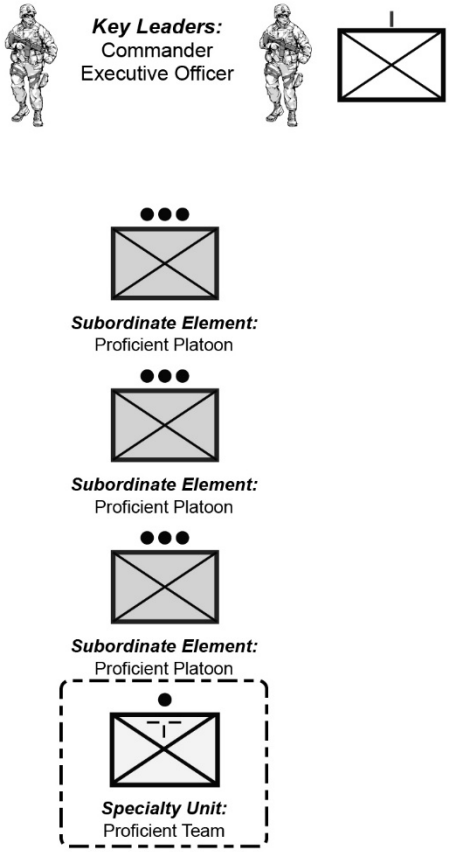


Figure 7-11. Commander mitigation option, example

STRYKER BRIGADE COMBAT TEAM INFANTRY COMPANY

7-23. A proficient Stryker brigade combat team (SBCT) Infantry company is a certified commander or executive officer. The SBCT has the required minimum number of proficient subordinate maneuver elements and specialty units. Together, these units complete company and troop, Table IV, Field Training Exercise, and Table VI, Live-Fire Exercise. These units have not met any of the condemnation criteria of the qualification period. Each subordinate element and specialty unit must follow the rules for maintaining their proficiency as described in earlier chapters.

7-24. The commander may add or remove subordinate elements as necessary to build the desired small unit formation to meet their intent (see figure 7-12). The commander can alter the company at any time provided they assess the new formation structure against the condemnation criteria to develop the unit's updated proficiency assessment.

PROFICIENT COMPANY

A proficient Stryker Brigade Combat Team (SBCT) Infantry company is a ***certified*** **commander or executive officer** with the required minimum number of **proficient subordinate maneuver elements and specialty units** that together have successfully completed Company / Troop, Table IV, Field Training Exercise and Table VI, Combined Arms Live-Fire Exercise (CALFEX) and have not met any of the condemnation criteria of the qualification period.

Number of Assigned Specialty Units or Subordinate Maneuver Elements	Minimum Proficient Elements Required
9	6 of 9
8	5 of 8
7	5 of 7
6	4 of 6
5	4 of 5
4	3 of 4
3	2 of 3
2	2 of 2
1	1 of 1

Note: For this example, the SBCT Infantry company (A, B, and C) consists of three Infantry platoons and one mortar section (specialty unit). The heavy weapons company (D Co) does not include the mortar section.

SBCT Infantry Company

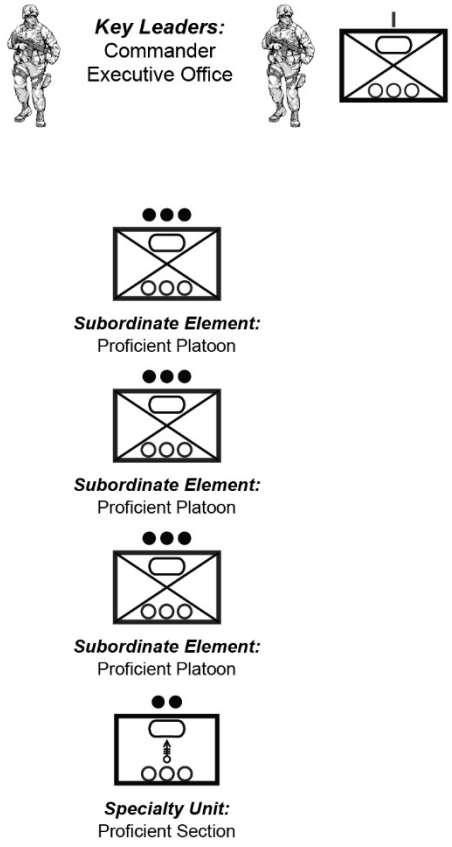


Figure 7-12. Proficient SBCT Infantry company, example

7-25. Figure 7-13 provides an example of the SBCT Infantry company losing its proficiency rating. In the example shown, the organic mortar section, a specialty unit, loses its proficiency rating when they fail to maintain the minimum certifications. When that occurs, both the mortar section and the SBCT Infantry company lose their proficiency ratings. The loss of the mortar section's certification requirements triggers Rule 5.

UNCERTIFIED COMPANY

Proficiency Condemnation Criteria:

- ☐ **1) Time -** 12 months have elapsed since the date of the qualification or certification was completed.
- ☐ **2) Key Leader Turn-over -** minimum identified key leaders ***at echelon*** are no longer assigned to the positions within the small unit from their previous qualification or certification.
- ☐ **3) Commander Assessment -** a ***commander*** within the chain of command determines the small unit is no longer proficient for any reason.
- ☐ **4) Subordinate Element Proficiency -** the minimum number of subordinate elements are no longer proficient.
- ■ **5) Specialty Unit Proficiency -** subordinate specialty unit proficiency or required additional skill identifiers are not maintained.

In this example, the organic mortar section does not maintain its proficiency due to a lack of qualified B1 additional skill identifier (ASI) certified leaders. Losing the proficient mortar section causes the Stryker Brigade Combat Team (SBCT) Infantry company to lose its proficiency rating.

Number of Assigned Specialty Units or Subordinate Maneuver Elements	Minimum Proficient Elements Required
3	2 of 3
1	1 of 1
Note: The SBCT Infantry company (A, B, and C) includes one organic mortar section.	

SBCT Infantry Company

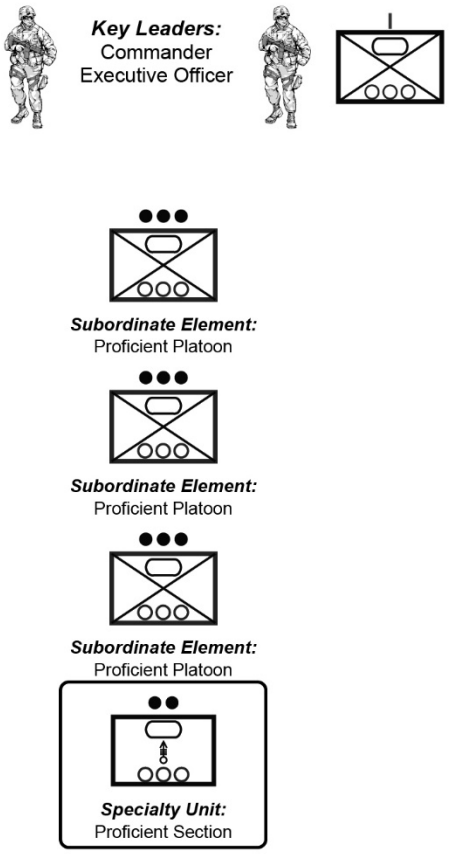


Figure 7-13. Unqualified SBCT Infantry company, example

7-26. The commander has several options available to mitigate the loss of the specialty unit proficiency. The commander may opt to—

- Send authorized personnel to the requisite courses.
- Assign a certified mortar leader to the appropriate position to meet the certification requirement.
- Request a certified mortar leader transfer from within the battalion or brigade to fulfill the certification requirements.
- Any combination of options that return the proficiency rating to the mortar section.

7-27. The commander opts to send an authorized mortar leader to the Infantry Mortar Leader's Course in figure 7-14, example. Provided no other condemnation criteria are triggered, the mortar leader restores the mortar section's proficiency upon graduation and returning to the unit. Once complete, this also restores the SBCT Infantry company's proficiency rating.

PROFICIENT COMPANY

Proficiency Condemnation Criteria:

- ❑ **1) Time -** 12 months have elapsed since the date of the qualification or certification was completed.
- ❑ **2) Key Leader Turn-over -** minimum identified key leaders ***at echelon*** are no longer assigned to the positions within the small unit from their previous qualification or certification.
- ❑ **3) Commander Assessment -** a ***commander*** within the chain of command determines the small unit is no longer proficient for any reason.
- ❑ **4) Subordinate Element Proficiency -** the minimum number of subordinate elements are no longer proficient.
- ❑ **5) Specialty Unit Proficiency -** subordinate specialty unit proficiency or required additional skill identifiers are not maintained.

In this example, the organic mortar section's section leader returns from the Infantry Mortar Leader Course and restores the mortar section's proficiency. This in turn restores the company's proficiency rating by achieving the required specialty proficiency requirements.

Number of Assigned Specialty Units or Subordinate Maneuver Elements	Minimum Proficient Elements Required
3	2 of 3
1	1 of 1
Note: The Stryker Brigade Combat Team (SBCT) Infantry company (A, B, and C) includes one organic mortar section.	

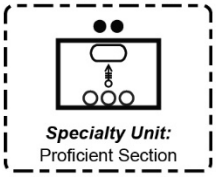
SBCT Infantry Company

Key Leaders:
Commander
Executive Officer

Subordinate Element:
Proficient Platoon

Subordinate Element:
Proficient Platoon

Subordinate Element:
Proficient Platoon



Specialty Unit:
Proficient Section

Figure 7-14. Commander's talent management options restore unit proficiency, example

Appendix A

Ammunition Requirements

This appendix lists the training ammunition, pyrotechnics, explosives, and other devices recommended for the training events for the company and troop. The information in this appendix lists the recommended munitions for each training event. The quantities listed apply to a single weapon, system, or platform. Training planners use the quantities listed as a guide to develop their scenario and apply them appropriately across the training unit's formation. The munition quantities are recommended. Units may add additional quantities based on their training objectives and scenario design to support the commander's training plan.

Note. The ammunition quantities listed is a recommendation and may not reflect the current fiscal year DA PAM 350-38. The standards in training commission (known as STRAC) is used as a resource tool which provides the unit planner with the ability to forecast ammunition for future training events.

Effective resourcing is the responsibility of the unit. Units must ensure sufficient time to forecast, secure, and draw the appropriate munitions. Failure to provide a minimum of 90 days for forecasting may not allow sufficient delivery time to the training installation to support the event.

Note. The munitions listed are recommended by type, quantity, and the Department of Defense Identification Code. Units may encounter shortfalls when resourcing the munitions by type or quantity listed for a number of reasons. Unit commanders should coordinate with their higher headquarters S-3/G-3 office to ensure the appropriate amount and type of munitions are available, authorized, and coordinated 90 days prior to the execution of the training event.

AMMUNITION MANAGEMENT

A-1. Paragraphs A-7 through A-73 detail the recommended munitions for Tables III through VI to support the company and troop training strategy. These are recommended munitions by event which may not reflect the authorized munitions as listed in DA PAM 350-38 for the fiscal year. The recommended quantities create an effective and realistic training event that supports the unit's live-fire, mission-essential tasks battle effects, combat realisms, and key collective tasks. The unit should plan for realistic training that includes blank, subcaliber, full caliber, pyrotechnics, simulators, and other special purpose munitions for their authorized weapons, systems, and platforms listed in Figure A-1, page A-2.

A-2. When the recommended munitions are greater than the authorized munitions in DA PAM 350-38, the unit secures the appropriate quantities from the existing overall authorizations. When deficiencies exist, the unit must coordinate with the appropriate higher organization to resource available training ammunition support, as necessary.

Common Weapons	*ABCT*	*SBCT*	*IBCT*
M4 / M16	Abrams series	Stryker MGS	MMG
M249AR	Bradley series	Stryker ICV / RV	TOW ITAS
M9 / M17 / M18	MMG	Stryker ATGM	81-mm mortar
Sniper Weapon System	120-mm mortar	Stryker 30 mm	60-mm mortar
Mounted machine gun	155-mm artillery	120-mm mortar	105-mm artillery
M249L		155-mm artillery	120-mm mortar
M240B		60-mm mortar	
M2A1		81-mm mortar	
MK19			
M203 / M320			
Shotgun			
AT4 / AT4CS			
M3 MAAWS			
Javelin			
Grenades			
Claymore			

Legend

ABCT	Armored brigade combat team	MGS	mobile gun system
ATGM	antitank guided missile	mm	millimeter
IBCT	Infantry brigade combat team	MMG	mounted machine gun
ICV	Infantry carrier vehicle	RV	reconnaissance vehicle
ITAS	Improved Target Acquisition System	SBCT	Stryker brigade combat team
MAAWS	Multi-role Anti-armor Anti-personnel Weapons System	TOW	tube launched, optically tracked, wire guided

Figure A-1. Authorized weapons, systems, and platforms

COMMON MUNITION REQUIREMENTS

A-3. Figure A-2 lists the common weapons, systems, and platforms across all maneuver brigade types. Figures A-3 through A-17 (pages A-4 through A-16) list the recommended munitions requirements for all brigade combat team formations.

Common Weapons to all Brigade Combat Teams	*Remarks*
M4 / M16 M249AR M9 / M17 / M18 Sniper Weapon System Mounted Machine Gun M249L M240B M2A1 MK19 M203 / M320 Shotgun AT4 / AT4CS M3 MAAWS Javelin Grenades Claymore Battle Effects, Signals, Smoke, and Pyrotechnics	Each weapon or system will receive the training ammunition for each event as depicted on the corresponding table. All munitions listed are recommended for expenditure during the associated training event. Units may wish to provide or secure additional munitions to replicate the weapon or system's combat load for training to reinforce the principles of "train as you fight."
Legend MAAWS Multi-role, Anti-armor, Anti-personnel Weapons System	

Figure A-2. Common weapons, systems, and platforms for all BCT formations

A-4. The munitions and training resources listed in figures A-3 through A-17 (pages A-4 through A-15) represent the recommendations for expending during the training event. Units may wish to secure a full complement of the weapon or system's combat load to replicate the form, fit, weight, and load burden for the firer, team, or small unit.

A-5. The munitions listed in the tables are expected to be fired or available for support during the listed event. When additional munitions are deemed necessary to support the training event, the unit is responsible to coordinate and secure the additional munitions.

> For example, an M4 firer is recommended to have 30 rounds for Company, Table VI, CALFEX. The unit desires to have each Soldier assigned to a squad participating in the CALFEX to have one full combat load of 210 rounds to best replicate the Soldier's load burden. The unit is responsible to coordinate for the additional 180 rounds to meet the commander's intent.

A-6. The munition quantities listed in figures A-3 through A-17, pages A-4 through A-16, do not reflect the amount of munitions authorized in DA PAM 350-38 accurately. The unit must use harvested training munitions to cover any shortfalls, or coordinate with the higher headquarters ammunition office to secure the training munitions.

BATTLE EFFECTS AND PYROTECHNICS

A-7. Figure A-3 provides a list of the recommended battle effects, simulators, and pyrotechnics (smoke, signals, and grenades) to support the company and troop training events. Provided they are appropriately trained, any OC/T or the commander can distribute these resources to support the training event.

Company and Troop Ammunition Resourcing						
BCT Type	All	Munition Type		Smoke, Signals, and Grenades		
DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
G940	HG, SMK GRN M18	2	2	4	5	13
G945	HG, SMK YEL	4	4	4	6	18
G955	HG, SMK VIOL	1	1	2	2	6
G963	HG, RIOT CS M7	1	1	0	0	2
G982	HG, SMK TNG M83	4	4	3	4	15
K511	SMK POT, FLOATING, PRACTICE				1	1
L305	SIG, ILLUM GS PARA M195	1	1	1	1	4
L307	SIG, ILLUM WS CLUSTER M159	1	2	1	1	5
L312	SIG, ILLUM WS PARA M127A1	3	2	2	3	7
L314	SIG, ILLUM GRN STAR M125A	1	2	1	3	7
L495	FLARE, SURFACE TRIP M49A1	3	3	0	0	6
G950	HG, SMK RED	4	2	2	1	9
L306	SIG, ILLUM RS CLUSTER M158A1	1	2	1	2	6
LA80	SIG, ILLUM RED PARA M126E2	1	1	1	1	4

Legend

BCT	brigade combat team	ILLUM	illumination
CALFEX	combined arms live-fire exercise	PARA	parachute
CS	tear gas	RS	reduced sensitivity
DODIC	Department of Defense identification code	SIG	signal
FCX	fire coordination exercise	SMK	smoke
FTX	field training exercise	STX	situational training exercise
GRN	green	VIOL	violet
GS	green star	WS	White Star
HG	hand grenade	YEL	yellow

Figure A-3. Recommended smoke, signals, and grenades

A-8. Figure A-4 lists the recommended simulators for use in the company and troop training events. These recommendations support all maneuver companies but may require augmentation based on the complexity of the training scenarios.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
L594	SIM, PROJ GRND BURST M115A2	15	15	7	7	44
L598	SIM, BOOBYTRAP FLASH M117	2	2	0	2	6
L599	SIM, BOOBYTRAP ILLUM M118	2	2	0	1	5
L600	SIM, BOOBYTRAP WHIS M119	2	2	0	2	6
L601	SIM, HAND GREN M116A1	14	7	0	7	28

Legend

DODIC	Department of Defense identification code	ILLUM	illumination
CALFEX	combined arms live-fire exercise	PROJ	projectile
FCX	fire coordination exercise	SIM	simulated munitions
FTX	field training exercise	STX	situational training exercise
GREN	grenade	WHIS	whistling
GRND	ground		

Figure A-4. Company and troop recommended simulators

A-9. The munitions in figures A-3 and A-4 (pages A-4 and A-5) allow each maneuver company to add combat realism to the company-level training events. Units may provide subordinate units, OC/Ts, fire markers, and other support personnel with munitions to support the training event's scenario.

> ***Note***. The red smoke (G950), red star cluster (L306), and red parachute (L311) are for real world emergency use ONLY. Units may not incorporate them into the training scenario unless specifically authorized by the battalion commander.

A-10. Units must identify any pyrotechnic shortfalls as early in the planning process as possible to secure the appropriate quantity of munitions. Units must coordinate with the BCT ammunition manager for additional resources beyond those available within their unit's Training Ammunition Management Information System account.

M4/M16

A-11. Figure A-5 provides the recommended M4/M16 munitions for Table III, STX; Table IV, FTX; Table V, FCX; and Table VI, CALFEX. The munitions listed in figure A-5 are for company and troop training. The quantities shown are for each Soldier assigned to a maneuver squad (Infantry or Cavalry) and combat engineer squads only.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
AB74	CTG, 5.56-mm TRCR M856A1				15	15
AB77	CTG, 5.56-mm Ball M855A1			20	75	95
AA68	CTG, 5.56-mm SR TRNG M862			30		30
A080	CTG, 5.56-mm BLNK for M16A1/A2	30	30			60

Legend

BLNK	blank	FTX	field training exercise
CALFEX	combined arms live-fire exercise	mm	millimeter
CTG	cartridge	STX	situational training exercise
DODIC	Department of Defense identification code	SR TRNG	short range training
FCX	fire coordination exercise	TRCR	tracer

Figure A-5. M4 and M16 recommended training munitions

> ***Note***. Units may not have blank and live munitions on the same training facility at the same time due to increased likelihood of mixing munition types. This is a critical safety issue during collective training events.

