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Stryker Brigade Combat Team Weapons Troop

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Stryker Brigade Combat Team Weapons Troop

Contents

Page

PREFACE ..... **ix**

INTRODUCTION ..... **x**

Chapter 1 ORGANIZATION AND CAPABILITIES **1-1**

Section I – Operational Environment **1-1**
Threat 1-1
Unified Action 1-2
Unified Land Operations 1-2
Decisive Action 1-3
Combat Power 1-4

Section II – Organization **1-7**
Antitank Guided Missile Platoon 1-8
Mobile Gun System Platoon 1-10
Headquarters Section 1-11
Habitual Attachments 1-12

Secton III – Role of the SBCT Weapons Troop **1-13**

Section IV – Duties and Responsibilities **1-14**
Troop Commander 1-14
Executive Officer 1-15
First Sergeant 1-15
Antitank Guided Missile Platoon Leader 1-16
Antitank Guided Missile Platoon Sergeant 1-16
Antitank Guided Missile Squad Leader 1-17
Antitank Guided Missile Gunner 1-17
Driver 1-17
Assistant Gunner 1-17
Mobile Gun System Platoon Leader 1-18
Mobile Gun System Platoon Sergeant 1-18
Supply Sergeant 1-18
Signal Support Noncommissioned Officer 1-19

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Chapter 2 RECONAISSANCE AND SECURITY 2-1

Section I – Reconnaissance 2-1

Reconnaissance Fundamentals 2-1
Forms of Reconnaissance 2-2
Planning 2-4

Section II – Security 2-10

Fundamentals of Security Operations 2-10
Forms of Security 2-11
Screen 2-12
Guard 2-12
Cover 2-15
Area Security 2-15
Local Security 2-16

Section III – Reconaissance Handover and Transition 2-16

Transition to Offense 2-16
Transition to Defense 2-17

Chapter 3 OFFENSE 3-1

Section I – Basics of the Offense 3-1

Characteristics of the offense 3-1
Offensive Tasks 3-2
Sequence of the Offense 3-2
Forms of Maneuver 3-5
Common Offensive Planning Considerations 3-11
Additional Planning Considerations 3-26

Section II – Movement to Contact 3-32

Organization of Forces 3-33
Control Measures 3-35
Planning a Movement to Contact 3-35
Preparing for a Movement to Contact 3-35
Executing a Movement to Contact 3-36
Search and Attack 3-37
Cordon and Search 3-37

Section III – Attack 3-37

Organization of Forces 3-38
Control Measures for an Attack 3-39
Planning an Attack 3-39
Preparing an Attack 3-41
Executing an Attack 3-42
Special-Purpose Attacks 3-45

Section IV – Transitions 3-47

Consolidation 3-47
Continuing Operations 3-47
Conclusion 3-48

Chapter 4 DEFENSE 4-1

Section I – Basics of the Defense 4-1

Characteristics of Defense 4-1

Defensive Tasks 4-3
Forms of the Defense 4-6
Common Defensive Planning Considerations 4-7
Additional Planning Considerations 4-9
Common Defensive Control Measures 4-12
Section II – Area Defense 4-15
Area Defense in Depth 4-15
Area Forward Defense 4-15
Organization of Forces 4-16
Planning an Area Defense 4-16
Preparing an Area Defense 4-21
Executing an Area Defense 4-23
Section III – Mobile Defense and Retrograde 4-29
Mobile Defense 4-29
Retrograde 4-29
Section IV – Defense of a Linear Obstacle 4-30
Plan 4-30
Prepare 4-30
Execute 4-30
Counterattack 4-31
Assess 4-31
Section V – Perimeter Defense 4-32
Planning and Preparing 4-33
Executing 4-33
Assessing 4-33
Section VI – Reverse-Slope Defense 4-34
Special Considerations 4-35
Plan 4-36
Prepare 4-36
Execute 4-36
Assess 4-39
Section VII – Engagement Area Development 4-39
Determine Enemy Scheme of Maneuver 4-40
Determine Where to Engage the Enemy 4-41
Plan and Integrate Obstacles 4-43
Plan and Integrate Indirect Fires 4-45
Engagement Area Rehearsal 4-46
Section VIII – Transitions 4-47
Consolidation 4-47
Reorganization 4-47
Continuing Operations 4-48
Chapter 5 STABILITY 5-1
Section I – Overview of Stability 5-1
Stability Framework 5-1
Stability Tenets 5-2
Stability Tasks 5-2

Section II – Planning Considerations 5-4
Mission Command 5-4
Movement and Maneuver 5-5
Intelligence 5-5
Fires 5-6
Sustainment 5-6
Protection 5-6
Section III – Additional Tasks 5-7
Area Security 5-8
Security Force Assistance 5-8
Section IV – Transitions 5-9
Transition to the Offense 5-9
Transition to the Defense 5-9
Transfer of Authority 5-9
Transition to Civilian/Host Nation Security Force Control 5-10