A-12. Units may increase the munitions quantities as necessary to meet their training objectives; however, the units must coordinate with the appropriate level ammunition manager for any increases.

M249AR

A-13. Figure A-6 provides the recommended M249AR munitions for Table III, STX; Table IV, FTX; Table V, FCX; and Table VI, CALFEX. The munitions listed in figure A-6 are for company and troop training.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
AB73	CTG, 5.56-mm LNKD (4:1) M855A1 (BALL) and M856A1 (TRCR)				200	200
A075	CTG, 5.56-mm BLANK LNKD for SAW	100	100			200

Legend

BCT	brigade combat team	FTX	field training exercise
CALFEX	combined arms live-fire exercise	LNKD	linked
CTG	cartridge	mm	millimeter
DODIC	Department of Defense identification code	SAW	squad automatic weapon
FCX	fire coordination exercise	STX	situational training exercise
		TRCR	tracer

Figure A-6. M249AR recommended training munitions

Note. Units may not have blank and live munitions on the same training facility at the same time due to increased likelihood of mixing munition types. This is a critical safety issue during collective training events.

A-14. Units may increase the munitions quantities as necessary to meet their training objectives; however, the units must coordinate with the appropriate ammunition manager for any increases.

M9/M17/M18

A-15. Figure A-7 lists the recommended M9/M17/M18 munitions for Table III, STX; Table IV, FTX; Table V, FCX; and Table VI, CALFEX. The munitions listed in Figure A-7 are for company and troop training. The ammunition listed in Figure A-7 is for Infantry team leader and above.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
AC20	CTG, 9-mm Ball Pistol (New)			5	5	10
AB13	CTG, 9-mm M1041 Blue SIMS	8	7			15
AB14	CTG, 9-mm M1041 Red SIMS	8	7			15

Note. The munitions listed are recommended for expected transitions to secondary engagements during company and troop collective training events. Units should ensure that munitions are provided to the dismounted elements who are equipped with a pistol as a secondary weapon and who will be conducting the transition during the event.

Legend

CALFEX	combined arms live-fire exercise	FTX	field training exercise
DODIC	Department of Defense identification code	mm	millimeter
CTG	cartridge	SIMS	simulated munitions
FCX	fire coordination exercise	STX	situational training exercise

Figure A-7. M9/M17/M18 recommended training munitions

SNIPER WEAPON SYSTEMS

A-16. Figure A-8 provides the recommended sniper, weapon system munitions for Table III, STX; Table IV, FTX; Table V, FCX; and Table VI, CALFEX. The munitions listed in figure A-8 are for company and troop training.

M110, Sniper Rifle						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
AA11	CTG, 7.62-mm, M118 L Range			10	10	20
AB72	CTG, 7.62-mm, BLNK (Bottlenose)	5	5			10
M107, Anti-materiel Sniper Rifle						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
A606	CTG, .50 CAL API MK211-0			10	10	20
A598	CTG, .50 CAL BLNK F/M2	5	5			10

Legend

API	armor piercing incendiary	DODIC	Department of Defense identification code
BLNK	blank	FCX	fire coordination exercise
CAL	caliber	FTX	field training exercise
CALFEX	combined arms live-fire exercise	mm	millimeter
CTG	cartridge	STX	situational training exercise

Figure A-8. Sniper weapon systems recommended training munitions

A-17. Units with other approved sniper weapon systems should follow the M110 training strategy to identify sufficient training quantities. Units using the M110E1, Squad Designated Marksman Rifle, use the same quantities described for the M110.

CREW SERVED WEAPONS

A-18. Figure A-9 provides the recommended crew-served weapons (machine gun) munitions for Table III, STX; Table IV, FTX; Table V, FCX; and Table VI, CALFEX. The munitions listed in figure A-9 are for company and troop training and are for the respective weapon when used in the ground role or as a mounted machine gun.

M249, Light Machine Gun						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
AB73	CTG, 5.56-mm LNKD (4:1) M855A1 (Ball) and M856A1 (TRCR)			50	250	300
A075	CTG, 5.56-mm Blank LNKD for SAW	100	100			200
M240B, Medium Machine Gun						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
AB86	CTG, 7.62-mm 4 Ball/1 TRCR LNKD, Lead Free			50	150	200
A111	CTG, 7.62-mm BLNK M82 LNKD	100	100			200
M2A1, Heavy Machine Gun						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
A557	CTG, .50 CAL 4 Ball/1 TRCR LNKD M33 for M2				100	100
A602	CTG, .50 CAL Short RNG Plastic 4 TP M858/1 TP-T M860			50		50
A598	CTG, .0 CAL BLNK for M2 (MILES)	50	50			100
MK19, Grenade Machine Gun						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
BA55	CTG, 40mm, TP, Day/Night/ Thermal for MK19, M918E1			8	16	24

Legend

BLNK	blank	MILES	Multiple Integrated Laser Engagement System or similar device
CALFEX	combined arms live-fire exercise	mm	millimeter
DODIC	Department of Defense identification code	RNG	range
CAL	caliber	SAW	squad automatic weapon
CTG	cartridge	STX	situational training exercise
LNKD	linked	TP	target practice
FCX	fire coordination exercise	TP-T	target practice-training
FTX	field training exercise	TRCR	tracer

Figure A-9. Crew-served machine gun recommended munitions

M203/M320

A-19. Figure A-10 provides the recommended M203/M320, low velocity 40-mm munitions for Company, Table III, STX; Table IV, FTX; Table V, FCX; and Company, Table VI, CALFEX. The munitions listed in figure A-10 are for company and troop training.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
BA54	CTG, 40-mm, TP Low Velocity F/M320			4	8	12
B535	CTG, 40-mm White Star PARA (ILLUM)			2	3	5
BA03	CTG, 40-mm GREN IR ILLUM M992			2	8	10

Legend

CALFEX	combined arms live-fire exercise	FCX	fire coordination exercise
DODIC	Department of Defense identification code	FTX	field training exercise
CTG	cartridge	mm	millimeter
GREN	grenade	PARA	parachute
ILLUM	Illumination	STX	situational training exercise
IR	infrared	TP	target practice

Figure A-10. M203/M320 low velocity 40-mm recommended munitions

A-20. Units should use caution when scheduling B535, cartridge, 40-mm, White Star parachute, illumination and BA03, cartridge, 40-mm, grenade, infrared, illumination rounds to ensure they meet the needs of the training event. The BA03 requires the use of image intensifier optics (infrared night vision goggles, for example).

SHOTGUN

A-21. Figure A-11 provides the recommended shotgun munitions for Table III, STX; Table IV, FTX; Table V, FCX; and Table VI, CALFEX. The munitions listed in figure A-11 are for company and troop training.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
A011	CTG, 12-gauge Shotgun 00 Buckshot				5	5

Legend

CALFEX	combined arms live-fire exercise	FCX	fire coordination exercise
CTG	cartridge	FTX	field training exercise
DODIC	Department of Defense identification code	STX	situational training exercise

Figure A-11. Shotgun recommended munitions

Note. Units should only provide shotgun munitions when the training scenario includes breaching operations.

AT-4/AT-4CS

A-22. Figure A-12 provides the recommended AT-4/AT-4CS munitions for Table III, X; Table IV, FTX; Table V, FCX; and Table VI, CALFEX. The munitions listed in figure A-12 are for company and troop training.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
LA77	SIM, Launch, Antitank (ATWESS) M22	6	6			12
CA30	CTG 84-mm and LNCHR M136 (AT-4 CS)			1	1	2

Legend

ATWESS	anti-tank weapons effect signature simulator	FTX	field training exercise
CALFEX	combined arms live-fire exercise	LNCHR	launcher
CS	confined space	mm	millimeter
CTG	cartridge	SIM	simulated munitions
DODIC	Department of Defense identification code	STX	situational training exercise
FCX	fire coordination exercise		

Figure A-12. AT-4 and AT-4 CS (confined space) recommended munitions

A-23. Units must ensure approval of a live-fire training area with a dedicated impact area for all live rockets (C995). Units may fire these munitions on other training facilities and training areas, but the installation may restrict them. Units are required to coordinate with their supporting installation for approved areas for live, high-explosive rockets.

M3 MAAWS

A-24. Figure A-13 provides the recommended M3, Multi-role, Anti-armor, Anti-personnel Weapons System (known as MAAWS) munitions for Table III, STX; Table IV, FTX; Table V, FCX; and Table VI, CALFEX. The munitions listed in figure A-13 are for company and troop training.

DODIC	*Munition Type*	*Table III STX*	*Table IV FTX*	*Table V FCX*	*Table VI CALFEX*	*Total*
CA21	CTG, 84-mm HEDP 502 IM			0.5	0.5	1
CA27	CTG, 84-mm HE 441D IM RS			0.5	0.5	1
CA10	CTG, 84-mm PRAC with TRCR			0.5	0.5	1

Note. When using MAAWS HE/HEDP munitions within the training area, units must ensure an adequate amount of training space is available prior to use of the munitions. Unit planners must consider all safety factors when selecting the appropriate training site for their collective training. The appropriate training area enables for safe firing of the munition into the designated impact areas during the event.

Legend

CALFEX	combined arms live-fire exercise	IM	impact
CTG	cartridge	MAAWS	Multi-role Anti-armor Anti-personnel Weapons System
DODIC	Department of Defense identification code	mm	millimeter
FCX	fire coordination exercise	PRAC	practice
FTX	field training exercise	RS	reduced sensitivity
HE	high explosive	TRCR	tracer
HEDP	high-explosive dual purpose	STX	situational training exercise

Figure A-13. M3, MAAWS recommended munition types

A-25. Units must ensure they have an approved live-fire training area with a dedicated impact area for all high-explosive munitions (CA21 and CA27). Units may fire these munitions on other training facilities and training areas, although installations can restrict them. Units are required to coordinate with their supporting installation for approved areas for live, high-explosive munitions.

JAVELIN

A-26. Figure A-14, provides the recommended Javelin missiles for Table III, STX; Table IV, FTX; Table V, FCX; and Table VI, CALFEX. The munitions listed in figure A-14 are for company and troop training.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
PM93	GM, Javelin BLK I SURF ATK FMG-148E				0.25	0.25

Legend			
ATK	attack	FTX	field training exercise
BLK	block	GM	ground missile
CALFEX	Combined arms live-fire exercise	SURF	surface
DODIC	Department of Defense identification code	STX	situational training exercise
FCX	fire coordination exercise		

Figure A-14. Javelin recommended munitions

A-27. No training ammunition or other munitions are authorized for any Javelin training event. Javelin teams participate in collective training using laser-based TADSS with laser target, interface devices. Units must coordinate with their training support center to request the appropriate TADSS and interface equipment for training.

A-28. There are no Javelin training missile variants or subcaliber options available. Units may use pyrotechnics within their scenario to replicate the effects of the missile to create realism during the training event.

A-29. Units with long, lead times to their training event (greater than six-months) may coordinate for tactical missiles if available. Due to the low availability of the Javelin missiles for training purposes, units must coordinate well in advance with their Army command ammunition manager to secure the munitions. Depending on the availability of missiles reaching their shelf life, units should only include a live-fire scenario option and not base the engagement solely on live missile resources.

A-30. If live missiles are available, units should provide no more than one missile per company-size unit during Table VI, CALFEX. Where multiple missiles are available, units should provide equal distribution across their subordinate companies first, followed by company-size organizations within the brigade with assigned Javelin teams.

GRENADES

A-31. Figure A-15 provides the recommended hand grenades for Table III, STX; Table IV, FTX; Table V, FCX; and Table VI, CALFEX. The munitions listed in figure A-15 are for company and troop training.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
G878	Fuze, M228 for use with G811 TNG HG body	2	2	0	2	6

Legend

CALFEX	combined arms live-fire exercise	HG	hand grenade
DODIC	Department of Defense identification code	STX	situational training exercise
FCX	fire coordination exercise	TNG	training
FTX	field training exercise		

Figure A-15. Hand grenade recommended quantities

A-32. Hand grenades are authorized only during company and troop training events for modified table of organization and equipment assigned to Infantry or Cavalry in maneuver squads. Unit of issue of the quantities above is per Soldier assigned to the Infantry or Cavalry dismounted squad.

DEMOLITIONS, SCOUT SQUAD

A-33. Figure A-16 provides the recommended demolitions for reconnaissance units conducting company and troop training. The munitions listed are separate from the demolitions provided to the integrated engineer squad.

A-34. If C-4 is not available, substitute TNT. Calculate the quantity of TNT needed by multiplying the quantity of C-4 by 1.34 (relative effectiveness factor). The result should be rounded up to the nearest ¼-pound package size.

A-35. Figure A-16 provides individual and collective demolition quantities for distribution as necessary. When units require additional demolitions, they must coordinate with the higher headquarters ammunition manager for assistance.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
M023	CHG, Demo block 1-1/4# C4	100	50	50	100	300
M456	Cord, DET Type-1	250	150	150	250	800
ML45	Holder, Blast Cap and Shock Tube	100	100	100	200	500
MN08	Igniter, Blast Time Fuse M81	10	5	5	15	35
ML47	Cap, Blast Non-electric 30 foot SHK Tube M11 MDI	100	50	50	100	300
MN90	Cap, Blast In-line Initiator Non-electric 1,000 foot Mini-tube M23	10	5	5	15	35
MN06	Cap, Blasting Delay M14	10	5	5	15	35

Legend

CALFEX	combined arms live-fire exercise	FTX	field training exercise
CHG	charge	MDI	modern demolition initiator
DET	detonator	SHK	shock
DODIC	Department of Defense identification code	STX	situational training exercise
FCX	fire coordination exercise		

Figure A-16. Cavalry squad recommended demolitions during company collective training

DEMOLITIONS, ENGINEERS

A-36. Figure A-17 provides the recommended demolitions for Company, Table III, STX; Table IV, FTX; Table V, FCX; and Company, Table VI, CALFEX. The munitions listed in figure A-17 are for company and troop training.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
MP03	Demo Kit, Bangalore M1A2E1			1	3	4
MN68	Booster, Demo CHG 10-ft DET Cord M151			50	100	150
MN69	Booster, Demo CHG 30-ft DET Cord M152			50	100	150
M039	CHG, Demo 40-lb Cratering			5	10	15
M023	CHG, Demo BLK 1-1/4 #C4			25	100	125
M456	Cord DET Type 1			100	500	600
ML45	Holder, Blast Cap and Shock Tube			50	100	150
MN08	Igniter, Blast Time Fuse M81			50	100	150
K042	CAN, Mine PRAC for M88 (Volcano)			1	1	2
MN88	Cap, Blast Nonelectric with 500-foot Mini-tube M21			3	5	8
MN90	Cap, Blast In-line Initiator Nonelectric 1,000-foot Mini-tube M23			3	5	8
MN06	Cap, Blasting Delay M14			50	100	150
M420	CHG, Demo-shaped 15-lb M2 Series			5	10	15
M914	CHG, Demo Linear PRAC M68 (MICLIC)				1	1
J143	RKT MTR, 5-inch MK22-4 for MICLIC				1	1

Legend

BLK	block	FTX	field training exercise
CALFEX	combined arms live-fire exercise	lb	pound
CAN	canister	MICLIC	mine clearing line charge
CHG	charge	MTR	motor
DET	detonator	PRAC	practice
DODIC	Department of Defense identification code	RKT	rocket
FCX	fire coordination exercise	STX	situational training exercise

Figure A-17. Recommended demolitions for company collective training

ARMORED BRIGADE COMBAT TEAM AMMUNITION REQUIREMENTS

A-37. The following figures provide the recommended munition quantities for weapons, systems, and platforms specific to the Armored brigade combat team (ABCT). Figure A-18 lists the weapons, systems, and platforms specific to an ABCT formation and is described in the section below. The recommended munition quantities for weapons, systems, and platforms specific to the ABCT are described in paragraphs A-40 through A-47.

ABCT Platforms	Remarks
Abrams Series	Munitions identified in this section reflect the quantity by type recommended for each platform that is expected to participate in the training event.
Bradley Series	
Cavalry Mounted Machine Gun (MMG)	
Mortars	
Field Artillery	
Legend ABCT Armored brigade combat team	

Figure A-18. ABCT weapons, systems, and platforms

A-38. The munitions listed for the platforms within the ABCT formation do not include engineer or air defense artillery recommended quantities. Units should refer to the appropriate chapter within DA PAM 350-38 to identify the resources authorized for company collective events.

A-39. Cavalry platforms follow the Bradley series recommended munitions for Cavalry fighting vehicles. Units should consider augmenting those munitions with a complement of dismounted munitions for reconnaissance elements.

ABRAMS SERIES

A-40. Figure A-19 illustrates the recommended munitions for each Abrams series platform participating in the collective training event. The quantities listed in Figure A-19 are per tank within the company-size organization.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
C785	CTG, 120-mm TPCSDS-T M865 for TNKGUN			1	2	3
CA31	CTG, 120-mm TP-T M1002			1*	1*	2*
CA38	CTG, 120-mm Canister M1028			.5*	3*	3.5*
AB86	CTG, 7.62-mm 4 Ball M80/1TRCR M62 LNKD			50	150	200
A557	CTG, .50 Cal 4 Ball/1 TRCR LNKD M33 for M2			50	150	200
G978	GREN LNCHR, SMK SIM Screen M82		6		6	12
LA53	SIM, Target Hit XM35 (BES)			3	4	7
LA54	SIM, EXP DET XM34 (BES)			7	8	15
A111	CTG, 7.62-mm BLNK M82 LNKD	150	100			250
A598	CTG, .50 CAL BLNK for M2 (MILES)	50	50			100

* Rounds must be harvested from previous tables

Legend:

BES	battle effects simulator	LNCHR	launcher
BLNK	blank	MILES	Multiple Integrated Laser Engagement System or similar device
CALFEX	combined arms live-fire exercise	mm	millimeter
CTG	cartridge	SMK	smoke
DODIC	Department of Defense identification code	SIM	simulator
EXP DET	explosive detonation	STX	situational training exercise
FCX	fire coordination exercise	TNKGUN	tank gun
FTX	field training exercise	TPCSDS-T	target practice cone stabilized discarding sabot-tracer
GREN	grenade	TPT	target practice-training
LNKD	linked	TRCR	tracer

Figure A-19. Abrams recommended munitions

BRADLEY SERIES

A-41. Figure A-20 shows the recommended munitions for each Bradley series platform participating in the collective training event. The figure lists the quantities per fighting vehicle within the company-size organization.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
A940	CTG, 25-mm AP TNG LNKD M910			8	16	24
A976	CTG, 25-mm, TP-T LNKD M793			8	16	24
WH05	GM, TOW-2 SURF Practice				1	1
AB86	CTG, 7.62-mm 4 Ball M80/1 TRCR M62 LNKD			50	150	200
G978	GREN LNCHR, SMK SIM Screen M82		6		6	12
LA53	SIM, Target Hit XM35 (BES)		0	3	4	7
LA54	SIM, EXP DET XM34 (BES)			7	8	15
A111	CTG, 7.62-mm BLNK M82 LNKD	10	100			200

Note. The munitions listed also include engineer companies equipped with Bradley fighting vehicle platforms.