Chapter 6 SUSTAINMENT 6-1
Section I – Sustainment Functions 6-1
Conduct Logistics 6-2
Provide Personnel Services 6-4
Development of the Troop Sustainment Plan 6-5
Section II – Sustainment Responsibilities and Supporting Units 6-6
Executive Officer 6-6
First Sergeant 6-7
Supply Sergeant 6-7
Troop Combat Medics 6-8
Forward Support Company 6-8
Section III – Conduct Logistics 6-9
Plan 6-9
Prepare 6-13
Logistics Package Operations 6-14
Execute 6-14
Section IV – Maintenance and Vehicle Recovery 6-19
Levels of Maintenance 6-20
Recovery 6-20
Section V – Army Health Support System 6-20
Casualty Procedures 6-21
Techniques 6-22
Section VI – Enemy Prisoner of War and Retained/Detained Persons 6-23
Captured Enemy Equipment and Captured Enemy Ammunition 6-23
Transportation 6-23

Chapter 7 AUGMENTING COMBAT POWER 7-1
Section I – Fires 7-1
Fire Support Team 7-1
Fire support Planning and Coordination 7-2
Clearance of Fires 7-4
Field Artillery 7-5

Mortars 7-6
Section II – Protection 7-6
Air and Missile Defense 7-6
Survivability 7-8
Force Health Protection 7-9
Chemical, Biological, Radiological, and Nuclear Operations 7-10
Employ Safety Techniques 7-10
Operations Security 7-11
Explosive Ordnance Disposal 7-11
Personnel Recovery 7-12
Section III – Aviation 7-12
Assessing 7-16
Respond to Downed Aircraft 7-16
Section IV – Military Information Support Operations 7-18
Capabilities 7-18
Planning Considerations 7-19
Themes, Messages, and Actions 7-19
Information-Related Capabilities 7-19
Section V – Special Operations Forces 7-22
Section VI – Civil Affairs 7-22
Civil-Military Operations 7-22
Civil Affairs 7-22

Chapter 8 TACTICAL ENABLING TASKS 8-1
Section I – Assembly Area 8-1
Quartering Party Employment 8-1
Occupation of the Assembly Area 8-2
Actions in the Assembly Area 8-3
Section II – Patrols 8-4
Combat Patrol 8-4
Reconnaissance Patrol 8-4
Section III – Relief in Place 8-5
Planning 8-5
Coordination 8-6
Conducting the Relief 8-6
Section IV – Passage of Lines 8-7
Planning Considerations 8-7
Forward Passage of Lines 8-7
Rearward Passage of Lines 8-8
Section V – Linkup 8-10
Control Measures 8-10
Execution 8-11
Phases of the Linkup 8-11
Section VI – Breaching 8-11
Breaching Tenets 8-12
Conducting the Breach 8-13
Section VII – Gap Crossing 8-17

Section VIII – Troop Movement **8-18**
Methods of Movement 8-18
Tactical Road March 8-19
Organization 8-19
Approach March 8-19

Chapter 9 **DIRECT FIRE PLANNING AND CONTROL** **9-1**

Section I – Fire Control Techniques **9-1**
Fire Control Process 9-1
Principles of Direct Fire 9-5

Section II – Direct Fire Planning **9-6**
Overview 9-6
Standard Operating Procedures 9-7
Platoon Movement Command (Defensive Engagements) 9-8

Section III – Direct Fire Control **9-8**
Fire Control Measures 9-8
Fire Commands 9-20

Appendix A **WEAPONS REFERENCE DATA** **A-1**

Appendix B **TOW EMPLOYMENT IN RESTRICTIVE TERRAIN** **B-1**

Appendix C **WEAPONS TROOP FICTIONAL SCENARIO** **C-1**

GLOSSARY **Glossary-1**

REFERENCES **References-1**

INDEX **Index-1**

Figures

Figure 1-1 SBCT weapons troop 1-8
Figure 1-2. SBCT antitank guided missile platoon 1-9
Figure 1-3. Mobile gun system platoon 1-11
Figure 1-4. SBCT weapons platoons 1-14
Figure 2-1. SBCT weapons troop dispersed in reconnaissance and security tasks 2-7
Figure 2-2. SBCT weapons troop pure in reconnaissance and security tasks 2-8
Figure 2-3. SBCT weapons troop pure in a guard 2-14
Figure 3-1. Envelopment 3-6
Figure 3-2. Flank attack 3-7
Figure 3-3. Turning movement 3-8
Figure 3-4. Frontal attack 3-9
Figure 3-5. Penetration 3-10
Figure 3-6. SBCT weapons troop in column formation 3-13
Figure 3-7. SBCT weapons troop in a wedge formation 3-14
Figure 3-8. SBCT weapons troop in a Vee formation 3-15
Figure 3-9. SBCT weapons troop in a line formation 3-16
Figure 3-10. SBCT weapons troop in an echelon formation 3-17

Figure 3-11. SBCT weapons troop in a box and diamond formation 3-18
Figure 3-12. Traveling movement technique 3-20
Figure 3-13. Traveling overwatch movement technique 3-21
Figure 3-14. Bounding overwatch alternate bounds 3-23
Figure 3-15. Bounding overwatch successive bounds 3-24
Figure 3-16. TOW missile backblast in an open street 3-27
Figure 3-17. MGS surface danger zone considerations in urban environment 3-29
Figure 3-18. Movement to contact 3-34
Figure 4-1. Elevation and depression graphic for engaging in urban environment 4-11
Figure 4-2. Primary, alternate, and subsequent battle positions 4-14
Figure 4-3. Supplementary battle position 4-14
Figure 4-4. Forward defense 4-26
Figure 4-5. Defense in depth 4-27
Figure 4-6. Defense of a linear obstacle 4-32
Figure 4-7. Perimeter defense 4-34
Figure 4-8. Reverse slope considerations 4-36
Figure 4-9. SBCT Example of a reverse slope 4-38
Figure 4-10. Likely enemy avenues of approach 4-40
Figure 4-11. Enemy scheme of maneuver 4-41
Figure 4-12. Where to engage the enemy 4-42
Figure 4-13. Integrate obstacles 4-43
Figure 4-14. Emplace weapons systems 4-45
Figure 4-15. Integrate indirect fires 4-46
Figure 6-1. Dispersion of the weapons troop 6-2
Figure 6-2. Forward support company 6-9
Figure 6-3. Stryker basic load 6-11
Figure 6-4. SBCT weapons troop logistics 6-13
Figure 6-5. Service station method 6-16
Figure 6-6. Tailgate resupply method 6-17
Figure 6-7. Prestock resupply operations—Method 1 (central class V prestock site) 6-18
Figure 6-8. Prestock resupply operations—Method 2 (class V prestock site for each vehicle) 6-19
Figure 7-1. Grid line method 7-15
Figure 7-2. Attack-by-fire method 7-16
Figure 8-1. SBCT Weapons troop assembly area 8-3
Figure 8-2. SBCT Infantry rifle company forward passage of line 8-8
Figure 8-3. SBCT Infantry rifle company rearward passage of lines 8-9
Figure 8-4. Initial lane marking 8-16
Figure 9-1. Example of identifying probable enemy locations and determining enemy scheme of maneuver 9-2
Figure 9-2. Example of determining where and how to mass fires 9-3
Figure 9-3. Example of orienting forces to speed target acquisition 9-4

Figure 9-4. Examples of constructed TRP markers 9-9
Figure 9-5. Terrain based quadrant examples 9-11
Figure 9-6. Friendly-based quadrant examples 9-12
Figure 9-7. Fire pattern examples 9-19
Figure 9-8. Target array examples 9-20
Figure A-1. TOW 2A, 2B, and BB missile flight time versus range A-2
Figure A-2. TOW 2B Aero missile flight time versus range A-3
Figure A-3. Diagram of surface danger zone A-6
Figure C-1. SBCT task organization C-2
Figure C-2. SBCT Cavalry squadron task organization C-5
Figure C-3. Squadron and weapons troop zone reconnaissance C-6
Figure C-4. Target handoff with A and B troops C-7
Figure C-5. Counterreconnaissance engagement C-9
Figure C-6. Squadron guard plan C-11
Figure C-7. SBCT task organization for a defense C-15
Figure C-8. SBCT area defense indepth C-17
Figure C-9. SBCT task organization for offense C-21
Figure C-10. Operational plan C-22
Figure C-11. Bounding and intersection C-25
Figure C-12. OBJ Cat C-26
Figure C-13. Engagement on OBJ Cat C-27
Figure C-14. Attack on OBJ Dog C-29

Tables

Table 3-1. Comparison of movement formations 3-19
Table 3-2. Munition selection 3-28
Table 6-1: Days of supply class I, III, and IV 6-10
Table 6-2. Categories of evacuation precedence 6-22
Table 8-1. Stationary and passing unit responsibilities 8-10
Table 8-2. Relationship between breaching organization and breaching fundamentals 8-14
Table 9-1. Common fire control measures 9-8
Table 9-2. Weapons safety posture levels 9-14
Table A-1. TOW characteristics A-1
Table A-2. TOW target set A-4

Preface

Army technique publication (ATP) 3-21.91 describes how the Stryker brigade combat team (SBCT) weapons troop and its platoons fight. This publication provides doctrine for employing the SBCT weapons troop and its platoons. It contains guidance on techniques weapons troops and its platoons use in offensive, defensive, and stability tasks. The target audience includes leaders in the SBCT weapons troop, SBCT battalion and brigade level commanders, and staff officers.