Legend

AP	armor piercing	GM	ground missile
BES	battle effects simulator	LNKD	linked
BLNK	blank	SMK	smoke
CALFEX	combined arms live-fire exercise	SIM	simulator
CTG	cartridge	STX	situational training exercise
DODIC	Department of Defense identification code	SURF	surface
EXP DET	explosive detonation	TNG	training
FCX	fire coordination exercise	TOW	tube launched, optically tracked, wire guided
FTX	field training exercise	TP-T	target practice-training
GREN	grenade	TRCR	tracer
LNCHR	launcher		

Figure A-20. Bradley Fighting Vehicle recommended munitions

CAVALRY MOUNTED MACHINE GUN

A-42. Figure A-21 illustrates the recommended munitions for Cavalry units in a motorized mounted, machine gun role. The munitions in the figure are recommendations per mounted machine gun (truck) that is expected to participate in the training events.

A-43. Figure A-21 lists the munitions for the motorized reconnaissance elements by truck crew. Units must consider the crew-served weapons assigned to each vehicle when calculating munitions requirements.

M240B, Medium Machine Gun						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
AB86	CTG, 7.62-mm 4 Ball/ 1 TRCR LNKD, Lead Free			50	50	100
A111	CTG, 7.62-mm BLNK M82 LNKD	200	200			400
M2A1, Heavy Machine Gun						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
A557	CTG, .50 CAL 4 Ball / 1 TRCR LNKD M33 for M2			100	200	300
A598	CTG, .50 CAL BLNK for M2 (MILES)	100	100			200
MK19, Grenade Machine Gun						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
BA55	CTG, 40-mm, TP, Day/Night/Thermal For MK19 High Velocity, M918E1			24	24	48

Legend

BLNK	blank	LNKD	linked
CAL	caliber	MILES	Multiple Integrated Laser Engagement System or similar device
CALFEX	combined arms live-fire exercise	mm	millimeter
CTG	cartridge	STX	situational training exercise
DODIC	Department of Defense identification code	TP	target practice
FCX	fire coordination exercise	TRCR	tracer
FTX	field training exercise		

Figure A-21. Recommended Cavalry mounted machine gun munitions per crew

ABCT MORTARS

A-44. Figure A-22 illustrates the recommended munitions for mortar units within the ABCT formation. Figure A-22 lists the munitions as recommendations per mortar unit that is expected to participate in the training events. The munitions listed for all the mortars are by organization and not by tube. The quantities are grouped by the formation in which they reside. Units must consider the crew-served weapons assigned to each vehicle when calculating munitions requirements for the STX and FTX.

A-45. The mortar unit uses figure A-22 to ensure they have sufficient munitions to conduct live-fire events. Each company is provided with the following:

- FCX. One day and one night adjust fire mission. Minimum quantities are listed for coordination purposes only. Units may add to the recommended quantities listed as available and appropriate.
- CALFEX. One day and one night adjust fire mission using HE and illumination rounds. Units may add to the recommended quantities based on their availability as necessary.

Battalion Mortars						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
CA04	CTG, 120-mm, HE M934 with MOF M734A1			2	29	31
C625	CTG, 120-mm ILLUM XM930			2	8	10
Cavalry Troop Mortars						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
CA04	CTG, 120-mm, HE M934 with MOF M734A1			2	18	20
C625	CTG, 120-mm ILLUM XM930			2	8	10

Legend

CALFEX	combined arms live-fire exercise	HE	high explosive
DODIC	Department of Defense identification code	ILLUM	illumination
CTG	cartridge	mm	millimeter
FCX	fire coordination exercise	MOF	multi-option fuse
FTX	field training exercise	STX	situational training exercise

Figure A-22. Recommended ABCT mortar munitions by formation

A-46. On installations where the dedicated impact area is separate from the training location expected for the live-fire events, the unit may use an observation point separate from the primary training facility to conduct the leader call for fire tasks when firing high explosives.

ABCT FIELD ARTILLERY

A-47. Figure A-23 illustrates the recommended munitions for ABCT field artillery supporting units. The figure lists munitions as recommendations per supporting unit, not by tube, to support the maneuver company. The BCT should coordinate with the subordinate field artillery battalion for the appropriate amount of munitions by task to support the maneuver training event. Units must consider the crew-served weapons assigned to each vehicle when calculating munitions requirements if the unit intends to integrate training within the STX and FTX events.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
DA51	PROJ, 155-mm HE M107 Deep Cavity with SUP CHG			5	10	15
DA66	PROJ, 155-mm WP M110 Series				6	6
DA57	PROJ 155-mm ILLUM M485 Series			6	6	12

Legend

CALFEX	combined arms live-fire exercise	ILLUM	illumination
CHG	charge	mm	millimeter
DODIC	Department of Defense identification code	PROJ	projectile
FCX	fire coordination exercise	STX	situational training exercise
FTX	field training exercise	SUP	supplemental
HE	high explosive	WP	white phosphorous

Figure A-23. Recommended ABCT field artillery per supporting unit

A-48. On installations where the dedicated impact area is separate from the training location expected for the live-fire events, the unit may use an observation point separate from the primary training facility to conduct the leader call for fire tasks when firing high explosives or white phosphorus munitions.

STRYKER BRIGADE COMBAT TEAM AMMUNITION REQUIREMENTS

A-49. The following figures provide the recommended munition quantities for weapons, systems, and platforms specific to the SBCT. Figure A-24 shows the weapons, systems, and platforms specific to an SBCT formation and is described in the section below.

A-50. The munitions listed for the platforms within the SBCT formation do not include field artillery, engineer, or air defense artillery recommended quantities. Units should refer to the appropriate chapter within DA PAM 350-38 to identify the resources authorized for company collective events. The recommended munition quantities for weapons, systems, and platforms specific to the SBCT are listed in figures A-25 through A-29 (pages A-23 through A-27).

SBCT Platforms	Remarks
Stryker ICV and RV Stryker MGS Stryker ATGM Mortars Field Artillery	Munitions identified in this section reflect the quantity by type recommended for each platform expected to participate in the training event.

Legend

ATGM	anti-tank guided missile	MGS	mobile gun system
ICV	Infantry carrier vehicle	RV	reconnaissance vehicle
		SBCT	Stryker brigade combat team

Figure A-24. SBCT weapons, systems, and platforms

A-51. Cavalry platforms follow the Stryker ICV and reconnaissance vehicle (known as RV) recommended munitions. Units should consider augmenting those munitions with a complement of dismounted munitions for their reconnaissance elements, as appropriate.

STRYKER ICV AND RECONNAISSANCE VEHICLE

A-52. Figure A-25 illustrates the recommended munitions for each Stryker ICV or RV platform participating in the collective training event. The figure lists the quantities per truck within the company-size organization.

M240B, Medium Machine Gun						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
AB86	CTG, 7.62-mm 4 Ball / 1 TRCR LNKD, Lead Free			50	50	100
A111	CTG, 7.62-mm BLNK M82 LNKD	200	200			400
M2A1, Heavy Machine Gun						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
A557	CTG, .50 CAL 4 Ball/1 TRCR LNKD M33 for M2			50	50	100
A602	CTG, .50 CAL Short RNG Plastic 4 TP M858/1 TP-T M870					0
A598	CTG, .50 CAL BLNK for M2 (MILES)	100	100			200
MK19, Grenade Machine Gun						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
BA55	CTG, 40-mm, TP, Day/ Night/Thermal High Velocity for MK19, M918E1			24	24	48

Legend

BCT	brigade combat team	MILES	Multiple Integrated Laser Engagement System or similar device
BLNK	blank	mm	millimeter
CALFEX	combined arms live-fire exercise	RNG	range
CTG	cartridge	STX	situational training exercise
DODIC	Department of Defense identification code	TP	target practice
FCX	fire coordination exercise	TP-T	target practice-tracer
FTX	field training exercise	TRCR	tracer
LNKD	linked		

Figure A-25. Stryker ICV or RV recommended munitions

STRYKER MOBILE GUN SYSTEM

A-53. Figure A-26 illustrates the recommended munitions for each Stryker MGS platform participating in the collective training event. The figure lists the quantities per Stryker MGS within the company-size organization.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
C511	CTG, 105-mm TP-T, M490A1			1	2	3
CA58	CTG, Tank, 105-mm DS-TP M724A1E1 Short Range for Tank Gun			1	1	2
A557	CTG, .50 CAL 4 Ball/1 TRCR LNKD M33 for M2			25	75	100
AB86	CTG, 7.62-mm 4 Ball/1 TRCR LNKD, Lead Free			50	150	200
A598	CTG, .50 CAL BLNK for M2 (MILES)	50	50			100
A111	CTG, 7.62-mm BLNK M82 LNKD	50	50			100
G978	GREN LNCHR, SMK SIM Screen M82		6		6	12
LA53	SIM, Target Hit XM35 (BES)			2	5	7
LA54	SIM, EXP DET XM34 (BES)			7	8	15

Legend

BES	battle effects simulator	GREN	grenade
BLNK	blank	LNCHR	launcher
CAL	caliber	LNKD	linked
CALFEX	combined arms live-fire exercise	MILES	Multiple Integrated Laser Engagement System or similar device
CTG	cartridge	mm	millimeter
DODIC	Department of Defense identification code	SIM	simulator
DS-TP	Discarding sabot – target practice	TP-T	target practice-training
EXP DET	explosive detonation	TRCR	tracer
FCX	fire coordination exercise	LNKD	linked
FTX	field training exercise	STX	situational training exercise

Figure A-26. Stryker MGS recommended munitions

STRYKER ANTITANK GUIDED MISSILE

A-54. Figure A-27 shows the recommended munitions for Stryker antitank guided missile (ATGM) trucks. The munitions are listed as recommendations per ATGM truck expected to participate in the training events.

A-55. Figure A-27 lists the truck crew, motorized, reconnaissance elements munitions. Units must consider the crew-served weapons assigned to each vehicle when calculating munitions requirements.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
WH05	GM, TOW-2 SURF PRACTICE				1	1
LA77	SIM, Launch Antitank (ATWESS) M22	4	2			6
G978	GREN LNCHR, SMK SIM Screen M82		6		6	12
with M240B, Medium Machine Gun						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
AB86	CTG, 7.62-mm 4 Ball/1 TCRC LNKD, Lead Free			50	50	100
A111	CTG, 7.62-mm BLNK M82 LNKD	100	100			200

Legend

ATWESS	antitank weapons effect signature simulator	LNCHR	launcher
BCT	brigade combat team	LNKD	linked
BLNK	blank	mm	millimeter
CALFEX	combined arms live-fire exercise	SIM	simulator
CTG	cartridge	SMK	smoke
DODIC	Department of Defense identification code	STX	situational training exercise
FCX	fire coordination exercise	SURF	surface
FTX	field training exercise	TCRC	tracer
GM	guided missile	TOW	tube launched, optically tracked, wire guided
GREN	grenade		

Figure A-27. Recommended Stryker ATGM munitions per crew

A-56. When firing live missiles, the unit must coordinate for the appropriate firing position with an approved, safety certified impact area. Units should coordinate through their installation's range support division when developing the live-fire scenario.

SBCT MORTARS

A-57. Figure A-28 illustrates the recommended munitions for mortar units within the SBCT formation. The munitions listed in the figure are recommendations per mortar unit. These mortar units are expected to participate in the training events. The munitions listed for all mortars are by organization and not by tube. The quantities are grouped by the formation in which they reside. Units must consider the crew-served weapons assigned to each vehicle when calculating munitions requirements for the STX and FTX.

Battalion Mortars						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
C871	CTG, 81-mm ILLUM M853A1 with M772 MTSQ			2	8	10
C868	CTG, 81-mm HE, M821 with MOF			2	32	34
C625	CTG, 120- mm ILLUM M930 with M776 MTSQ			2	8	10
CA04	CTG, 120- mm HE M934A1 with M734A1 MOF			2	32	34
Company Mortars						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
BA04	CTG, 60- mm ILLUM M767 IR			2	8	10
BA44	CTG, 60- mm HE M720A2 with M734A1 MOF			2	18	20
C625	CTG, 120- mm ILLUM XM930			2	8	10
CA04	CTG, 120- mm HE M934 with MOF M734A1			2	18	20
Cavalry Troop Mortars						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
C625	CTG, 120-mm ILLUM XM930			2	8	10
CA04	CTG, 120-mm HE M934 with MOF M734A1			2	18	20

Legend

CALFEX	combined arms live-fire exercise	FTX	field training exercise
DODIC	Department of Defense identification code	ILLUM	illumination
CTG	cartridge	MTSQ	mechanical time, super quick
HE	high explosive	MOF	multi-option fuse
IR	infrared	mm	millimeter
FCX	fire coordination exercise	STX	situational training exercise

Figure A-28. Recommended SBCT mortar munitions by formation

A-58. The mortar munitions listed provide the company with sufficient munitions to conduct live-fire events. Each company is provided with the following:

- FCX. One day and one night adjust fire mission. Minimum quantities are listed for coordination purposes only. Units may add to the recommended quantities listed as available and appropriate.
- CALFEX. One day and one night adjust fire mission using HE and illumination rounds. Units may add to the recommended quantities based on their availability as necessary.

A-59. On installations where the dedicated impact area is separate from the training location expected for the live-fire events, the unit may use an observation point separate from the primary training facility to conduct the leader call for fire tasks when firing high explosives.

SBCT FIELD ARTILLERY

A-60. Figure A-29 illustrates the recommended munitions for SBCT field artillery supporting units. The munitions listed in figure A-29 are for the field artillery units, which are by the unit and not by tube to support the maneuver company. Units must consider the crew-served weapons assigned to each vehicle when calculating munitions requirements if the unit intends to integrate training within the STX and FTX events.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
DA51	PROJ, 155-mm HE M107 with Fuze Well (COMP B + TNT)			5	10	15
DA66	PROJ, 155-mm WP M110 Series				6	6
DA57	PROJ, 155-mm ILLUM M485 Series			6	6	12

Legend

CALFEX	combined arms live-fire exercise	ILLUM	illumination
COMP	composition	mm	millimeter
DODIC	Department of Defense identification code	PROJ	projectile
FCX	fire coordination exercise	STX	situational training exercise
FTX	field training exercise	TNT	trinitrotoluene
HE	high explosive	WP	white phosphorous

Figure A-29. Recommended SBCT field artillery per supporting unit

A-61. On installations where the dedicated impact area is separate from the training location expected for the live-fire events, the unit may use an observation point separate from the primary training facility to conduct the leader call for fire tasks when firing high explosives or white phosphorus munitions.

IBCT AMMUNITION REQUIREMENTS

A-62. Figure A-30 to A-34, pages A-28 to A-32, lists the recommended munition quantities for weapons, systems, and platforms specific to the Infantry brigade combat team (IBCT). Figure A-30 illustrates the weapons, systems, and platforms that are common within an IBCT formation. The munition requirements for these weapons, systems, and platforms are described in paragraphs A-67 through A-71.

SBCT Platforms	Remarks
Mounted Machine Guns TOW/TAS Mortars Artillery	Munitions identified in this section reflect the quantity by type recommended for each platform expected to participate in the training event.
Legend TAS target acquisition system TOW tube launched, optically tracked, wire guided	

Figure A-30. IBCT weapons, systems, and platforms

A-63. The munitions listed for the platforms within the IBCT formation do not include field artillery, engineer, or air defense artillery recommended quantities. Units should refer to the appropriate chapter within DA PAM 350-38 to identify the resources authorized for company collective events.

A-64. Cavalry platforms follow the mounted, machine gun recommended munitions. Units should consider augmenting those munitions with a complement of dismounted munitions for their reconnaissance elements, as appropriate.

MOUNTED MACHINE GUN

A-65. Figure A-31 illustrates the recommended munitions for each Stryker ICV or RV platform participating in the collective training event. The figure lists the quantities per truck within the company-size organization.

M240B, Medium Machine Gun						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
AB86	CTG, 7.62-mm 4 Ball / 1 TRCR LNKD, Lead Free			50	50	100
A111	CTG, 7.62-mm BLNK M82 LNKD	200	200			400
M2A1, Heavy Machine Gun						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
A557	CTG, .50 CAL 4 Ball / 1 TRCR LNKD M33 for M2			100	200	300
A602	CTG, .50 CAL Short RNG Plastic 4 TP M858 / 1 TP-T M860					0
A598	CTG, .0 CAL BLNK for M2 (MILES)	100	100			200
MK19, Grenade Machine Gun						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
BA55	CTG, 40-mm, TP, Day / Night / Thermal High Velocity M918E1			24	24	48

Legend

BLNK	blank	MILES	Multiple Integrated Laser Engagement System or similar device
CAL	caliber	mm	millimeter
CALFEX	combined arms live-fire exercise	RNG	range
DODIC	Department of Defense identification code	STX	situational training exercise
CTG	cartridge	TP	target practice
LNKD	linked	TP-T	target practice-training
FCX	fire coordination exercise	TRCR	tracer
FTX	field training exercise		

Figure A-31. Mounted, machine gun platform recommended munitions

TOW/ITAS SYSTEMS

A-66. Figure A-32 illustrates the recommended munitions for each tube launched, optically tracked, wire guided (TOW)/Improved Target Acquisition System (known as ITAS) system or platform participating in the collective training event. The figure lists the quantities per weapon system within the company-size organization.

DODIC	Munition Type	Table III STX	Table IV FTX	Table V FCX	Table VI CALFEX	Total
WH05	GM, TOW-2-SURF Practice				1	1
LA77	SIM, Launch Antitank (ATWESS) M22	4	2			6
G978	GREN LNCHR, SMK SIM Screen M82	2	1	1	4	8
With assigned M240B, Medium Machine Gun						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
AB86	CTG, 7.62-mm 4 Ball / 1 TRCR LNKD, Lead Free			50	50	100
A111	CTG, 7.62-mm BLNK M82 LNKD	200	200			400

Legend

ATWESS	antitank weapons effect signature simulator	LNCHR	launcher
BLNK	blank	LNKD	linked
CALFEX	combined arms live-fire exercise	mm	millimeter
CTG	cartridge	SIM	simulator
DODIC	Department of Defense identification code	SMK	smoke
FCX	fire coordination exercise	STX	situational training exercise
FTX	field training exercise	SURF	surface
GREN	grenade	TRCR	tracer
GM	guided missile	TOW	tube launched, optically tracked, wire guided

Figure A-32. TOW/ITAS recommended munitions

IBCT MORTARS

A-67. Figure A-33 illustrates the recommended munitions for mortar units within the IBCT formation. Figure A-33 lists munitions as recommendations per mortar unit that is expected to participate in the training events. The munitions listed for all the mortars are by organization and not by tube. The quantities are grouped by the formation in which they reside. Units must consider the crew-served weapons assigned to each vehicle when calculating munitions requirements for the STX and FTX.

A-68. The unit uses figure A-33 to ensure the company has sufficient mortar munitions to conduct live-fire events. Each company is provided with—

- FCX. One day and one night adjust fire mission. Minimum quantities are listed for coordination purposes only. Units may add to the recommended quantities listed as available and appropriate.
- CALFEX. One day and one night adjust fire mission using HE and illumination rounds. Units may add to the recommended quantities based on their availability as necessary.

Infantry Battalion Mortars						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
C871	CTG, 81-mm ILLUM M853			2	8	10
C868	CTG, 81-mm HE, M821 with MOF			2	29	31
C625	CTG, 120-mm ILLUM XM930			2	8	10
CA04	CTG, 120-mm HE M934 with MOF M734A1			2	29	31
Infantry Mortars						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
BA04	CTG, 60-mm ILLUM XM767 IR			2	8	10
BA44	CTG, 60-mm, HE, IMX-104, M720A2 with MOF M734A1			2	18	20
Cavalry Troop Mortars						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
BA04	CTG, 60-mm ILLUM XM767 IR					
BA44	CTG, 60-mm, HE, IMX-104, M720A2 with MOF M734A1					
C625	CTG, 120-mm ILLUM XM930			2	8	10
CA04	CTG, 120-mm HE M934 with MOF M734A1			2	18	20

Legend

CALFEX	combined arms live-fire exercise	IR	infrared
DODIC	Department of Defense identification code	ILLUM	illumination
CTG	cartridge		
HE	high explosive	MOF	multi-option fuse
FCX	fire coordination exercise	mm	millimeter
FTX	field training exercise	STX	situational training exercise

Figure A-33. Recommended IBCT mortar munitions by formation

A-69. On installations where the dedicated impact area is separate from the training location expected for the live-fire events, the unit may use an observation point separate from the primary training facility to conduct the leader call for fire tasks when firing high explosives.

IBCT FIELD ARTILLERY

A-70. Figure A-34 illustrates the recommended munitions for IBCT field artillery supporting units. The munitions for the field artillery units are listed by the unit, not by the tube, to support the maneuver company. Units must consider the crew-served weapons assigned to each vehicle when calculating munitions requirements if the unit intends to integrate training within the STX and FTX events.

Battalion Mortars						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
CA04	CTG, 120-mm HE M934 with MOF M734A1			2	29	31
C625	CTG, 120-mm ILLUM XM930			28	10	
Cavalry Troop Mortars						
DODIC	**Munition Type**	**Table III STX**	**Table IV FTX**	**Table V FCX**	**Table VI CALFEX**	**Total**
CA04	CTG, 120-mm HE M934 with MOF M734A1			2	18	20
C625	CTG, 120-mm ILLUM XM930			2	8	10

Legend:

CALFEX	combined arms live-fire exercise	FCX	fire coordination exercise
CTG	cartridge	FTX	field training exercise
DODIC	Department of Defense identification code	MOF	multi-option fuse
HE	high explosive	STX	situational training exercise
ILLUM	illumination		

Figure A-34. Recommended IBCT field artillery per supporting unit

A-71. On installations where the dedicated impact area is separate from the training location expected for the live-fire events, the unit may use an observation point separate from the primary training facility to conduct the leader call for fire tasks when firing high explosives or white phosphorus munitions.

Appendix B
Building Collective Training

This appendix is an overview of the warfighting functions integration requirements for maneuver collective training events. Commanders can use this appendix as a guide to build a scenario that meets the integration requirements of their event, particularly those that are evaluated externally. For each requirement at echelon, examples are given to show possible methods of completing the integration requirement. These examples provided are not finite. They provide the intent of the integration requirement and various methods.

For each integrated function, notes are provided for live and virtual environments, as well as live-fire and force-on-force conditions, as appropriate. Units cannot integrate all warfighting functions in all environments or under all conditions. Units can select from multiple tasks to meet the requirements, notional options, or other methods to achieve the intent of the integrated function.

Commanders and staff developing the training scenarios should review the examples to understand the intent of the integration. Units are encouraged to develop other methods to integrate the warfighting function requirements, provided the intent is maintained. All training maneuver collective training events focus on the unit's mission-essential tasks and inherent or implied supporting collective tasks.

UNIT TRAINING PLAN DEVELOPMENT

B-1. Development of a unit training plan is a lengthy process. Developing a unit training plan requires research and analysis to create the commander's assessment, mission-essential tasks with enabling and supporting collective tasks, warfighting skills, training goals, training objectives, and collective training best practices, at a minimum. Units conduct the research and analysis of these and other topics and integrate the command training guidance into the development process. Leaders and planners must be familiar with and refer to FM 7-0 for detailed information pertaining to unit training.

COMMANDER'S ASSESSMENT

B-2. Prior to developing any unit training plan, the commander must make a complete assessment of the unit's proficiency, training strengths, weaknesses, and the standards they wish to achieve. This assessment must be comprehensive to design training that achieves, improves, or sustains proficiency. Commanders assess and evaluate all aspects of training, including the planning, preparation, and execution. Leaders continuously monitor the unit's mission-essential task proficiency to determine a quantifiable snapshot of the unit's current, direct fire training proficiency. From this snapshot, the unit can develop a training plan to correct deficiencies, sustain fundamentals, improve mastery, and build collective proficiency.

B-3. The commander uses the specific task standards whenever possible to measure the abilities of subordinate unit proficiency using assessments from previous training and evaluation outlines and live-fire exercise records. Accurate and honest evaluations are necessary to identify where to place training emphasis.

MISSION-ESSENTIAL TASKS

B-4. The Department of the Army standardizes the unit mission-essential tasks for maneuver units to the company level. This standardization ensures that like-units have like-capabilities regardless of their location, higher headquarters, or expected area of operations.

B-5. Time, resources, and command emphasis must focus on training tasks that support the mission-essential task list. Commanders, platoon leaders, and platoon sergeants should use the appropriate individual and collective tasks that support their training objectives using the following references:

- CATS.
- Central Army Registry (known as CAR).
- Digital Training Management System (DTMS).
- Soldier's manuals.
- Soldier training publications.
- DA PAM 350-38.
- Deployment or mobilization plans.
- Army Universal Task List.
- Universal Joint Task List.
- Army, area command, and local regulations.
- Local SOPs.

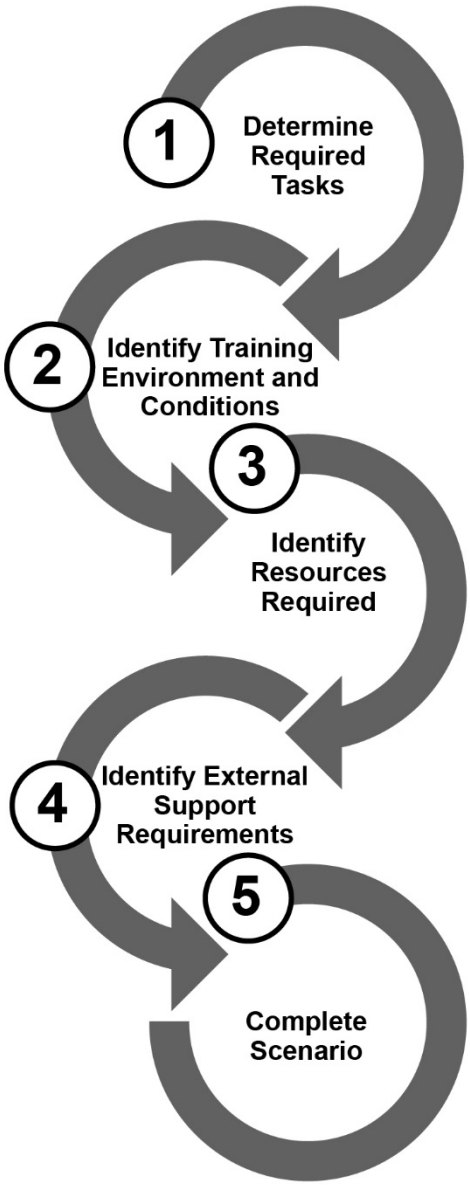
B-6. Commanders use training and evaluation outlines for the collective tasks, drills, and individual tasks that support the unit's mission-essential task list. Commanders can access the outlines through the DTMS and CATS found on the Army Training Network (ATN) website.

B-7. For the purposes of maneuver collective training at the company and troop level, there are ten maneuver formation variations within the three BCT formation types. Each of these formations has their specific mission-essential tasks and branch-unique enabling task sets. The mission-essential tasks and the enabling task sets create the foundation of collective training for the organization.

B-8. Commanders build the entire training plan so their organizations can train to become proficient in their mission-essential tasks. Commanders use their assessments of their organizations and subordinate units' proficiency and training deficiencies to determine which supporting collective and supporting individual tasks to include in each of the prerequisite table training events. Table IV, FTX, serves as the units' collective task proficiency gate. Organizations must train and externally evaluate all mission-essential tasks. Table VI serves as the unit's live-fire proficiency gate. The brigade commander must select at least one mission-essential task to train and externally evaluate.

DEVELOPING THE TRAINING SCENARIO

B-9. Paragraphs B-10 through B-59, pages B-4 through B-18, describe a general outline for developing a company-size training event. The outline is for reference only and is not all-inclusive. The outline shows all the key actions, tasks, or steps (see figure B-1) units should review when developing the training scenario for their training event.



1. Determine required tasks
- a. Mission-essential tasks
- b. Integrated warfighting function tasks
- c. Operational environment conditions

2. Identify the training environment and conditions
- a. Virtual
- b. Live, TADSS based
- c. Live, live fire

3. Identify the resources required
- a. Training ammunition required/available for each weapon system pyrotechnics
- b. TADSS
- c. Range facilities, training land, firing points, target locations, dedicated impact areas
- d. Time

4. Identify external support requirements
- a. OC/T
  - i. Training
  - ii. Vehicles
  - iii. Pyrotechnics
  - iv. Evaluation packets
- b. OPFOR
  - i. Training
  - ii. Vehicles
  - iii. Training ammunition, pyrotechnics
- c. Targetry
  - i. Target panels
  - ii. Lifting mechanisms
  - iii. Battle effects simulators
  - iv. Pyrotechnics
- d. Fire markers
- e. External direct and indirect fire assets

5. Complete the training scenario
- a. OPORDs
- b. FRAGORDs
- c. WARNORDs
- d. Drivers
- e. Branches
- f. Sequels
- g. Threat SITTEMP
- h. Graphic control measures
- i. Risk management

Legend

FRAGORDs	fragmentary orders	SITTEMP	situational template
OC/T	observer-controller/trainer	TADSS	training aids, devices, simulators, and simulations
OPFOR	opposing force	WARNORDs	warning orders
OPORDs	operations orders		

Figure B-1. Developing the training scenario

DETERMINE THE REQUIRED TASKS FOR THE TRAINING EVENT

B-10. The company training strategy requires organizations to perform certain tasks for evaluation using either Table IV, FTX or Table VI, CALFEX. These tasks are required to achieve unit proficiency.

B-11. The required tasks are derived from the following:

- Mission-essential task.
- Supporting collective task. Five to seven tasks listed as critical, supporting collective tasks as part of the mission-essential task.
- Decisive action enabling task. Identified as part of Task Set 17-TS-2508, Conduct Decisive Action Enabling Tasks.
- Basic tactical task. Identified within Task Set 17-TS-2106, Perform Basic Tactical Tasks.
- Integrated warfighting function tasks. Integrated warfighting function tasks required to show proficiency at a specific capability, function, or action.
- Operational environment. Four or more operational environment conditions must be included in the scenario.
- Commander selected. Determined by the commander based on their current unit assessment or command training guidance.

MISSION-ESSENTIAL TASK REQUIREMENTS

B-12. Each table within the training strategy lists how much time and the resources the unit should focus on when they train on one or more mission-essential tasks. Each mission-essential task has an associated training and evaluation outline that the evaluation commander and the training unit can use during the evaluation to gain an objective assessment of their unit's performance. The commander and training unit use mission-essential task training and evaluation outlines alone during the evaluation. The supporting collective task training and evaluation outlines are not aggregated to the supported collective task. Task and evaluation outlines can be accessed through the ATN or CATS website.

B-13. Figures B-2 through B-6 (pages B-5 through B-7) illustrate the required mission-essential task training and evaluation requirements for the collective task proficiency gate (Table IV, FTX) and the LFPG (Table VI, CALFEX). Companies and troops have the option to execute their live-fire mission-essential task by integrating into another unit's live-fire event or executing a commander-designed live-fire exercise as an organic unit.

B-14. Commanders must prioritize the training objectives for the prerequisite tables (Table I, II, and III). Table IV requires the execution and EXEVAL of all mission-essential tasks with the exception of Task 55-CO-4830, Conduct Expeditionary Deployment Operations. For Table V and VI, commanders select one or more mission-essential tasks that can be evaluated under live-fire conditions as depicted in figures B-2 through B-6, pages B-5 through B-7. Commanders must evaluate the mission-essential task selected for Table VI externally.

Task Number	Title	I TEWT	II STX-V	III STX	IV FTX	V FCX	VI CALFEX
07-CO-1094	Conduct an Attack				REQ	SEL	SEL
07-CO-1074	Conduct a Movement to Contact				REQ		
07-CO-1030	Conduct an Area Defense				REQ		
07-CO-1272	Conduct Area Security				REQ		
55-CO-4830	Conduct Expeditionary Deployment Operations						

Legend

CALFEX	combined arms live-fire exercise	STX	situational training exercise
FCX	fire coordination exercise	STX-V	situational training exercise–virtual training environment
FTX	field training exercise	TEWT	tactical exercise without troops

REQ – required task for external evaluation (EXEVAL) during Table IV, Field Training Exercise, to assess collective task proficiency (CTP).
SEL – evaluation commander selects a minimum of 1 mission-essential task for Table VI, CALFEX, Live-Fire Proficiency Gate

Figure B-2. ABCT, rifle and Armor company mission-essential task training requirements, example

Task Number	Title	I TEWT	II STX-V	III STX	IV FTX	V FCX	VI CALFEX
07-CO-1093	Conduct an Attack				REQ	SEL	SEL
07-CO-1073	Conduct a Movement to Contact				REQ		
07-CO-1029	Conduct an Area Defense				REQ		
07-CO-1272	Conduct Area Security				REQ		
55-CO-4830	Conduct Expeditionary Deployment Operations						

Legend

CALFEX	combined arms live-fire exercise	STX	situational training exercise
FCX	fire coordination exercise	STX-V	situational training exercise–virtual training environment
FTX	field training exercise	TEWT	tactical exercise without troops

REQ – required task for external evaluation (EXEVAL) during Table IV, Field Training Exercise, to assess collective task proficiency (CTP).
SEL – evaluation commander selects a minimum of 1 mission-essential task for Table VI, CALFEX, Live-Fire Proficiency Gate

Figure B-3. SBCT, rifle company mission-essential task training requirements, example

Task Number	Title	I TEWT	II STX-V	III STX	IV FTX	V FCX	VI CALFEX
07-CO-1256	Conduct an Attack by Fire				REQ	SEL	SEL
07-CO-3000	Conduct Support by Fire				REQ		
07-CO-9003	Conduct an Area Defense				REQ		
55-CO-4830	Conduct Expeditionary Deployment Operations						

Legend

CALFEX	combined arms live-fire exercise	STX	situational training exercise
FCX	fire coordination exercise	STX-V	situational training exercise–virtual training environment
FTX	field training exercise	TEWT	tactical exercise without troops

REQ – required task for external evaluation (EXEVAL) during Table IV, Field Training Exercise, to assess collective task proficiency (CTP).
SEL – evaluation commander selects a minimum of one mission-essential task for Table VI, CALFEX, Live-Fire Proficiency Gate

Figure B-4. Anti-armor, weapons company, and troop mission-essential task training requirements, example

Task Number	Title	I TEWT	II STX-V	III STX	IV FTX	V FCX	VI CALFEX
07-CO-1092	Conduct an Attack				REQ	SEL	SEL
07-CO-1072	Conduct a Movement to Contact				REQ		
07-CO-1028	Conduct an Area Defense				REQ		
07-CO-1272	Conduct Area Security				REQ		
55-CO-4830	Conduct Expeditionary Deployment Operations						

Legend

CALFEX	combined arms live-fire exercise	STX	situational training exercise
FCX	fire coordination exercise	STX-V	situational training exercise–virtual training environment
FTX	field training exercise	TEWT	tactical exercise without troops

REQ – required task for external evaluation (EXEVAL) during Table IV, Field Training Exercise, to assess collective task proficiency (CTP).
SEL – evaluation commander selects a minimum of one mission-essential task for Table VI, CALFEX, Live-fire Proficiency Gate

Figure B-5. IBCT rifle company mission essential task training requirements, example

Task Number	Title	I TEWT	II STX-V	III STX	IV FTX	V FCX	VI CALFEX
17-TRP-4010	Conduct Zone Reconnaissance				REQ	SEL	SEL
17-TRP-9225	Conduct a Screen				REQ		
17-TRP-4000	Conduct Route Reconnaissance				REQ		
17-TRP-4011	Conduct Area Reconnaissance						
07-CO-1272	Conduct Area Security				REQ		
55-CO-4830	Conduct Expeditionary Deployment Operations						

Legend

CALFEX	combined arms live-fire exercise	STX	situational training exercise
FCX	fire coordination exercise	STX-V	situational training exercise–virtual training environment
FTX	field training exercise	TEWT	tactical exercise without troops

REQ – required task for external evaluation (EXEVAL) during Table IV, Field Training Exercise, to assess collective task proficiency (CTP).

SEL – evaluation commander selects a minimum of one mission-essential task for Table VI, CALFEX, Live-fire Proficiency Gate

Figure B-6. Mounted and dismounted Cavalry troop mission-essential task training requirements, example

INTEGRATED WARFIGHTING FUNCTION TASK REQUIREMENTS

B-15. Commanders develop their collective training scenarios based on their unit's mission-essential task, and a critical, objective assessment of their unit's tactical proficiency, command training guidance, and critical collective tasks that directly affect the success of the company to accomplish their mission. Commanders select all the tasks trained during the unit training plan based on mission-essential tasks that require a demonstrated proficiency during Table IV and Table VI.

B-16. Commanders design their scenarios in multiple lanes, phases, or stages, where each portion of the scenario trains one or two collective tasks in a progressive manner. Successful completion of each lane (based on the commander's assessment using the SOP and training and evaluation outlines as a guide) moves the formation tactically to the next lane.

B-17. The trainers brief the training audience on the tasks for each lane for Table III. This builds their proficiency so that they execute the tasks intuitively based on tactical situations during Tables IV, V, and VI, respectively.

B-18. The Table III scenarios must include training on commander-selected tasks specific to the warfighting functions listed in figure B-7, page B-9. Commanders integrate these tasks as appropriate across all STX lanes. Commanders should include a repetition of the selected tasks during both the day and night phase of the training scenario.

B-19. Each warfighting function includes optional or required tasks commanders integrate into their training scenario. For special purpose weapons, commanders determine how many iterations of the special weapons to integrate during the day and night. Commanders select from the special purpose weapons available to them, as well as how the scenario initiates using those special purpose weapons.

B-20. Commanders integrate tasks as appropriate and where they deem them most beneficial. The company conducts warfighting function, integrated tasks during limited and unlimited visibility conditions, across the entire Table III training scenario event—not on each maneuver task trained.

For example, during a two-day Table III at a local training area, the commander selects call for indirect fire during the company attack day phase, identifying priority of fires to a subordinate platoon. On day two of the STX, the commander includes training for each subordinate platoon to conduct a call-for-fire illumination mission. The commander incorporated the call for fire task into the STX day operations using HE and smoke and into night operations utilizing illumination rounds.

B-21. During Tables IV and VI, the scenario must include various warfighting function tasks that are relevant to the company's mission-essential tasks. Figure B-7 shows the requirements for squad through company to illustrate the progressive nature of the training. The figure serves to articulate the mandatory training tasks or topics units must integrate across their training plan. Commanders must incorporate and evaluate the required elements of the warfighting functions listed in figure B-7 during the execution phase of during the execution phase of Table IV, FTX, and Table VI, CALFEX. Elements indicated as optional are not required due to limited availability; however, units are highly encouraged to include these elements into the scenario when possible.