This publication reflects and supports the Army doctrine found in Field Manual (FM) 3-96 and serves as an authoritative reference for personnel who—

- Develop doctrine (fundamental principles and tactics, techniques, and procedures [TTP] materiel, and force structure). Develop institution and unit training.
- Develop unit tactical standard operating procedures for SBCT antiarmor operations.

This ATP replaces FM 3-21.91. FM 3-21.91 discussed three organizations: weapons companies in airborne and air assault battalions, antiarmor companies in SBCTs, and antitank guided missile (ATGM) platoons in light Infantry battalions. This ATP only discusses the weapons troops in SBCTs. All reference to antiarmor use of M2 machine guns and M19 grenade launchers were removed as they are not organic weapons of an SBCT weapons troop. This ATP updates company organization and equipment, Stryker unit symbols, and information on current and future weapon systems. This ATP includes updates to support Doctrine 2015.

Defined terms are identified in the text. Definitions for which this publication is the proponent are printed in boldface. These terms and their definitions will be incorporated into the next revision of Army Doctrine Reference Publication (ADRP) 1-02. For other definitions in the text, the term is italicized, and the number of the proponent publication follows the definition. Terms for which this publication is the proponent are indicated with an asterisk in the glossary.

This publication applies to the Active Army, the United States Army National Guard/Army National Guard of the United States, and the United States Army Reserve unless otherwise stated.

The proponent for this publication is the United States Army Training and Doctrine Command. The preparing agency is the United States (U.S.) Army Maneuver Center of Excellence. Send comments and recommendations by any means—U.S. mail, e-mail, fax, or telephone—following the format of Department of the Army (DA) Form 2028 (*Recommended Changes to Publications and Blank Forms*).

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Unless otherwise stated in this publication, masculine nouns and pronouns refer to both men and women.

Introduction

ATP 3-21.91, The SBCT weapons troop, discusses the techniques used while conducting missions. In addition to doctrine changes, a significant effort has been made to eliminate redundancies with parent doctrinal manuals (for example ADRP 3-07.) Mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC) condition will dictate how the troop commander accomplishes his tasks. This manual provides the commander and his subordinates with an array of methods that can be used or modified.

ATP 3-21.91 has nine chapters and three appendices. The chapters consist of an organizational chapter and a chapter on reconnaissance and security, offense, defense, stability, and tactical enabling operations. Defense support to civilian authorities and defense support of civil authority is not covered. The chapters and the appendices use examples and illustrations to show techniques that can be used. Doctrine is included only to the extent of understanding the context and relationships between techniques.

The following text provides a small overview of the highlights of the chapter. For parts of former FM 3-21.91 that have no corresponding discussion in the ATP, the applicable publication is listed in parenthesis. This manual incorporates significant changes in Army doctrinal terminology, concepts, constructs, and proven tactics developed during recent operations. It also incorporates doctrinal terms and changes based on Doctrine 2015.

Note. This manual is written based on the current structure of the SBCT and its subordinate units. The organizational charts in chapter 1 illustrate the structure of the SBCT weapons troop for this publication. Future changes to the organizational structures of the SBCT weapons troop will be published as change documents to the manual.

The following is a brief introduction and summary of changes by chapter.

Chapter 1 – Organization

Chapter 1 addresses the organizational characteristics of the SBCT weapons troop as optimized and trained to conduct offensive and defensive tasks, and operations in support of stability to function across the range of military operations. Chapter 1 describes the organization and mission of the troop, each of its subordinate elements as well as the duties and responsibilities of its key leaders.

Chapter 2 – Reconnaissance and Security

Chapter 2 discusses the actions the SBCT weapons troop will conduct in support of the reconnaissance and security mission. It will provide techniques to destroy, defeat, or neutralize the enemy reconnaissance effort. The chapter addresses in the planning considerations when transitioning to other tactical operations.

Chapter 3 – Offense

Chapter 3 discusses offensive actions to destroy, defeat, or neutralize the enemy. The chapter addresses the characteristics of a SBCT weapons troop offense and describes the movement to contact, attack tasks, and considerations when participating in exploitation, and pursuit. Chapter 3 also discusses—

- Common offensive planning considerations.

- Forms of maneuver. (Adds sixth form of maneuver "flank attack".)
- Planning considerations when transitioning to other tactical operations.

Note. ADRP 3 90 adds a sixth form of maneuver, flank attack.

Chapter 4 – Defense

Chapter 4 discusses defensive actions to defeat enemy attacks, buy time, control key terrain, protect critical infrastructure, secure the population, and economize forces. This chapter addresses the characteristics SBCT weapons troop in the three defensive tasks: area defense, mobile defense, and retrograde. Chapter 4 also discusses—

- Common defensive planning considerations.
- Forms of the defense.
- Forms of defensive maneuver.
- Engagement area (EA) development.
- Planning considerations when transitioning to other tactical operations.

Chapter 5 – Stability

Chapter 5 addresses support to operations focused on stability tasks. This chapter encompasses various military missions, tasks, and activities conducted outside the United States in coordination with other instruments of national power. In addition, Chapter 5—

- Addresses the foundation (tenets and framework), and environment during stabilization.
- Discusses the actions taken by the SBCT weapons troop when supporting stability tasks.
- Discusses the transition from stability to other tactical operations.

Chapter 6 – Sustainment

Chapter 6 discusses the process of sustainment the SBCT weapons troop conducts. It describes considerations for consolidated or dispersed elements across the SBCT footprint for sustainment. Discusses the placement of key sustainment personnel at locations throughout the SBCT footprint. Chapter 6 also addresses the following—

- Functions of sustainment.
- Responsibilities.
- Maintenance.
- Army Health system support.
- Human resources support.
- Enemy prisoner of war (EPW)/Detained persons.

Chapter 7 – Augmenting Combat Power

Chapter 7 provides techniques for the integration and synchronization of warfighting functions as enablers to enhance the conduct of operations, Chapter 6 includes discussions on—

- Fires.
- Protection.
- Aviation.
- Military information support operations (MISO).
- Special operation forces (SOF).
- Civil affairs (CA).

Chapter 8 – Enabling Operations

Chapter 8 provides the enabling tasks and activities into one chapter. It includes details in the supporting tasks that occur before, during, and after operations. Chapter 8 also addresses the following—

- Assembly areas.
- Patrols.

- Relief in place.
- Passage of lines.
- Linkup.
- Combined arms breaching.
- Gap crossing.
- Troop movement.

Chapter 9 – Direct Fire Planning and Control

Chapter 9 provides guidance for planning and integration of the direct fire weapon systems used by the SBCT weapons troop to engage targets. Provides techniques for weapon employment, rates and patterns of fire.

Appendix A –Weapons Reference Data.

Appendix B – Tube Launched, Optically Tracked, Wire Guided Employment in Restrictive Terrain.

Appendix C – Weapons Troop Fictional Scenario.

Chapter 1
Organization and Capabilities

The primary mission of the SBCT weapons troop is to engage the enemy by means of fire and movement to disrupt, destroy, or defeat them, repel the enemy assault by fire, and to facilitate follow on forces to engage in close combat. The SBCT weapons troop can deploy rapidly and sustain itself from an austere support structure for up to 72 hours conducting independent operations. SBCT conducts operations against threat forces in all types of terrain and weather conditions. This requires bold, aggressive, resourceful, and adaptive leaders willing to accept prudent risks to accomplish the mission. This chapter emphasizes the role, organization, capabilities, duties and responsibilities within the SBCT weapons troop.

SECTION I – OPERATIONAL ENVIRONMENT

1-1. The *operational environment* is a composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander (Joint Publication (JP) 3-0). The operational environment of the SBCT weapons troop includes all enemy, adversarial, friendly, and neutral systems across the range of military operations. The operational environment includes an understanding of the physical environment, the state of governance, technology, local resources, and the culture of the local population. The operational environment for each operation is different, and it evolves as the operation progresses. The company must train agile and adaptive leaders who can understand, adapt, and successfully operate within the current operational environment.

OPERATIONAL VARIABLES

1-2. An *operation* is a series of tactical actions with a common purpose or unifying theme (JP 1). A tactical action is a battle or engagement, employing lethal or nonlethal actions, designed for a specific purpose relative to the enemy, the terrain, friendly forces, or other entity. Tactical actions include widely varied activities such as an attack to seize a piece of terrain or destroy an enemy unit, the defense of a population, and the assisting of security forces as part of building partner capacity or stabilization.

1-3. When the SBCT weapons troop is alerted for deployment, redeployment within a theater of operations, or assigned a mission, its assigned higher headquarters provides an analysis of the operational environment. That analysis includes the operational variables: political, military, economic, social, information, infrastructure, physical environment, and time.

MISSION VARIABLES

1-4. Upon receipt of a mission, the commander assisted by his company intelligence support team (COIST) if formed, filters information categorized by the operational variables into relevant information with respect to the mission. Leaders use the mission variables to analyze missions enabling them to combine operational variables and tactical-level information with knowledge about local conditions relevant to their mission. The mission variables are METT-TC. (Refer to ADRP 6.0 for more information.)

THREAT

1-5. A *threat* is any combination of actors, entities, or forces that have the capability and intent to harm United States forces, United States national interests, or the homeland. Threats may include individuals, groups of individuals (organized or not organized), paramilitary or military forces, nation-states, or national alliances. When threats execute their capability to do harm to the United States, they become enemies

(ADRP 3-0). It is critical that the SBCT weapons troop understands the threat in their operational environment.