MISSION COMMAND	SQUAD	SECTION and PLATOON	COMPANY and TROOP
Graphics Overlay	Required	Required	Required
OPORD	Optional	Minimum 1	Minimum 2
FRAGORD	Optional	Minimum 2	Minimum 4
Conduct a Rehearsal	Required	Required	Required
Operate a Command Post			Required
MOVEMENT AND MANEUVER			
Engineers			Required
Breach Obstacle (Offense)			Required
Integrate Obstacle (Defense)			Required
Direct Fire Support		Required	Required
Employ Snipers		Optional	Required
Special Purpose Weapons*	Minimum 1	Minimum 2	Minimum 3
Conduct Quartering Party Activities		Optional	Required
Conduct a Dismounted Tactical Road March*		Required	Required
Conduct a Mounted Tactical Road March**		Required	Required
Occupy an Assembly Area	Optional	Required	Required
Conduct Tactical Movement	Required	Required	Required
*Dismounted units only **Mounted units only			
FIRE SUPPORT			
Close Air Support			Optional
Attack Aviation			Required
Field Artillery			Required
Mortars (Company or Battalion)			Required
Air Defense or Counterfire			Optional
INTELLIGENCE			
UAS/UGS*			Required
Digital Icon Population		Required	Required
Digital Reports			Required
*Based on equipment available			
PROTECTION			
CBRN	Required	Required	Required
Maintain Operational Security	Required	Required	Optional
Perform Field Sanitation Functions	Optional	Optional	Required
Conduct Risk Management	Required	Required	Required
SUSTAINMENT			
CASEVAC	Required	Required	Required
MEDEVAC			Required
Conduct Consolidation and Reorganization	Required	Required	Required
Conduct LOGPAC Support			Required

Legend

CASEVAC	casualty evacuation	MEDEVAC	medical evacuation
CBRN	chemical, biological, radiological, and nuclear	OPORD	operation order
FRAGORD	fragmentary order	UAS	unmanned aircraft system
LOGPAC	logistics package	UGS	unmanned ground system

Figure B-7. Maneuver collective training integration requirements

OPERATIONAL ENVIRONMENT REQUIREMENTS

B-22. Units are required to develop scenarios that include influences of operational variables (political, military, economic, social, information, infrastructure, physical environment, and time [PMESII-PT]) on mission variables (METT-TC). For company training events, scenarios must be dynamic and complex. Scenarios must include four or more operational environment conditions that include a hybrid threat, various types of terrain, time restrictions, and social variables. Commanders can select additional variables at their discretion. Figure B-8 has examples of how a commander can integrate operational environment variables into a live-fire scenario.

B-23. The live-fire tables requiring static, dynamic, or complex scenarios are designed based upon the following criteria (see figure B-8):

- Static. A static training environment has aspects of operational variables needed to stimulate mission variables that are fixed throughout the unit's execution of the task. During live fire, a fixed scenario that does not change and remains constant regardless of the training units' actions depicts this.
- Dynamic. A dynamic training environment has operational variables and threat TTP for assigned counter-tasks that change in response to the execution of friendly force tasks. During live fire, the dynamic aspect is depicted through a depleting enemy scenario. During the initial target presentation, the unit is presented with a fixed number of enemy targets. Subsequent target presentations are based upon the accuracy and efficiency of the firing unit.
- Complex. A complex training environment requires a minimum of four or more operational variables (see figure B-9). During live fire, the complex aspect is depicted through a depleting or reinforcing enemy scenario. During the initial target presentation, the unit is presented with a fixed number of enemy targets. Subsequent target presentations are based upon the speed, accuracy, efficiency of the firing unit's ability to maximize direct fires, and integrate indirect fire, attack aviation, and close air support to defeat the enemy.

SCENARIO CRITERIA DEFINITION	***SITUATIONAL TRAINING EXERCISE-VIRTUAL***	***FORCE ON FORCE***	***LIVE FIRE***
Static	Table II	Table III	Table V and VI
Dynamic	Table II	Table III and IV	Table V and VI
Complex	Table II	Table III and IV	Table VI
Note. Commanders may choose to increase scenario difficulty based on overall proficiency of the company or troop.			

Figure B-8. Scenario criteria

B-24. During live fire, technical trucks (L2T), sedans (L3T), and dismounted rocket propelled grenades teams may be used to replicate irregular or terrorist forces. Using these types of targets in conjunction with traditional military vehicles such as T-90's (H1T), Soviet amphibious tracked infantry fighting vehicles, (M1T), and dismounted troop clusters (E-type and D-type) successfully meets the hybrid threat criteria.

Operational Environment Variable (PMESII-PT)	*Scenario Examples*
Political	The rules of engagement can be used to replicate a highly volatile situation that requires the fining unit to exercise restraint. For example, the commander can initiate the scenario by incorporating an escalation of force criteria or fired only if fired upon situation. The commander could expose several hostile target types without the use of a hostile fire indicator requiring the firing unit to exercise restraint until a target is presented that incorporates a battle effects simulator cartage simulating a hostile act. As soon as the engagement criteria is met, the unit is authorized to engage and destroy the enemy force.
Military	Incorporate designated friendly target types. For example, the M1 Abrams and the HMMWV incorporated into a scenario present obvious target signatures every Soldier is expected to recognize and avoid firing at or near. Units that are regionally aligned are encouraged to incorporate their partnered military counterpart's equipment into the scenario.
Economic	The designation of off-limits areas or no fire areas of a live-fire range can be used to emphasize or protect infrastructure. For example, commanders can restrict the firing unit to course roads to preserve notional agricultural areas.
Social	The designation of off-limits areas or no fire areas of a live-fire range can be used to emphasize the social implications. For example, commanders can specify religious or historical sites that must not be damaged.
Information	Public perception may be a critical element of the training event's OPORD.
Infrastructure	Many digital ranges provide simulated urban clusters that can be incorporated into the scenarios. This allows the commander to train and challenge the unit with the complexities that combat in an urban environment entails.
Physical Environment	Units should link training areas into the live-fire plan to present the firing unit with adequate movement and maneuver training. Most installation's training areas have a diverse physical environment that contains challenges such as wooded areas, bodies of water, and restrictive terrain.
Time	Condensed or accelerated operational timeline that requires the unit to cross the line of departure or as an added criteria for mission completion.

Legend

HMMWV	high mobility multipurpose wheeled vehicle	PMESII-PT	political, military, economic, social, information, infrastructure, physical environment, and time [operational variables]
OPORD	operations order		

Figure B-9. Operational environment variable scenario, examples

B-25. When no training environment is identified, the commander can create a training environment by using the decisive action-training environment available on the ATN website. This training environment is a composite model of the real-world environment. The model is a useful training planning tool to replicate an operational environment for training when one is not specified.

B-26. The decisive action-training environment is a composite of conditions, circumstances, and influences that units could encounter in current and future military operations. A decisive action-training environment reflects a real-world operational environment as it is geographically centered on a region that provides all the operational environment and hybrid threat (OPFOR) conditions needed to realistically and effectively represent training conditions needed to challenge any Army task; it uses fictitious names to be in compliance with AR 350-2.

B-27. The exercise support application and the exercise design tool are online programs that host existing exercise support packages complete with—

- Validated operational environment compliant scenarios.
- Operations orders, road to war.
- Role player scripts, human networks.

B-28. The exercise support application allows users to download exercise products into Microsoft Office tools. The application enables training developers to use automated tools that update or change existing exercise support packages or create new ones from scratch. The exercise support application and the exercise design tool are available online at the Army G-2, Operational Environment Center website.

IDENTIFY THE TRAINING ENVIRONMENT AND CONDITIONS

B-29. The unit conducts each training event in a specific training environment. The conditions of the training environment determine the supporting requirements that build the training scenario. In general, the training strategy includes the following environment and condition combinations:

- Virtual (V).
- Live TADSS-based.
- Live, live fire.

B-30. The commander uses the appropriate environment and condition set to determine the training resource requirements. The training unit acquires the training resources organically or externally from the evaluation commander (see figure B-10).

	Resource	Environment, Conditions		
		Virtual	Live, TADSS	Live, Live Fire
Unit Provided	Training Ammunition		Blank only	Authorized Training Ammunition
	Pyrotechnics		Smoke, Signals, Simulators	Smoke, Signals, Simulators
	TADSS		MILES	MILES*
Externally Supported	Training Facilities	CCTT or Similar	Training Area	Ranges, TA, FP
	Threat Type	Virtual	OPFOR	Targetry: Type, Quantity, Location, and Sequence
	Support Personnel	System Operators	OPFOR, OC/T	Range OPs, OC/T
	Training Ammunition (OPFOR)		Blank only	
	Pyrotechnics		Smoke, Signals, Simulators	Smoke, Signals, Simulators, BES
	Training and Certification	System Operators	OPFOR and OC/T	OC/T
	Vehicles		OPFOR and OC/T	OC/T Tasked Unit
	TADSS		MILES and Controller	LTID** and Controller
	Evaluation Packets	Select T&EOs	Select and mandatory T&EOs	Select and mandatory T&EOs

Notes:
*MILES utilized for battle damage / casualty /assessment and safety of blue force during live fire.
**Laser target interface device (LTID) used on targetry to support TADSS-based missile engagements (TOW, ATGM, AT-4) when required.

Legend

ATGM	antitank guided missile	OPFOR	opposing force
BES	battle effects simulator	OPs	operations
CCTT	close combat tactical trainer	TA	training area
FP	force protections	TADSS	training aids, devices, simulators, and simulations
LTID	laser target interface device Multiple, Integrated, Laser	TOW	tube launched, optically tracked, wire guided
MILES	Engagement System or similar device	T&EOs	training and evaluation outlines
OC/T	observer-controller/trainer		

Figure B-10. Training event environment and conditions cross-reference

IDENTIFY RESOURCES REQUIRED

B-31. Once the unit selects the training event (see figure B-11), and the training environment and conditions for the training event, the unit plans and coordinates for the appropriate resources. Figure B-11 shows the common resources for each training event within the company training strategy.

Resource	Responsibility	Table					
		I L	II V	III TADSS	IV TADSS	V LF	VI LF
Training Ammunition	Unit			X	X	X	X
Pyrotechnics	Unit			X	X	X	X
TADSS	Unit			X	X	X	X
Training Facilities	Unit/Brigade	X	X	X	X	X	X
Support Personnel	Brigade		X		X	X	X
Ranges	Brigade					X	X
Land, Training Areas	Brigade	X		X	X	X	X
Firing Points	Brigade					X	X
Impact Areas	Brigade					X	X
Threat Resources	**Responsibility**	**Table**					
		I L	**II V**	**III TADSS**	**IV TADSS**	**V LF**	**VI LF**
OPFOR	Evaluation Commander			X	X		
Training Ammunition	Tasked OPFOR Unit			X	X		
Pyrotechnics	Tasked OPFOR Unit			X	X		
Training and Certification	Evaluation Commander			X	X		
Vehicles	Tasked OPFOR Unit			X	X		
TADSS	Tasked OPFOR Unit			X	X		
Life Support	Tasked OPFOR Unit			X	X		
Targetry	Brigade		X			X	X
Battle Effects Simulators	Brigade					X	X
EXEVAL Resources	**Responsibility**	**Table**					
		I L	**II V**	**III TADSS**	**IV TADSS**	**V LF**	**VI LF**
OC/T	Evaluation Commander				X		X
Pyrotechnics	Tasked OC/T Unit				X		X
TADSS (Controller)	Tasked OC/T Unit				X		X
Vehicles	Tasked OC/T Unit				X		X
Communication Equipment	Tasked OC/T Unit				X		X
Evaluation Packets	Evaluation Commander				X		X
Training and Certification	Evaluation Commander				X		X
Life Support	Tasked OC/T Unit				X		X

Legend

EXEVAL	external evaluation	OPFOR	opposing force
L	live environment	TADSS	training aids, devices, simulators, and simulations
LF	live fire	V	virtual
OC/T	observer-controller/trainer		

Figure B-11. Training resources by table, example

Training Ammunition

B-32. Appendix A includes lists of training ammunition requirements for each training event by weapon, system, or unit. The munitions listed, including pyrotechnics, are the base-line start point. The amount of ammunition authorized and available has a direct correlation to the amount of targets that trainers should incorporate into the scenario throughout the development process.

B-33. When selecting the number of live-fire targets to incorporate and present during the live-fire scenario, commanders, master gunners, and planners must consider the amount of ammunition available. Figure B-12 provides the standard ammunition-to-target ratio for the most common weapons found within maneuver companies and troops.

B-34. Throughout the units' live-fire training plan, it is likely that units can harvest ammunition from previous live-fire events, commonly known as first round hit savings. Units that have additional training ammunition should include additional targets within their scenarios during Tables V and VI or ensure they secure sufficient munitions for any necessary retraining. When adding additional targetry where harvested training ammunition is available, units should follow the target increase rules of thumb as described in figure B-12.

B-35. Units can easily incorporate unexpected ammunition availability into their live-fire scenario. One method is to present the appropriate number of alternate targets (based upon the amount of additional ammunition) together with primary targets. Doing so exposes the unit to a target rich environment and provides the unit with additional live-fire training without the need to develop additional branches, drivers, or sequels.

B-36. Another option is to incorporate an additional branch or sequel into the live-fire scenario. One example is to have the unit break contact, bound back to a previous battle position, and then represent the targets associated with that phase of the scenario. This allows the commander to incorporate displacement criteria, evaluate an additional collective task, and provides the unit with additional live-fire training.

B-37. Units should distribute the training ammunition above the required quantity described in appendix A to a Soldier or system based on the ratios listed in figure B-12. This ensures the firer has the necessary training ammunition to adequately engage a target (or target set) using standard engagement techniques used throughout the training strategy. In instances where partial quantities remain, those munitions should be distributed as the commander deems necessary.

Caliber or Weapon	*Ratio*	*Rule of Thumb*
5.56 mm (M4)	1:100	1 target per 100 rounds
5.56 mm (M249)	1:50	1 target set per 50 rounds
7.62 mm (M240B)	1:50	1 target set per 50 rounds
7.62 mm (SDMR or Sniper)	1:5	1 target set per 5 rounds
Caliber .50	1:50	1 target set per 50 rounds
40 mm (M203 / M320)	1:3	1 target per 3 rounds
40 mm (MK19)	1:8	1 target per 8 rounds
25 mm (BFV)	1:8	1 target per 8 rounds
30 mm (Stryker)	1:8	1 target per 8 rounds
105 mm (MGS)	1:1.5	1 target per 1.5 rounds
120 mm (Abrams)	1:1.5	1 target per 1.5 rounds
Note. The ratio is read, "one target (or target set for troop type targets) for every xxx rounds available to the firer."		
Legend		
BFV Bradley fighting vehicle	mm millimeter	
MGS mobile gun system	SDMR squad designated marksman rifle	

Figure B-12. Targetry increases by ammunition available

Targetry to Support the Live-fire Scenario

B-38. Master gunners and planners determine the number of targets or target sets that must be presented during the training event overall. They apply the ratios listed in figure B-12 to the training ammunition available to the unit. The scenario develops when the targets are presented by phase of the operation, and how they are presented to the appropriate subordinate unit so the units can effectively engage them.

B-39. Targets support the live-fire scenario by portraying the enemy threat and evoke specific actions from the training unit. Planners must use special consideration when selecting the amount, location, and types of threat targets to present to the training unit. Companies, platoons, squads, crews, and Soldiers train to use specific battle drills, weapons, munitions, and engagement techniques to defeat various types of threats. The scenario developer must build the targets into the scenario as drivers to initiate these actions.

B-40. Special purpose weapons and some integrated warfighting function tasks may require specialty targets. Specialty targets include bunkers, trenches, building facades, and high value targets. Units must identify any targetry requirements that require instrumentation, either with TADSS or with facility-provided equipment that facilitate safety, combat realism, or effective evaluations during the training event. Planners should refer to TC 3-20.31, TC 25-8, and DA PAM 385-63 for information pertaining to live-fire operations and scenario development.

Training Aids, Devices, Simulators, and Simulations

B-41. TADSS are key enablers for effective maneuver training in force-on-force and live-fire events. Units must plan for the training, draw, installation, and alignment of the available systems. During force-on-force, Table III, STX and Table IV, FTX events, units must ensure the appropriate laser-based systems are available for their entire formation, including the OPFOR. This includes all weapons, systems, and crew platform systems. When systems are not available for a weapon or system, units should coordinate for a similar system. Units must ensure the appropriate training munitions (blanks, back-blast simulators, and main gun simulators) are forecasted to support the TADSS. Units must also ensure sufficient controllers are available for the OC/T structure assigned to the event.

B-42. During live fire, Table V, FCX and Table VI, CALFEX events, units must use TADSS such as the laser target interface device for ATGM systems when practice or live missiles are unavailable. The TADSS allow the scenario to include specific targetry capable of providing down-range feedback during device-based engagements. Units should consider keeping system TADSS installed on their Soldiers, systems, and crew platforms as a means for the OC/T to assess casualties or battle damage and to shape the training event to meet specific drivers, branches, and sequel actions.

Training Facilities

B-43. Each training event requires sufficient facilities to support the company-size element. This includes movement and maneuver space, SDZ considerations, bivouac locations, OPFOR assembly areas and maneuver space, and life support for the training audience, OPFOR, and OC/T elements.

B-44. The design of most maneuver live-fire range and digital multipurpose range facility live-fire ranges support crew through platoon-size elements through qualification. Due to the size and composition of maneuver companies and troops, multiple training areas and live-fire ranges may be required in order to accommodate live and live-fire training events. Planners must identify and secure these limited resources early on in the planning process. Planners should strive to link training areas and live-fire ranges that are in close proximity to one another to facilitate a realistic flow of the scenario. The close proximity of the training areas and live-fire ranges enables planners to develop realistic and logical graphic control measures and to support accurate reports. When possible during virtual training, units must consider replicating the terrain and environmental conditions that may be encountered during live-fire training. Doing so lets the maneuver unit know what is to be expected during the execution of the FCX and CALFEX events.

B-45. Due to the sensitive infrastructure found on many live-fire ranges, obstacle emplacement and breaching with live demolitions may be prohibited. Local installation training areas should support these types of tactical enabling tasks. An effective method is to have the training unit perform the breech (offense) or establish an obstacle (defense) in an adjacent training area prior to moving onto the live-fire range. Units must work closely with their local range operations during this nonstandard range development process.

Facility Support Personnel

B-46. With the exception of force-on-force training areas, each facility used during the company training plan has assigned or required support personnel. These personnel ensure the safe conduct of the event, the delivery of combat-realistic scenarios, and administrative functions. Units must coordinate with their installation to understand the organic support personnel for each facility scheduled, their hours of operation during the training event, the level of service provided, and identify any unit-provided support requirements.

DETERMINE EXTERNAL SUPPORT REQUIREMENTS

B-47. When conducting an externally evaluated training event, the evaluation commander's staff must coordinate for the opposing force and OC/T element support. These elements are tasked according to the commander's intent. Both the OPFOR and OC/T element must be properly trained and certified to the evaluation commander's satisfaction to ensure the most effective, objective assessment of the training audience's proficiency can be effectively determined. The evaluation commander's staff is responsible for training and certifying the OPFOR and OC/T elements, and ensuring the necessary training munitions, pyrotechnics, vehicles, and life support for the duration of the tasking are properly resourced.