1-6. In general, the various actors in any operational area can qualify as a threat, an enemy, an adversary, a neutral, or a friend. An *enemy* is a party identified as hostile against which the use of force is authorized (ADRP 3-0). An enemy is sometimes called a combatant in present day conflicts and the law of war dictates treatment of both enemy personnel and combatants. An *adversary* is a party acknowledged as potentially hostile to a friendly party and against which the use of force may be envisaged (JP 3-0). An adversary becomes an enemy when friendly forces take action against them. A *neutral* is a party identified as neither supporting nor opposing friendly or enemy forces. Land operations often prove complex because a threat, an enemy, an adversary, a neutral, or a friend intermix, often with no easy means to distinguish one from another.

HYBRID THREAT

1-7. The term hybrid threat has evolved to capture the seemingly increased complexity of operations, the multiplicity of actors involved, and the blurring between traditional elements of conflict. A *hybrid threat* is the diverse and dynamic combination of regular forces, irregular forces, terrorist forces, or criminal elements unified to achieve mutually benefitting effects. Hybrid threats combine regular forces governed by international law, military tradition, and custom with unregulated forces that act with no restrictions on violence or their targets. These may involve nation-state actors that employ protracted forms of warfare, possibly using proxy forces to coerce and intimidate, or nonstate actors using operational concepts and high-end capabilities traditionally associated with states. Such varied forces and capabilities enable hybrid threats to capitalize on perceived vulnerabilities, making them particularly effective. (Refer to ADRP 3-0 for more information.)

1-8. Today and in the future, the SBCT must prepare to fight and win against regular forces, irregular forces, terrorist forces, and criminal elements that employ unconventional and terrorist tactics, and hybrid threats that combine conventional, unconventional, and terrorist capabilities and methods to meet their strategic goals and political aims.

THREAT CAPABILITIES, TACTICS, AND TECHNIQUES

1-9. Current and future enemies and adversaries will seek to counter U.S. advantages in information collection capabilities, long-range precision fires, armor protection and mobility, communications, and combined-arms integration by employing a series of integrated tactical and technical countermeasures. Enemy tactical countermeasures will consist of deception operations, dispersion, concealment, and the intermingling with civilians in urban terrain. Complementing these tactical techniques, the enemy will employ technological countermeasures such as improved explosive devices (IED), cyber attacks and global positioning system jamming to evade and disrupt U.S. forces' ability to develop the situation, seize the initiative, and consolidate tactical gains into favorable political outcomes.

UNIFIED ACTION

1-10. *Unified action* is the synchronization, coordination, and/or integration of the activities of governmental and nongovernmental entities with military operations to achieve unity of effort (JP 1). As military forces synchronize actions, they achieve unity of effort. Unified action includes actions of military forces synchronized with activities of other government agencies, nongovernmental and intergovernmental organizations, and the private sector. Military forces play a key role in unified action before, during, and after operations through engagement. The Army's contribution to unified action is unified land operations.

1-11. Army forces coordinate operations with unified action partners. *Unified action partners* are those military forces, governmental and nongovernmental organizations, and elements of the private sector with whom Army forces plan, coordinate, synchronize, and integrate during the conduct of operations. Unified action partners include joint forces and components, multinational forces, and U.S. government agencies and departments (ADRP 3-0).

UNIFIED LAND OPERATIONS

1-12. *Unified land operations* are simultaneous offensive, defensive, and stability or defense support of civil authorities tasks to seize, retain, and exploit the initiative and consolidate gains to prevent conflict, shape the

operational environment, and win our Nation's wars as part of unified action (ADRP 3-0). Through decisive action unified land operations can prevent or deter conflict, prevail in war, and create the conditions for favorable conflict resolution.

DECISIVE ACTION

1-13. *Decisive action* is the continuous, simultaneous combinations of offensive, defensive, and stability or defense support of civil authorities tasks (ADRP 3-0). In unified land operations, commanders seek to seize, retain, and exploit the initiative while synchronizing their actions to achieve the best effects possible. Operations conducted outside the United States and its territories simultaneously combine three elements—offense, defense, and stability. Within the United States and its territories, decisive action combines the elements of defense support of civil authorities and, as required, offense and defense to support homeland defense. (Refer to ADRP 3-0 for more information.)

1-14. The SBCT weapons troop participates in decisive action in every theater of conflict. Decisive action requires continuous, simultaneous combinations of offensive, defensive, stability, and defense support of civil authorities' tasks. SBCT weapons troop are prepared to conduct any combination of these elements (described below) either independently, or as part of a larger force.