Opposing Force

B-48. The OPFOR element must be sufficient in composition, capability, and strength to present an effective aggressor for the training scenario, its drivers, branches, and sequels. The evaluation commander determines the OPFOR composition, training, and certification based on the assessed tasks, conditions, standard, and event flexibility as follows:

- Composition. The OPFOR must be of sufficient composition to enable multiple or simultaneous iterations. The OPFOR provides the flexibility to provide retraining while another unit is conducting the event.
- Ammunition. The tasked unit provides training for the OPFOR. The evaluation commander's staff must ensure sufficient munitions are available and specified to the tasked unit for proper forecasting, draw, use, and reconciliation.
- Pyrotechnics. The OPFOR requires pyrotechnics in the form of smoke, signals, and simulators. The OPFOR's pyrotechnics is based on their role, composition, and number of iterations expected.
- Training and certification. The evaluation commander determines the training and certification process for the OPFOR element to ensure they are presenting the tactical dilemmas, observable, or discoverable level of threat to the training audience. Their actions serve as drivers during the tactical scenario that instigate expected and desirable reaction from the training audience. Their training and conduct are a vital component to the training event's effectiveness.
- Virtual OPFOR Academy. An online application that educates leaders how to execute company-level OPFOR counter-tasks in support of unit training objectives. The Virtual OPFOR Academy provides users downloadable OPFOR tactical counter-tasks with task-condition-standard of a CATS. The Virtual OPFOR Academy also provides an instructor-led video that explains each OPFOR task and an immersive video that demonstrates the task being conducted. The Virtual OPFOR Academy website also provides users with access to hybrid threat (OPFOR) doctrine, OPFOR TTP, the Worldwide Equipment Guide, the decisive action training environment and OPFOR smart book, and other useful products. The Virtual OPFOR Academy can found on the ATN or G-2, Operational Environment Center websites.
- Vehicles. The tasked unit provides vehicle support to the OPFOR. This includes not only tactical vehicles that replicate the commander's OPFOR composition, but also any administrative vehicles that directly support their mission.
- TADSS. All OPFOR weapons, systems, and crew platforms must be provided laser-based training systems, respectively. Some systems, such as the M3 MAAWS or MK19, do not have associated laser-based training devices. Units should provide comparable devices (AT-4 MILES systems for example), or direct the use of fire markers or OC/Ts to assess damage or casualties.
- Life support. The evaluation commander is responsible to provide the OPFOR any necessary life support, or task a subordinate unit with those functions during the conduct of the event. Life support includes bivouac or housing, ration cycle, and field hygiene, at a minimum. The tasked unit is responsible for maintenance and recovery activities to ensure the OPFOR maintains their operational readiness.

Observer-Controller/Trainer

B-49. The OC/T element must be sufficient in composition, capability, and strength to provide an effective assessment of proficiency of the evaluated tasks, a close-proximity safety officer, and a means to induce additional rigor to the training audience as the evaluation commander directs. They also may serve the running scenario by acting as a fire marker, assessing casualties, and determining battle damage to both blue force and OPFOR elements.

B-50. The OC/T composition, training, and certification is determined by the evaluation commander based on the assessed tasks, conditions, standards, and event flexibility. The minimum number of trained and certified OC/Ts for company-level training events are shown in figure B-13.

OC/T Support Coverage	*OC/T*	*RTO/Driver*
Commander	1 each CPT or above post command	1 each dual-net capable
Executive officer	1 each 1LT or above XO experience	1 each dual-net capable
First sergeant	1 each MSG branch qualified or SGM	1 each dual-net capable
Each subordinate platoon assigned or attached	1 each 1LT or above branch qualified	1 each single-net minimum
Each subordinate specialty unit assigned or attached (mortars, sniper team, scouts)	1 each SFC or above with specialty unit experience	1 each single-net minimum
OC/T requirements are for each of the subordinate platoons and specialty units assigned or attached. For example, a unit with 3 each subordinate platoons, a mortar section, and a sniper team requires 5 total OC/Ts with 5 each RTOs and driver. Vehicle support is implied to motorized or mechanized elements. For dismounted subordinate platoons and specialty units, the overall RTO requirement may be reduced or eliminated by the evaluation commander.		

Legend			
1LT	first lieutenant	SFC	sergeant first class
CPT	captain	RTO	radiotelephone operator
MSG	master sergeant	SGM	sergeant major
OC/T	observer-controller/trainer	XO	executive officer

Figure B-13. OC/T and radiotelephone operator driver minimum requirements

Complete the Training Scenario

B-51. Planners visualize the training event by drawing an event sketch and detailing how the unit can execute the training. They write a list of actions that meet the specified training objectives. They consider the time available to train versus the number of possible iterations to attain proficiency. This visualization serves as the concept for executing the training event. Once planners develop a sketch and visualized concept from start to end and the commander approves it, additional resourcing for the event can begin.

B-52. Planners identify and request resources early and track their availability throughout the planning and preparation phases. Effective planners use the CATS, training and evaluation outlines, and unit historical records as a starting point to identify resources. Typically, historical records document resources the unit needed and when it needed them. Successful planners know what resources they used previously for like training events. The event planner ensures the event resources—including any newly identified resources—are available. The DTMS has a checklist tool that allows users to set up and track the status of training resources associated within events.

B-53. An event administrative OPORD is required to execute the training and includes all necessary coordination. It explains the concept, resourcing, and responsibilities to execute the training event. Additionally, the plan identifies both tactical orders and OPFOR orders to drive the training and stimulate task execution.

B-54. Units use the operations process to generate the training scenario to include WARNORDs, OPORDs, FRAGORDs, and detailed, graphic control measures. The different forms of orders are used during the execution of the scenarios to initiate the desired action or response from the training unit beginning with an

initial OPORD. The various forms of OPORDs in the scenario are used as branches, sequels, and drivers within the scenario to contribute to the method of executing the STX lanes for each unit. In general—

B-55. Branches are contingency plans or "options built into the base plan" for changing the disposition, orientation, or direction of movement during the mission. For the purposes of collective training scenarios (missions), they provide the commander with options to alter the training focus during the mission based on observed performance. They aim to create the best possible results or conditions for the training unit.

B-56. Sequels are actions taken at the conclusion of the mission. They are based on the outcomes of the mission. Sequel actions provide missions for subordinate units and establish new objectives. For the purposes of collective training scenarios (missions), units use sequels when they have successfully met the training objectives to posture them for a continuing mission, follow-on lane, or subsequent phase.

B-57. Drivers are the intelligence, real or notional, used to instigate the training unit to execute a task, drill, or action. The task, drill, or action directly supports the tempo, orientation, direction, and rigor of the scenario (mission).

Note. The definitions for branches, sequels, and drivers are for training purposes only as they apply to collective training events and the development of the various training scenarios.

B-58. The branches, sequels, and drivers are developed to provide the most comprehensive training plan to ensure the unit is—

- Challenged, not overwhelmed.
- Learning, not complacent.
- Rewarded, and retrained as necessary.

B-59. Scenario developers must coordinate and collaborate with the installation's Training Soldier System assets, range safety office, installation assistant chief of staff, operations, and other local agencies, particularly when developing live-fire scenarios. Units must follow the most stringent regulation or policy when developing any training event.

COLLECTIVE TRAINING BEST PRACTICES

B-60. During all collective training events, units should invest time and effort obtaining "training discipline" to passively provide protection, freedom of maneuver, and the ability to reduce detection by threats operating in multiple domains (land, air, sea, space, and cyber).

B-61. Paragraphs B-63 through B-73, pages B-18 through B-20, list the best practices to introduce into the unit's training discipline as often as possible. This is a condensed and generalized list of past and current discipline issues that plague operations. They have been tailored in context to the unit's training plans but are equally important during decisive action operations.

ACTIVE PROTECTION AGAINST DETECTION IN ALL DOMAINS (PROTECTION)

B-62. Units must practice and enforce noise, light, litter, and signal discipline during training. Ongoing operations across the globe have proven discipline in these areas is critical to the unit's survival. Units that lack discipline in these four areas provide obvious, rapid target detection and acquisition. Units must deliberately incorporate noise, light, litter, and signal discipline into their training and strictly enforce those standards during all training events. Commanders must employ means to evaluate units on these aspects, particularly with regard to signals discipline. One method is to employ organic or attached electronic warfare assets to locate unit locations based on signature.

TRAIN DISPLACEMENT CRITERIA (PROTECTION)

B-63. Near-peer adversaries have all the warfighting enablers and capabilities. To maintain overmatch, training must focus on applying combat power effectively and faster. Near-peers focus on counterbatteries, counter-unmanned aircraft systems (C-UAS), and other active protection measures against friendly combat power. To maintain initiative, combat power, and overmatch units must practice displacement criteria as often as possible. A stationary maneuver force can become a combat ineffective maneuver force quickly.

Mortars, field artillery, and crew platforms must deliberately practice displacement, movement to hide, alternate, or subsequent positions to reduce or eliminate their stationary signature.

REDUCE ELECTROMAGNETIC FOOTPRINT (PROTECTION)

B-64. Units must train how to reduce their electromagnetic footprint. This includes reducing radio transmissions, using terrain to mask emissions when possible, and practicing sound signal discipline. Neither personal nor official cellular phones should be part of the unit's primary, alternate, contingency, and emergency (known as PACE) communications plan. The use of personal or commercial cell phones as an emergency communications device in their PACE plan will prove lethal to units when in a combat environment. These devices add to the unit's already significant electromagnetic signature and may compromise the unit's maneuver effectiveness in a tactical situation. Commanders should use electronic warfare direction finding assets as a training aid to demonstrate how vulnerable training units are in the electromagnetic spectrum. In doing so, this provides feedback and awareness to the unit so that they may reduce future electromagnetic signatures created during operations.

MASTER DIGITAL SKILLS, MASTER ANALOG FUNDAMENTALS (MISSION COMMAND)

B-65. Units operate to the maximum extent using secure tactical communications systems. Units lack experience in maximizing system ranges, planning for retransmission (retrans) positioning, and operating in frequency hopping modes on tactical radios. Secure communication may not be possible during live-fire training events based on range and installation safety requirements; however, units must force mastery whenever possible.

MAP READING IS A CRITICAL SKILL (MOVEMENT AND MANEUVER, PROTECTION)

B-66. Units must train to operate without the aid of Global Positioning System (GPS) for accurate positional data. They develop techniques and identifiable terrain reference systems to validate positional data through manual, land navigation skills to enhance readiness, practice a perishable skill, and identify when GPS spoofing has occurred. A simple survey of personnel can reveal that the average person would tend to believe an inaccurate GPS position over their own assessment of physical position due to lack of confidence in manual, land navigation skills.

MAINTAIN REDUNDANT CAPABILITIES (DIGITAL TO ANALOG) (MISSION COMMAND, PROTECTION, INTELLIGENCE)

B-67. Units must develop criteria and procedures to switch to analog tracking of the common operating picture to continue operations. Units focus on the cyber threat and feel that they can secure themselves from network intrusion by operating in more secure modes. This does not account for the environmental threats to digital systems that likely pose a greater chance of occurrence, such as maintenance faults, component failures, battle damage to systems and antennas, and other incidents that may also affect digital reliance. Units should practice operating and maintaining situational awareness using analog tracking systems for extended periods, and then further develop the procedures to capture the data back into digital systems when they become available.

CONCEAL AND CAMOUFLAGE (PROTECTION)

B-68. Units equip, practice, and discipline the use of camouflage, concealment, and deception in tactical operations. This is the first and easiest C-UAS mitigation strategy, which enhances force protection from indirect fires.

AIR DEFENSE IS MORE IMPORTANT THAN EVER (PROTECTION)

B-69. Units practice and train on combined arms for air defense. Not only is this relevant to the C-UAS fight against small unmanned aircraft systems (UASs), but the near-peer threat can employ rotary-wing aircraft with destructive effects as well.

EMPLOY ATTACK AVIATION (MOVEMENT AND MANEUVER, FIRES)

B-70. Units plan and integrate attack aviation as a maneuver force operating in a dense air defense artillery environment. Units employ this enabler in this capacity to drive airspace management, suppression of enemy air defense planning, and mission command decision point operations when determining specific target criteria and conditions for commitment.

USE UAS AT SQUAD THROUGH BRIGADE ROUTINELY (INTELLIGENCE, PROTECTION)

B-71. Units train and certify the appropriate number of crews and operators to leverage UASs fully. Units must understand the UAS operator's training requirements and integrate their use into the maneuver collective training events as often as possible. UAS operator training and required flight hours support any squad through the brigade maneuver collective training event and directly supports the intelligence, movement and maneuver, fires, and protection warfighting functions.

DECISION SUPPORT MATRIXES (MISSION COMMAND, INTELLIGENCE)

B-72. Units develop the commander's decision support matrices that not only account for the execution of planned decisions, but also account for capitalizing on opportunities gained through effective shaping operations. Units tend to not link the high-payoff target list with the decision support matrix to understand when they have achieved payoff and leverage the opportunity that effective targeting created. Combat power includes the six warfighting functions plus leadership and information. The decision support matrices assist the commander to manage combat power.

INTEGRATING ENABLERS DURING SCENARIO

B-73. Unit planners must consider building scenarios that provide commanders the opportunity to exercise their use of the six Army warfighting functions. This allows unit commanders to be more proficient when integrating available enablers that may assist in accomplishing specified tasks assigned from higher. Commanders may inject thought processing scenarios during rehearsals if desired enablers aren't readily available during Tables I and II. This provides subordinate leaders with the opportunity to execute tactical decision making during rehearsals and the training event. Units should maximize the use of enablers during each table to develop/reinforce unit SOPs and build coordination between supporting elements prior to live fire. Figure B-14 through figure B-19, pages B-21 through B-26, describe how enablers can be integrated into training from collective Tables I through VI.

FUNCTIONS	*TABLE I*	*TABLE II*	*TABLE III*	*TABLE IV*	*TABLE V*	*TABLE VI*
Graphics overlay	Unit constructs terrain model with key leaders	Additional direct fire control measures are implemented	Unit receives operations graphics from HHQ	Graphics overlay is disseminated to subordinate elements	Fire support graphics are integrated	Templated threat positions and obstacles are integrated to current overlay
OPORD	Commanders issue OPORD; backbriefs conducted with subordinate leaders	Subordinate elements backbrief leaders upon receipt of the OPORD	Commanders provide subordinate leaders with locations of enemy/friendly forces	Unit employs assets available and executes specified tasks	Commander addresses sustainment situations with company/ troop leaders	Commanders exercise command and control within company/troop
FRAGORD	Commander issues OPORD; FRAGORD is injected during rehearsals with subordinate leaders	Subordinate leaders disseminate FRAGORD to subordinate elements; leaders conduct backbrief with subordinates	Subordinate leaders backbrief commander upon receipt of the FRAGORD	Company/ troop elements conduct rehearsals needed to support current FRAGORD specified tasks	Unit leaders conduct confirmation briefs using map and overlays to emphasize critical elements of FRAGORD	Commander receives FRAGORD from higher and updates subordinates through mission command systems
Operate a command post	Unit conducts radio rehearsals with key leaders and HHQ; conducts COMMEX; creates and maintains COP	Command post battle tracks the maneuver friendly force during operations in a virtual environment	Command post coordinates with adjacent unit and increases situational understanding	Command post sends and receives reports via FM and digital to HHQ	Unit maintains SA with adjacent elements and forwards any information from HHQ to subordinate elements; updates COP	Unit command post maintains communication with subordinate elements and HHQ; CP controls maneuver/fires of elements; maintains COP

Legend

COMMEX	communications exercise	HHQ	higher headquarters
COP	common operating picture	FRAGORD	fragmentary order
CP	command post	OPORD	operation order
FM	frequency modulator	SA	situational awareness

Figure B-14. Integrating (mission command) enablers during scenario, example

FUNCTIONS	*TABLE I*	*TABLE II*	*TABLE III*	*TABLE IV*	*TABLE V*	*TABLE VI*
Engineers	Company/troop leaders understand intent, specific tasks, CONOPs, and assets available	Unit coordinates for simulated obstacle emplacement in a virtual training environment	Blue 9/Blue 10 reports sent to HHQ; engineer assets are coordinated	Unit identifies potential point of penetration advantageous to the maneuvering force	Unit ensures all efforts are synchronized between the engineer support and organic forces to execute SOSRA	Unit conducts breaching operations on obstacle belt and marks a passage lane for the advancing force
Direct fire support	Subordinate leaders identify tentative sectors of fire with the use of current operational graphics	Leaders develop company/troop direct fire plan and coordinate fires in a simulated virtual environment	Unit commander emplaces sniper teams to conduct overwatch and identify potential HVTs and HPT in AO	Leaders employ heavy weapons teams to provide direct fire support for the maneuvering force	Leaders refine RFLs and MELs within the company/troop direct fire plan	Unit executes SBF/ABF to support the maneuver element and achieve fire superiority
Conduct quartering party activities; occupy an AA	Unit commander identifies and disseminates information on potential AA location	Subordinate leaders prepare quartering party for movement; PCCs, PCIs, convoy briefs	Quartering party secures new unit AO and conducts initial site survey	Quartering party leader supervises movement; unit executes SPs, checkpoints, and RPs; reports route changes	Quartering party leader supervises preparation tasks (establish internal communications, identify entrance/exit points, and mark unit areas	Quartering party supervises reception of main body and performs guide functions
Conduct tactical movement	Company/troop conducts backbriefs with subordinate leaders and HHQ	Company/troop move to LD using designated routes; unit uses cover and concealment and ensures contact is made with the smallest element	Company/troop executes movement utilizing various movement techniques based on METT-TC	Company/troop maintains correct interval, speed, and lateral dispersion while providing security and sufficient firepower forward	Company/troop maintains SA of friendly, maneuvering, and adjacent forces	Company/troop reacts to enemy contact and continues movement to designated point specified in the OPORD

Legend

AA	assembly area	LD	line of departure	RFLs	restrictive fire lane
ABF	attack by fire	MELs	maximum engagement lines	RP	release point
AO	area of operations	METT-TC	mission, enemy, terrain and weather, troops and support available, time available, civil considerations	SA	situational awareness
CONOPs	concept of operations			SBF	support by fire
HHQ	higher headquarters	OPORD	operation order	SOSRA	suppress, obscure, secure, reduce, and assault
HPT	high-payoff target	PCCs	pre-combat checks		
HVTs	high value targets	PCI	pre-combat inspections	SP	start point

Figure B-15. Integrating (movement and maneuver) enablers during scenario, example

FUNCTIONS	*TABLE I*	*TABLE II*	*TABLE III*	*TABLE IV*	*TABLE V*	*TABLE VI*
*Attack aviation	Commander informs subordinate leaders of available aviation assets for the mission and conducts rehearsals	Unit receives, processes, and disseminates intelligence collected by attack aviation assets	Location of friendly and enemy forces sent to attack aviation assets; unit increases situational understanding for assets	Company/troop integrates attack aviation assets into the units scheme of maneuver	Coordination with attack aviation assets finalized; unit maintains communication with aviation support	Company/ troop integrates attack aviation assets, performs combat assessment, and reports BDA to HHQ
*Field artillery	Commander identifies priority of fires to support the decisive operation and conducts risk management	Commander conducts confirmation briefs with subordinates on fire support tasks and intent	Company/troop clear air in operational area prior to executing indirect fire missions	Company/troop coordinates indirect fire support through battalion/ squadron FSO	FSO and subordinate leaders conduct fires rehearsal; fire plan sent to HHQ	Company and/or troop forward observers execute fire mission with the use of FA assets
*Mortars (company/ troop or battalion/ squadron)	Unit conducts coordination with company/ troop mortars and FSO to synchronize fires	Unit conducts appropriate CFF missions to achieve desired results for mission intent	Unit leaders identify potential MFP locations and incorporate assets in the company/troop fire plan	Unit integrates notional indirect fires with organic mortars to achieve target destruction or meet disengagement requirement	Company/troop relocates and reestablishes at alternate MFP location	Unit integrates IDF as part of the maneuvering plan for and reports BDA to HHQ
*Air defense or counterfire	Commander informs subordinate leaders of available air defense assets	Simulated AN/TPQ-50 radar reports enemy mortar positions to commander; information sent to subordinate elements	Unit executes reconnaissance of primary and alternate radar sites; elements conduct local security for radar team when stationary or moving	Company/troop coordinates air/ground surveillance to provide early warning for the maneuvering force	Company/troop commander plans for and places air defense assets along likely air avenues of approach to provide protection for key C2 nodes	Company/ troop and radar assets conduct counter fire target acquisition to identify point of origin of enemy artillery
**Electronic warfare	Unit conducts coordination with EW elements to synchronize effects	Unit conducts appropriate EW missions to achieve desired results for mission. Commander injects OPFOR EW to reinforce signature management	Unit identifies and integrates EW assets into company/troop maneuver. Commander injects OPFOR EW to reinforce signature management	Unit integrates notional EW assets to achieve desired effects		

Note. *denotes that enablers may not be available to the unit based on structure and type of the organization.
**denotes that enablers may not be used during live-fire events due to high risk in nature.

Legend

BDA	battle damage assessment	FSO	fire support officer
C2	command and control	HHQ	higher headquarters
CFF	call for fire	IDF	indirect fire
EW	electronic warfare	MFP	mortar firing point
FA	field artillery	OPFOR	opposing force

Figure B-16. Integrating (fire support) enablers during scenario, example

FUNCTIONS	*TABLE I*	*TABLE II*	*TABLE III*	*TABLE IV*	*TABLE V*	*TABLE VI*
*UAS/UGS/ SUAS	UAS/SUAS coordination and employment rehearsed; ROZ request submitted	Company/troop elements conduct coordination with UAS to conduct an overwatch in a virtual environment	Unit emplaces UGS as early warning sensors; subordinate leader prepares a sensor sketch map	Company/troop SUAS teams receive, process, and disseminate intelligence information collected	Unit coordinates forward and rearward passage of lines with UAS assets; unit maintains contact with UAS assets	Company/troop elements integrate SUAS and conduct reconnaissance and security tasks
Digital icon population	Distribution listing disseminated to subordinate leaders; leaders rehearse digital reporting procedures	Unit CP populates templated enemy positions using digital systems	Location of friendly/enemy forces are disseminated to subordinate elements by digital means (FBCB2,JCR, JBCP)	Units update locations of friendly/enemy forces, obstacles, service support assets, and any significant actions to increase SA	Subordinate leaders populate threat-based icons for company/troop SA	Company/troop populate threat-based icons for battalion/ squadron SA
Digital reports	Establish unit DISTRO listing; rehearse digital reporting procedures through echelons	Exercise digital reporting requirements during virtual simulations IAW the unit's SOP	Digitally sends/receives movement, logistical, and intelligence reports to higher; SP/LD/RP, LOGREP	Digital CBRN 1 report sent within 5 minutes of activity	Company/troop FSO sends CFF missions to battalion/ squadron FSO through digital reporting systems	Unit leaders send/receive digital reports rapidly and accurately to higher or as situation permits
Note. *denotes that enablers may not be available to the unit based on structure and type of the organization						

Legend

CBRN	chemical, biological, radiological, and nuclear	LD	line of departure
CP	command post	LOGREP	logistics report
CFF	call for fire	RP	release point
DISTRO	distribution	ROZ	restricted operating zone
FBCB2	Force XXI Battle Command, brigade and below	SA	situational awareness
FSO	fire support officer	SOP	standard operating procedure
IAW	in accordance with	SP	start point
JBCP	joint battle command platform	SUAS	small, unmanned aircraft system
JCR	joint capabilities release	UAS	unmanned aircraft system
		UGS	unmanned ground system

Figure B-17. Integrating (intelligence) enablers during scenario, example

FUNCTIONS	*TABLE I*	*TABLE II*	*TABLE III*	*TABLE IV*	*TABLE V*	*TABLE VI*
CBRN (hasty/ deliberate)	Unit identifies CBRN protective measures required and conduct rehearsals	Unit executes command directed MOPP-level procedures in a simulated virtual environment	Company/troop assumes MOPP; CBRN detection equipment employed	Unit ensures CBRN warning and reporting systems are operational; elements reinforce fighting positions to increase protection	Unit integrates and employs CBRN reconnaissance and surveillance teams	Leaders adjust MOPP-level by performing MOPP analysis; MOPP exchange as required
Maintain operational security	Commander integrates risk management and identifies recognition methods for friendly forces	Commander conducts backbriefs with subordinate leaders and HHQs on force protection method	Unit elements camouflage personnel and equipment to blend in with operational environments	Subordinate leaders employ observation posts and conduct reconnaissance and surveillance patrols	Company/troop elements protect friendly information, graphics, and other sensitive material	Commander conducts assessment of current operations security and reports SITREPs to HHQ
Perform field sanitations functions	Leaders identify and assign field sanitation personnel within company/troop	Commanders ensure field sanitation functions are understood by subordinate elements	Unit leaders monitor sanitation activities and coordinate assistance from HHQ support, when necessary	Unit field sanitation team conduct and enforce field sanitation measures	Unit leaders verify individual sanitation procedures are performed	Commander assesses performance conducted in regards to field sanitation related tasks
Conduct risk management	Commander establishes a force protection policy and publishes a commander's safety philosophy	Subordinate elements identify and train on risk management needed for their position and responsibilities	Unit leaders apply the principles and steps of risk management during all phases of the operation	Commander analyzes operational hazards and considerations to identify appropriate risk level for operations	Develops risk management controls and makes risk decisions as needed	Commander supervises and evaluates controls implemented; unit leaders monitored and enforced the risk management controls at all times

Legend

CBRN	chemical, biological, radiological, and nuclear	MOPP	mission-oriented protective posture
HHQ	higher headquarters	SITREPs	situation reports

Figure B-18. Integrating (protection) enablers during scenario, example

FUNCTIONS	*TABLE I*	*TABLE II*	*TABLE III*	*TABLE IV*	*TABLE V*	*TABLE VI*
CASEVAC	Commander issues OPORD and injects scenarios during rehearsals	CASEVAC plan developed IAW unit SOP; radio rehearsals conducted	Company/troop integrates battalion/ squadron medical support into CASEVAC plan	Unit elements conduct movement of casualty to appropriate CCP for transport	Company/troop sends CASEVAC report to higher IAW unit SOP	Company/troop evacuates casualty to next higher level of medical care
MEDEVAC	Commander issues OPORD and injects scenarios during rehearsals	MEDEVAC plan developed IAW unit SOP; radio rehearsals conducted	Company/troop integrates battalion/ squadron medical support into MEDEVAC plan	Appropriate medical treatment rendered to casualty; SITREP sent to higher	Unit leader identifies potential EVAC site based on METT-TC	Company/troop executes a 9-line MEDEVAC and maintains operational security
Consolidation and reorganization	Commander identifies consolidation and reorganization sites by phase of operations	Unit leader identifies templated locations for resupply, CASEVAC, and maintenance	Company/troop provide 360-degree local security and are prepared to execute follow-on missions	Unit identifies and requests resupply of critical shortages with HHQ	Unit conducts required maintenance operations	Elements conduct cross-level of personnel, ammunition, and other supplies
Conduct LOGPAC support	XO/1SG rehearse/ define resupply operations with subordinate leaders IAW unit SOP	Subordinate leaders report supply status by submitting LOGSTAT reports to XO/1SG	Conduct mission analysis to determine LOGPAC locations and methods; recon routes and potential LRP sites	Unit compiles LOGSTAT/ PERSTAT reports and vehicle/ equipment status for unit; reports sent to HHQ IAW unit SOP	Coordinates LOGPAC with HHQ S-4 and/or forward support company; plan, prepare, and execute resupply operations	Executes LOGPAC with selected method IAW unit SOP; key leaders assess and revise unit SOP as needed

Legend

1SG	first sergeant	PERSTAT	personnel status
CASEVAC	casualty evacuation	MEDEVAC	medical evacuation
CCP	casualty collection point	METT-TC	mission, enemy, terrain and weather, troops and support available, time available, civil considerations
EVAC	evacuation	OPORD	operation order
HHQ	higher headquarters	RECON	reconnaissance
IAW	in accordance with	S-4	battalion or brigade logistics staff officer
LOGPAC	logistics package	SITREP	situation report
LOGSTAT	logistics status	SOP	standard operating procedure
LRP	logistics resupply point	XO	executive officer

Figure B-19. Integrating (sustainment) enablers during scenario, example

CALFEX SCENARIO DEVELOPMENT

B-74. During collective training, units should plan and execute their CALFEX through maximizing training time and space available. Unit planners must consider developing the type of scenario to meet the unit's training objectives and commander's intent. The scenario development process provides commanders and planners with the flexibility to design their scenario using the selected collective tasks, type of training space, resources available, and training time available. The unit may choose to conduct a single-lane or multiple lane CALFEX scenario that best suits their collective training goals. Units should select the lane configuration that is most beneficial to the unit's training plan and scheduled training time while still achieving the desired end state.

SINGLE-LANE CALFEX

B-75. Units should consider using a single-lane CALFEX scenario when the training time and available maneuver space is limited. A single-lane CALFEX scenario provides commanders with the ability to train collective tasks to their units using a single, training lane. The collective tasks selected are arranged on a single lane in a progressive manner to ensure the company or troop executes each task from start to finish.

B-76. Unit planners should develop the CALFEX scenario based on the OPORD and the commander's intent (see figures B-20 and B-21, pages B-28 and B-29). The unit should provide operational graphics that depict friendly or enemy templated positions, control measures, axis of advances, and any additional warfighting function terms and graphics as needed (see figure B-22, page B-30). Unit planners must develop their CALFEX scenarios using tactical emphasis to ensure that the designated collective tasks are in logical sequence based on the structure of the unit and their higher command's intent (see figure B-23, page B-31).

MULTIPLE LANE CALFEX

B-77. Units should consider using a multiple lane CALFEX scenario when there is an adequate amount of training time and maneuver space available. A multiple lane CALFEX scenario provides commanders the ability to train their units on collective tasks using multiple training lanes. The collective tasks selected are arranged on two separate lanes in a progressive manner to ensure each task is executed from start to finish. The commander along with unit planners have the ability to elect which lane is to be executed first. It is recommended that commanders identify and designate specific tasks for each lane to avoid redundancy when utilizing both lanes for a CALFEX.

B-78. Units should develop the CALFEX scenario based on the OPORD and the commander's intent. The unit should provide operational graphics that depict friendly and enemy templated positions, control measures, axis of advances, and any additional warfighting function terms and graphics, as needed (see figure B-24, page B-32, and figure B-26, page B-33). Commanders may opt to dedicate one lane as an FCX lane while the other being a follow-on CALFEX scenario. Unit planners must develop their CALFEX scenarios using tactical emphasis to ensure that the collective tasks designated are in logical sequence based on the structure of the unit and their higher commands (see figure B-25, page B-32, and figure B-27, page B-34).

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OPORD (OPERATION BREAK-THROUGH 20-20) (UNCLASSIFIED)

References:
(U) Company OPORD 12020 (Operation Break-through 20-20).
(U) Company Tactical SOP

(U) Time Zone Used Throughout This Order: Local.

U) Task Organization. A Company (A CO) [HQ Platoon (PLT), 1st PLT, 2nd PLT, 3rd PLT, Company Mortars] #-# AR Battalion Snipers, 2nd PLT, B Company, ## BEB.

1. (U) Situation.

a. (U) **Terrain**. No change

b. (U) **Weather**. No Change

c. (U) **Enemy Forces**. The enemy will consist of reconnaissance elements with motorized capabilities designed to expedite movement of dismounted recon teams within the area of operations (AO). The enemy force may deploy infantry mounted/dismounted elements to reinforce OBJ STALLION or the templated obstacle belt located along phase line (PL) CHARLIE. Friendly intelligence reports possible anti-tank (AT) weapon teams may be used to eliminate friendly armor and impede movement of friendly forces during operations. As a supporting effort for the enemy force, a tank platoon and/or section will be used to provide direct fire support for forward elements IOT maintain control of OBJ STALLION and the obstacle belt.

d. (U) **Friendly Forces**.

(1) (U) #-# ABCT conducts decisive action within AO EAST IOT deny enemy presence for future operations. The brigade (BDE) main command post will continue operations southwest of TAA HAMMER until AO EAST is secured. #-# ABCT elements will establish BDE footprint within AO EAST NLT 181500FEB2020.

(2) (U) #-## FA establishes a firing point within PAA 1, north of the company boundary, and provides direct support indirect fire to A CO #-# AR.

(3) (U) #-# CAV will screen south of the #-# AR IOT secure the BDE's southern flank.

2. (U) Mission. A CO #-# AR conducts a movement to contact from PL ALPHA to PL DELTA NLT 041200FEB2020, IOT defeat enemy forces within the AO and seize control of OBJ STALLION. O/O, A CO #-# AR execute company-level breach VIC PL CHARLIE and defends along PL DELTA against enemy counterattack.

3. (U) **Execution**.

a. (U) **Commander's Intent.** (see comments from Para 1.d.)
(1) (U) **Purpose**. The purpose of this mission is to set the conditions for follow-on friendly forces to pass through, and beyond, A CO's defense.
(2) (U) **Key Tasks**. In order to pass forward friendly forces, A CO must seize OBJ STALLION, create two platoon lanes within the enemy obstacle belt, and establish a linear defense along PL DELTA capable of defending against a company-sized counterattack.
(3) (U) **End state.** Success for this mission is defined as passing follow-on forces forward of PL DELTA in order to defeat the enemy counterattack.

b. (U) **Concept of Operations.** This operation will be conducted in four phases:

(1) (U) Phase I: Planning/Preparation and Deployment PL ALPHA
(2) (U) Phase II: Seize control of OBJ STALLION
(3) (U) Phase III: Obstacle Breach along PL CHARLIE
(4) (U) Phase IV: Company Defense on PL DELTA (LOA)

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Figure B-20. CALFEX OPORD, single-lane, example

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c. (U) **Scheme of Movement and Maneuver.**

(1) (U) Phase I: Phase I begins upon the receipt of this order and ends when A CO #-# AR is set along PL ALPHA. Critical to this phase are: TLPs, PCCs/PCIs, and emplacement of the company mortar firing point (MFP).

(2) (U) Phase II: Phase II begins when the company is set on PL ALPHA and ends when the company seizes OBJ STALLION. Critical to this phase is the occupation of assault position (ASLT) BLUE, establishment of ABF/SBF positions along PL BRAVO, and the raid on OBJ STALLION.

(3) (U) Phase III: Phase III begins when the company has seized OBJ STALLION and ends upon successful breach of the obstacle along PL CHARLIE. Critical to this phase is the identification of obstacles and potential point of breach, breaching of templated obstacle, and the marking of passage lane(s) along obstacle belt.

(4) (U) Phase IV: Phase IV begins upon completion of obstacle breach and ends when A CO #-# AR has established defensive positions along PL DELTA. Critical to this phase is the establishment of a company defense, the destruction of enemy armored reinforcements beyond PL DELTA, and the consolidation/reorganization of company supplies (Class I, Class III, Class V, and Class VIII).

d. (U) **Tasks to Subordinate Units.**

(1) (U) Headquarters PLT

(a) (U) Submit daily LOGREPs to Battalion logistics officer (S-4).

(b) (U) Report SIGACTs and SIRs to higher HQ.

(c) (U) Disseminate higher HQ RFIs to subordinate elements.

(d) (U) Provide continuous tracking of friendly/enemy SA during entire operation.

(2) (U) 1st PLT

(a) (U) Establish COMMS with northern elements and maintain unit boundaries.

(b) (U) O/O, provide RETRANS for battalion snipers IOT rapidly and accurately report HVT/HPT locations.

(c) (U) Seize OBJ STALLION and establish a stronghold for breach.

(3) (U) 2nd PLT

(a) (U) Secure ASLT BLUE IOT consolidate squads for assault.

(b) (U) Seize OBJ STALLION and establish a stronghold for breach.

(c) (U) Identify and mark passing lane for rearward breaching elements.

(4) (U) 3rd PLT

(a) (U) Establish COMMS with northern elements and maintain unit boundaries.

(b) (U) Occupy SBF position(s) IOT to deny enemy reinforcements during raid.

(c) (U) O/O, provide far-side security during breach IOT disrupt enemy movement.

(5) (U) Company Mortar Section

(a) (U) Establish company MFP IOT provide supporting fires during phase 2 & 3.

(6) (U) #-# AR Snipers

(a) (U) Establish over watch positons and provide early warning for the company.

(b) (U) Reconnoiter OBJ STALLION IOT identify potential high value targets (HPTs) and high-payoff targets (HPTs).

(7) (U) ## BEB Engineer PLT

(a) (U) Execute obstacle breach VIC PL CHARLIE IOT create a passage lane for follow-on friendly forces.

e. (U) **Coordinating Instructions.**

(1) (U) Subordinate units will submit LOGSTAT to company CP 0500 and 1700 daily.

(2) (U) Maneuver elements will occupy SBF/ABF positions NLT 062000FEB2020.

(3) (U) All elements will have at least 72 hours of CLASS III supply prior to SP from TAA.

(4) (U) Subordinate leaders will contact company CP for additional coordination or RFIs.

(5) (U) Platoons will report SUAS lost link and recovery points to company CP.

(6) (U) All units will clear airspace of friendly aviation assets prior to executing IDFs

(7) (U) Company FSO will process all FA fire missions through battalion fires cell.

4. (U) **Sustainment**. No Change.