Offensive Tasks

1-15. An *offensive task* is a task conducted to defeat and destroy enemy forces and seize terrain, resources, and population centers (ADRP 3-0). Offensive tasks impose the commander's will on the enemy. Against a capable, adaptive enemy, the offense is the most direct and a sure means of seizing, retaining, and exploiting the initiative to gain physical and psychological advantages and achieve definitive results. In the offense, the decisive operation is a sudden, shattering action against an enemy weakness that capitalizes on speed, surprise, and shock. If that operation does not destroy the enemy, operations continue until enemy forces disintegrate or retreat to where they no longer pose a threat. Executing offensive tasks compels the enemy to react, creating or revealing additional weaknesses that the attacking force can exploit.

Defensive Tasks

1-16. A *defensive task* is a task conducted to defeat an enemy attack, gain time, economize forces, and develop conditions favorable for offensive or stability tasks (ADRP 3-0). Normally the defense alone cannot achieve a decision. However, it can set conditions for a counteroffensive or counterattack that enables Army forces to regain the initiative. Defensive tasks can also establish a shield behind which wide area security can progress. Defensive tasks are a counter to the enemy offense. They defeat attacks, destroying as much of the attacking enemy as possible. They also preserve and maintain control over land, resources, and populations. The purpose of defensive tasks is to retain terrain, guard populations, and protect critical capabilities against enemy attacks. Commanders can conduct defensive tasks to gain time and economize forces so offensive tasks can be executed elsewhere. The SBCT weapons troop uses the defense to occupy territory and initiate mass effects on enemy forces to repel their assault by fire, close combat, and counterattack.

Stability Tasks

1-17. *Stability tasks* include various missions, tasks, and activities conducted outside the U.S. These tasks are coordinated with other instruments of national power to maintain or reestablish a safe and secure environment, restore essential government services, and provide emergency infrastructure reconstruction and humanitarian relief (ADP 3-07). The SBCT weapons troop participate in stability tasks by performing missions, tasks, and activities that support a safe and secure environment, foster legitimate government services, provide emergency infrastructure reconstruction and humanitarian relief.

Defense Support of Civil Authorities Tasks

1-18. Defense support of civil authority is the Department of Defense's support to U.S. civil authorities for domestic emergencies, and for designated law enforcement and other activities. Forces conduct defense support of civil authority tasks only within the U.S. to protect her possessions and territories. Army units supporting civil authorities in the homeland are guided by three core purposes—to save lives, alleviate suffering, and protect property (refer to ADRP 3-28):

- Provide support for domestic disaster.

- Provide support for domestic chemical, biological, radiological, and nuclear, or chemical, biological, radiological, and nuclear (CBRN) incidents.
- Provide support for domestic civilian law enforcement agencies.
- Provide other designated support.

1-19. Stryker formations are well suited to provide defense support to civil authorities due to their mobility and formation specifications. They are able to transport the support needed for assigned tasks and partnered forces and can operate in similar areas as many of the vehicles operated by civil authorities.

COMBAT POWER

1-20. *Combat power* is the total means of destructive, constructive, and information capabilities that a military unit or formation can apply at a given time (ADP 3-0). Troop commanders conceptualize their capabilities in terms of combat power. Combat power has eight elements, the six warfighting functions—mission command, movement and maneuver, intelligence, fires, sustainment, and protection—plus leadership, and information. Commanders apply the warfighting functions using leadership and information throughout to multiply the effects of combat power.

1-21. SBCT weapons troop commanders understand, visualize, describe, direct, and lead operations and training in terms of the warfighting functions. Decisive, shaping, and sustaining operations combine all the warfighting functions to generate combat power. No warfighting function is a stand-alone entity or capability. (Refer to ADRP 3-0 for more information.)

LEADERSHIP

1-22. *Leadership* is the process of influencing people by providing purpose, direction, and motivation, to accomplish the mission and improve the organization (ADP 6-22). Leaders, by virtue of their assumed role or assigned responsibility, inspire and influence people to accomplish the mission. Leaders motivate Soldiers to pursue actions, reemphasize thinking, and shape decisions for the greater good of the organization. They instill in Soldiers the will to win.

1-23. Leadership traits that should be prominent in the command group of the SBCT weapons troop should include the ability to influence senior leaders, intelligence, independence, aggressiveness, and mental flexibility. Leaders should be willing to accept prudent risks to accomplish the mission. The SBCT weapons troop challenges leaders to think quickly and act decisively to seize the initiative from the enemy. The leadership can expect to operate independently in support of specified tasks from various levels of command with different support relationships. Closely tied to independence is ambiguity and operating independently while in transition to other units or missions.

1-24. SBCT weapons troop leaders must be willing and able to exercise aggressive, disciplined, and intelligent initiative. Taking the initiative allows the SBCT weapons troop to engage the enemy on advantageous terms, and therefore mitigating the effects of the Stryker platform's vulnerability to antiarmor weapons. It also enables the SBCT weapons troop to have timely and potentially significant positive effects on the battlefield. However, the challenge is determining what initiative to take, when to take it, and where to execute actions. Interface to multiple echelons of higher and adjacent units amplify the foreseeable outcomes to the tactical problem. The weapons troop commander must possess keen situational awareness with the ability to quickly analyze the problem and determine solutions all while under tactical time constraints.