5. (U) **Command and Signal**. No change

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Figure B-21. CALFEX OPORD, single lane, example (continued)

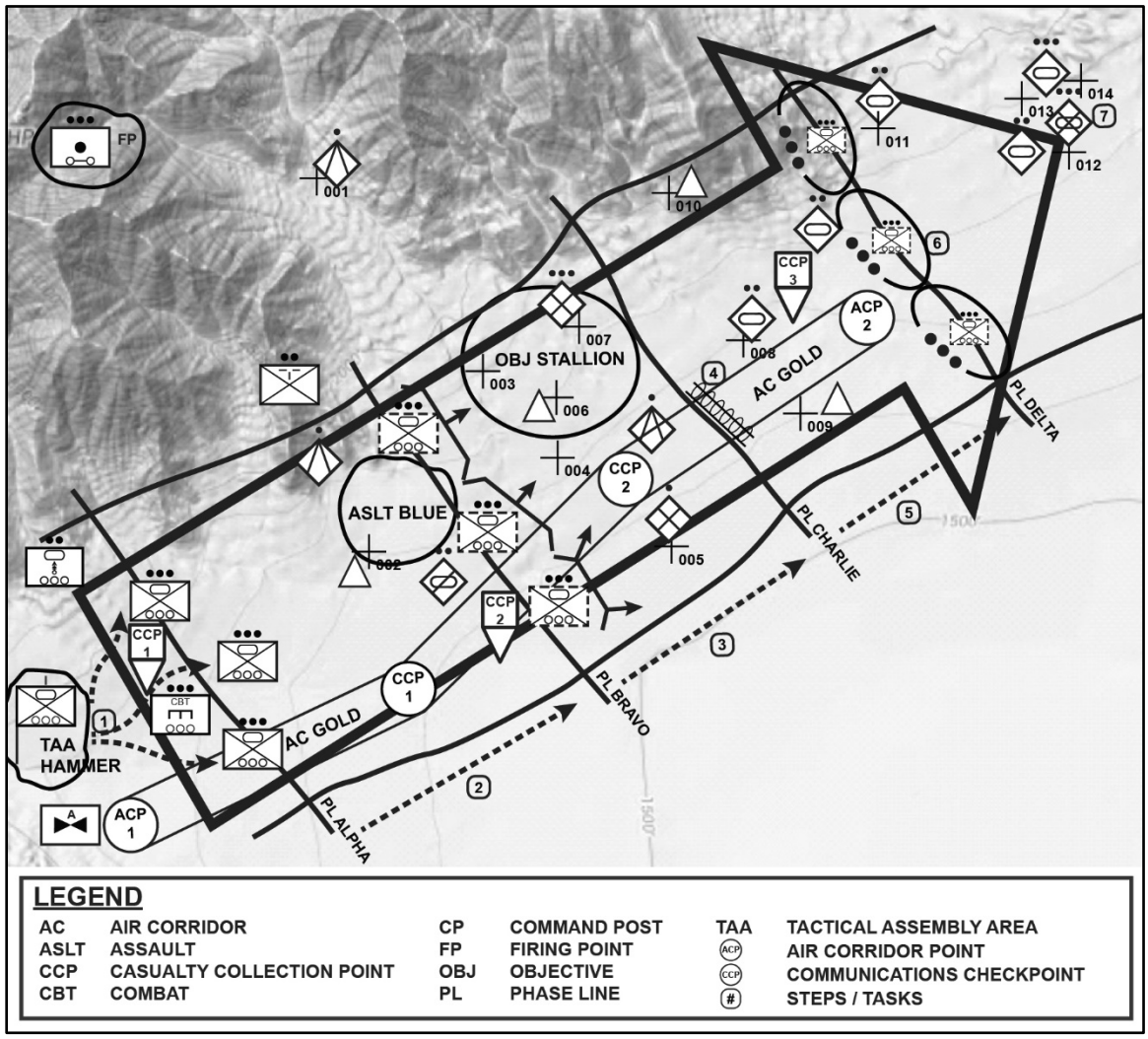

Figure B-22. CALFEX, single lane, example

STEPS/ TASKS	COLLECTIVE TASKS	UNIT LOCATION	SITUATION & MANEUVER	INTEGRATED ENABLERS
1	Conduct Tactical Movement	AA to PL Alpha	Unit tactically moves from AA to PL Alpha	Unit utilizes available SUASs to provide early warning for the maneuvering element
2	Conduct Movement to Contact	PL Alpha to PL Bravo	Unit moves from PL Alpha to PL Bravo; company establishes LOA on PL Delta	Unit conducts obscuration fires with organic mortar assets to conceal movement towards the objective
3	Conduct a Raid	PL Bravo to PL Charlie	Unit moves from PL Bravo to PL Charlie; company seizes control of OBJ Station	Unit conducts coordination with attack aviation assets to establish far-side security
4	Breach an Obstacle	PL Charlie	Unit moves to PL Charlie; company and engineer assets breach obstacle belt and submit obstacle and bypass reports required to higher	Unit coordinates with available engineer breach assets to eliminate or reduce the obstacle
5	Conduct Consolidation	PL Charlie to PL Delta	Unit moves from PL Charlie to PL Delta; company coordinates logistics and medical support with higher	Unit coordinates for necessary LOGPAC; company casualty collection points established; unit executes CASEVAC and MEDEVAC as needed
6	Conduct a Defense	PL Delta	Unit sets on PL Delta; company establishes defensive positions along LOA	Unit continues coordination with attack aviation assets and integrates target handoff into air support plan
7	Integrate IDF Support	PL Delta	Unit sets on PL Delta; company clears air and coordinates fires with FA support	Unit clears air and conducts coordination with adjacent FA support to achieve desired effects on the target according to the fires plan.

Legend

AA	assembly area	LOGPAC	logistics package
CASEVAC	casualty evacuation	MEDEVAC	medical evacuation
FA	field artillery	OBJ	objective
IDF	indirect fire	MEDEVAC	medical evacuation
LOA	limit of advance	PL	phase line
		SUAS	small, unmanned aircraft system

Figure B-23. CALFEX lane scenario, single lane, example

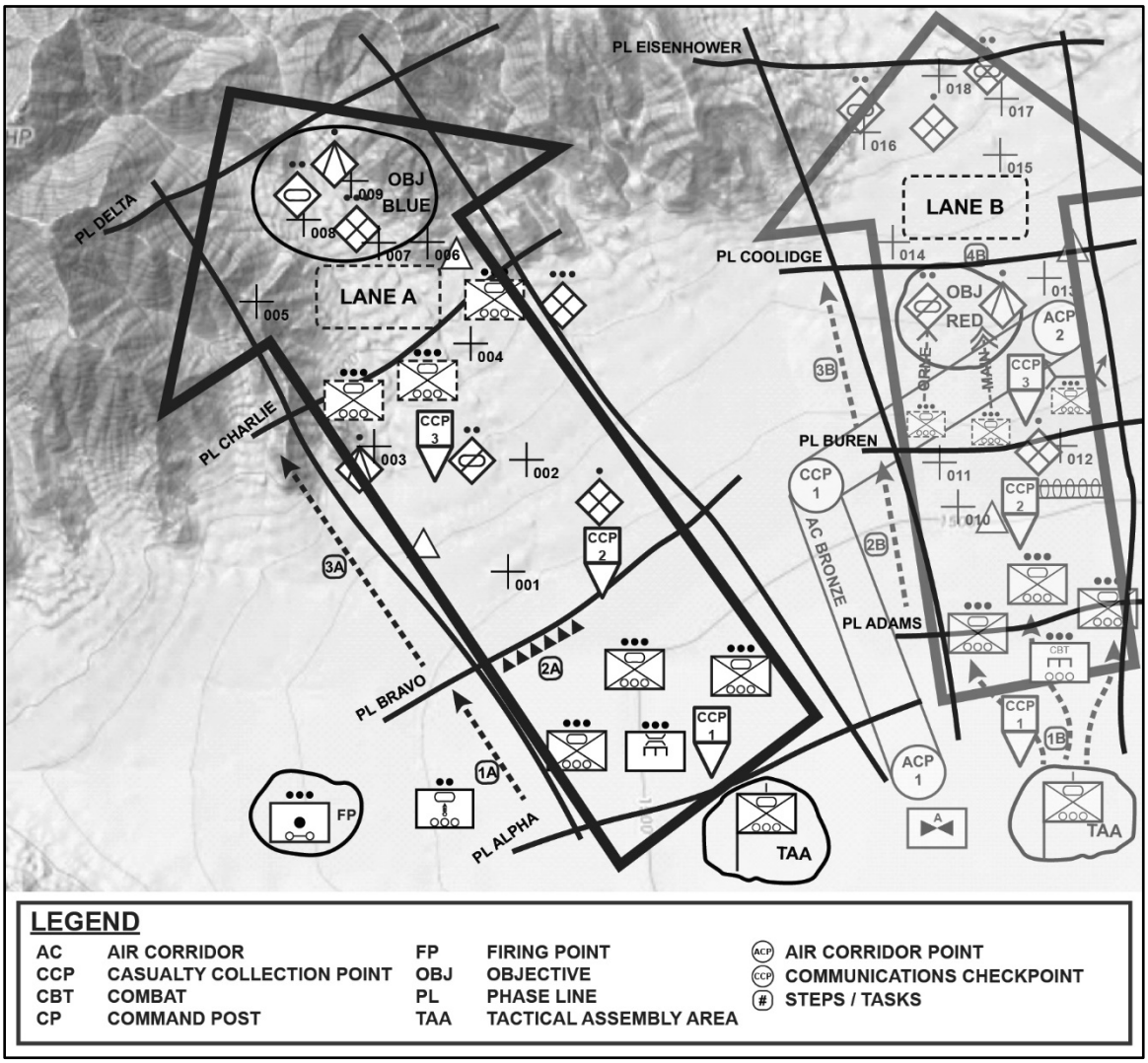

Figure B-24. CALFEX, multiple lanes, example A

STEP/ TASKS	*COLLECTIVE TASK*	*UNIT LOCATION*	*SITUATION & MANUEVER*	*INTEGRATED ENABLERS*
1A	Conduct Movement to Contact	PL Alpha to PL Bravo	Unit moves from PL Alpha to PL Bravo; company establishes LOA on PL Charlie.	Unit conducts disruptive fires with organic mortar assets to expedite movement to templated crossing point.
2A	Conduct a Gap Crossing	PL Bravo	Unit identifies potential crossing points and executes a hasty gap crossing and sets on PL Bravo.	Joint assault bridge teams are employed; unit crosses gap while maintaining local security for engineer assets.
3A	Integrate IDF Support	PL Bravo to PL Charlie	Unit moves from PL Bravo to PL Charlie; company identifies enemy armor in Objective Blue and executes fire mission.	Unit clears air and coordinates with adjacent FA support to achieve desired effects on target IAW fires plan.
Legend:				
IDF	indirect fire		FA	field artillery
LOA	limit of advance		PL	phase line

Figure B-25. CALFEX lane scenario, multiple lanes, example A

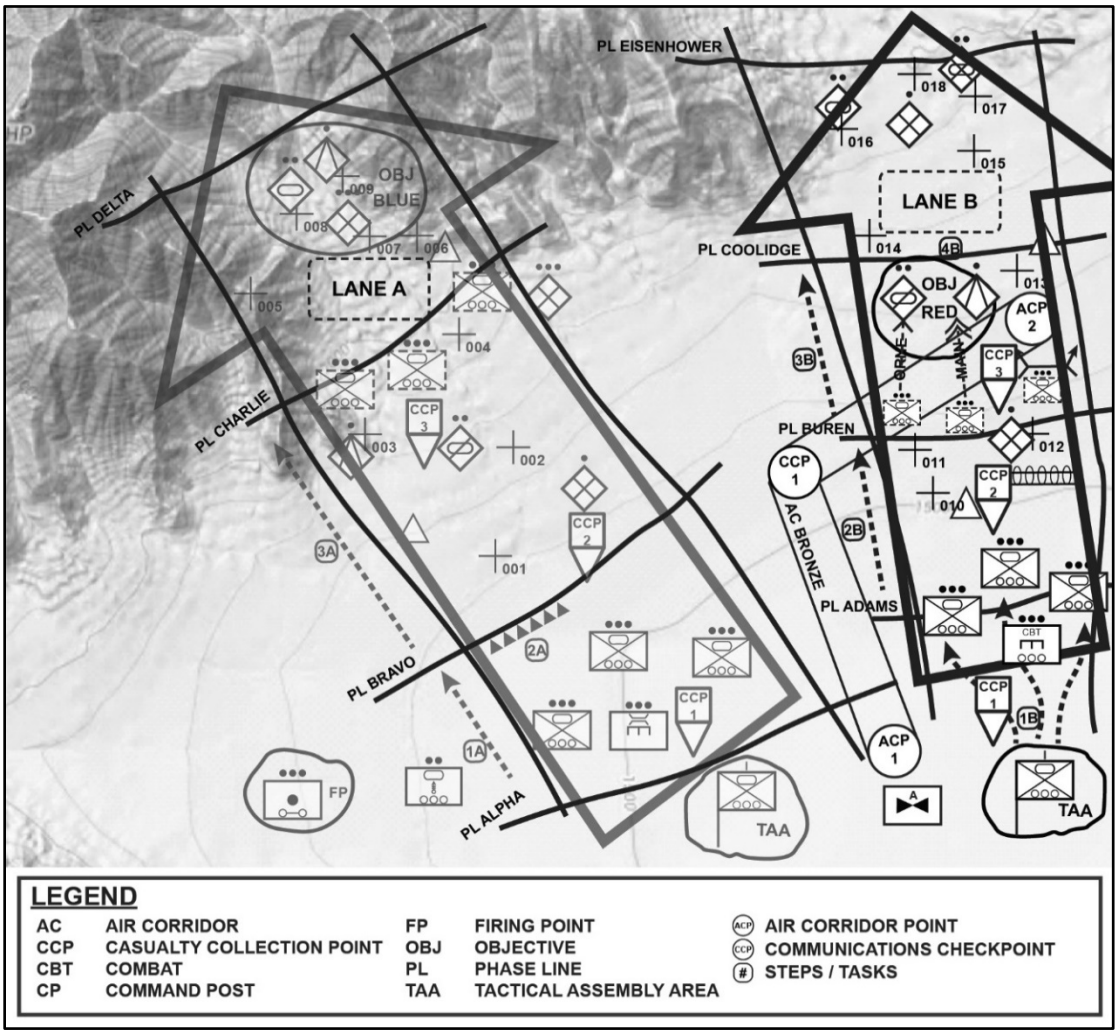

Figure B-26. CALFEX, multiple lanes, example B

STEP/ PHASES	COLLECTIVE TASK	UNIT LOCATION	SITUATION & MANUEVER	INTEGRATED ENABLERS
1B	Conduct Tactical Movement	AA to PL Adams	Unit moves from AA to PL Adams; unit sets on PL Adams and continues mission.	Unit deploys available SUAS to increase situational awareness of battlespace.
2B	Breach an Obstacle	PL Adams to PL Buren	Unit moves from PL Adams to PL Buren; unit identifies obstacle, executes breach, and submits reports to higher.	Unit deploys engineer assets; breach team removes or reduces obstacle.
3B	Conduct an Attack	PL Buren to PL Coolidge	Unit moves from PL Buren to PL Coolidge; company conducts an attack on Objective Red.	Unit coordinates with attack aviation to establish far side security and disrupt any enemy counterattack.
4B	Conduct Consolidation	PL Coolidge	Unit sets on PL Coolidge; unit consolidates LOGSTAT; command injects casualty scenarios to conduct CASEVAC and MEDEVAC operations as needed.	Unit requests for additional logistical or medical support through higher HQ; company executes internal CASEVAC IAW unit SOP.

Legend:

AA	assembly area	IAW	in accordance with
CASEVAC	casualty evacuation	PL	phase line
LOGSTAT	logistics status	SUAS	small, unmanned aircraft system
HQ	headquarters	SOP	standard operating procedure
		MEDEVAC	medical evacuation

Figure B-27. CALFEX lane scenario, multiple lanes, example B

Appendix C
Collective Evaluation

The training and evaluation outline is the Army's source for individual and collective task training standards. The training and evaluation outline consists of the major procedures (steps or actions) a unit or individual must accomplish to perform a task to standard. A collective task also describes the performance required of a unit under the conditions of the training environment. The training and evaluation outline is a summary document that provides information on individual or collective task training objectives, resource requirements, and evaluation procedures. Training and evaluation outlines are developed, approved, and published by the responsible proponents. This appendix focuses on collective task training and evaluation outlines.

During training events, leaders strive to achieve the Army standard for tasks trained. During training events, leaders and evaluators use training and evaluation outlines to measure observed task proficiency. Completed training and evaluation outlines form the backbone of bottom-up feedback that company commanders and first sergeants review at the weekly training meeting. The training and evaluation outlines provide the commander with the necessary objective evaluations to assess unit training proficiency and to assess training readiness.

REPOSITORIES

C-1. The Army has several official repositories that contain training and evaluation outlines. Users can access training and evaluation outlines at—

- The ATN.
- The DTMS.
- The CATS.
- The CAR.

C-2. Users access the DTMS, CATS, and CAR via the ATN. The ATN website does not require users to have additional privileges to view and print the training and evaluation outlines.

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Glossary

The glossary lists acronyms and terms with Army or joint definitions. Where Army and joint definitions differ, (Army) precedes the definition. The proponent manual for other terms is listed in parentheses after the definition.

SECTION I – ACRONYMS AND ABBREVIATIONS

AAR	after action review
ABCT	Armored brigade combat team
ADP	Army doctrine publication
AR	Army regulation
ATGM	antitank guided missile
ATN	Army Training Network
BCT	brigade combat team
CALFEX	combined arms live-fire exercise
CAR	Central Army Registry
CAS	close air support
CATS	Combined Arms Training Strategy
CBRN	chemical, biological, radiological, and nuclear
C-UAS	counter-unmanned aircraft system
DA	Department of the Army
DA PAM	Department of the Army pamphlet
DOD	Department of Defense
DTMS	Digital Training Management System
EXEVAL	external evaluation
FCX	fire coordination exercise
FIST	fire support team
FM	frequency modulation, field manual
FRAGORD	fragmentary order
FSO	fire support officer
FTX	field training exercise
GPS	Global Positioning System
HE	high explosive
IBCT	Infantry brigade comabat team
ICV	Infantry carrier vehicle
ITAS	Improved Target Acquisition System
IWTS	integrated weapons training strategy
LFPG	live-fire proficiency gate
LFX	live-fire exercise

MAAWS	Multi-role Anti-armor Anti-personnel Weapons System
MCO	Marine Corps order
MEDEVAC	medical evacuation
METT-TC	mission, enemy, terrain and weather, troops and support available-time available, civil considerations
MGS	mobile gun system
OC/T	observer-controller/trainer
OPFOR	opposing force
OPORD	operation order
PACE	primary, alternate, contingency, and emergency
PMESII-PT	political, military, economic, social, information, infrastructure, physical environment, and time [operational variables]
POL	petroleum, oils, and lubricants
RV	reconnaissance vehicle
SBCT	Stryker brigade combat team
SDZ	surface danger zone
SOP	standard operating procedure
STX	situational training exercise
STX-V	situational training exercise-virtual
TADSS	training aids, devices, simulators, and simulations
TC	training circular
TEWT	tactical exercise without troops
TM	technical manual
TOC	tactical operations center
TOW	tube launched, optically tracked, wire guided
TRP	target reference point
TTP	tactics, techniques, and procedures
UAS	unmanned aircraft system
WARNORD	warning order

SECTION II – TERMS

company

A unit consisting of two or more platoons, usually of the same type, with a headquarters and a limited capacity for self-support (ADP 3-90).

company team

A combined arms organization formed by attaching one or more nonorganic Armor, mechanized Infantry, Stryker Infantry, or light Infantry platoons to a tank, mechanized Infantry, Stryker, or Infantry company, either in exchange for, or in addition to, its organic platoons (ADP 3-90).

troop

A company-size unit in a Cavalry organization (ADP 3-90).

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URLs accessed 17 March 2021.

REQUIRED PUBLICATIONS

These documents must be available to the intended users of this publication

DOD Dictionary of Military and Associated Terms, January 2021. https://www.jcs.mil/Doctrine

FM 1-02.1, *Operational Terms*, 9 March 2021.

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RELATED PUBLICATIONS

These documents contain relevant supplemental information.

Most Army publications are available at https://armypubs.army.mil

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TC 25-1. *Training Land.* 31 July 2020.

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Unless otherwise indicated, DA forms are available on the Army Publishing Directorate (APD) website: https://armypubs.army.mil.

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WEBSITES

U. S. Army Training Network: https://atn.army.mil

U. S. Army G-2, Operational Environment Center: https://tbr.army.mil

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TC 3-20.11
28 April 2021

By Order of the Secretary of the Army:

JAMES C. MCCONVILLE
General, United States Army
Chief of Staff

Official:

KATHLEEN S. MILLER
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