1-25. Contingency planning assists in the execution of aggressive, disciplined, and intelligent initiative by preparing leaders and units to quickly react to and mitigate the effects of unexpected enemy actions. Proper contingency planning can also enable the SBCT weapons troop to degrade the enemy's situation by exploiting weaknesses that develop throughout the course of the engagement. Similarly, leaders must ensure that their exploitative actions do not result in presenting the same type of opportunity to the enemy within their capability to exploit. This aspect of leadership requires continual mentorship, and professional development and refinement of the unit's leaders. Repetition in classroom and tactical field environments during training periods builds experience needed for the weapons troop commander.

INFORMATION

1-26. Information fuels understanding and decision-making. Soldiers use information to persuade, inform, and influence target audiences. Information helps shape the perceptions of the civilian population. Commanders conduct reconnaissance to collect information in order to make timely decisions to shape the operational environment. Enemy forces, neutral, and friendly populations use information to convey their message. Information can be critical in decisive action and is particularly critical in stability tasks where popular support is a major factor in success or failure.

1-27. Information systems provide leaders with the information they need to enhance and reemphasize the warfighting functions. Relevant information enables the SBCT weapons troop commander to make informed decisions on how to apply combat power. The Joint Capabilities Release and Blue Force Tracker (JCR/BFT) computer-displayed common operational picture (COP) is a good example. It can provide SBCT weapons troop commanders with improved situational awareness (SA) by merging information into displays that Soldiers can understand at a glance. COPs do not always include terrain based systems such as JCR/BFT and command post of the future. They can also contain data bases that describe the civil considerations as well in such systems as tactical ground reporting net and Biometrics Automated Toolset System/Handheld Interagency Identity Detection Equipment systems. Accurate intelligence disseminated quickly through information systems enables the SBCT weapons troop to maneuver to positions of tactical advantage while massing the effects at the decisive place and time.

WARFIGHTING FUNCTIONS

1-28. 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 (ADRP 3-0). All warfighting functions possess scalable capabilities to mass lethal and nonlethal effects. No warfighting function is exclusively decisive, shaping, or sustaining, but may contain elements of more than one type of operation. (Refer to ADRP 3-0 for more information.) Commanders use the following warfighting functions to help them exercise mission command.

Mission Command

1-29. The *mission command warfighting function* is the related tasks and systems that develop and integrate those activities enabling a commander to balance the art of command and the science of control in order to integrate the other warfighting functions (ADRP 3-0). Mission command uses mission orders to ensure the use of disciplined initiative within the commander's intent, enabling agile and adaptive commanders, leaders, and organizations.

1-30. In the SBCT weapons troop, its commander is the central figure in mission command. The commander is essential to integrating the capabilities of the warfighting functions to accomplish the mission. Mission command invokes the greatest possible freedom of action to subordinates, facilitating their abilities to develop the situation, adapt, and act decisively through disciplined initiative within the commander’s intent. The weapons troop commander must implement clears orders and procedures for the elements of the weapons troop to operate throughout the entire are of operation for the SBCT. The weapons troop commander focuses on empowering subordinate leaders and sharing information to facilitate decentralized execution. (Refer to section III of this chapter for more information.)

1-31. The SBCT weapons troop commander is equipped with networked enabled, mission command capabilities that provide situational awareness of friendly units and enemy activity, in near-real time, and facilitates the synchronization of assets and warfighting functions. This networked-enabled mission command capability also gives the commander a reach-back capability for orders, preformatted reports, information, and staff analysis support from echelons above the company level.

1-32. The SBCT weapons troop is frequently required to task organize its subordinate elements across the SBCT. Use of standard administrative reporting procedures is a requirement. Reports will include, at a minimum, current location, vehicle counts by type, weapons types, ammunition available, and time before refueling.

- Call Identification: "Able 6, this is Gold 1."

- Weapons team composition and location: " 2 ATGM and 2 MGS (mobile gun system)"
- Munitions available (rockets/guns/missiles): " 16 TOW (tube launched, optically tracked, wire guided) missiles: 4 TOW Aero (tube launched, optically tracked, wire guided), 8 BB (bunker buster), 4 2B" "MGS: 26 Rounds: 3 canister, 9 HEP (high-explosive plastic), 8 SABOT (Armor-piercing fin-stabilized discarding-sabot *APFSDS (also known as SABOT*)), 6 HEAT (high explosive antitank)"
- Fuel Status: "Amber on Fuel. Refuel needed in 4 hours of running time."
- Request for location and point-of-contact for link up with supported unit: "Request Linkup Point. Gold 1 linkup at command post (CP) 15 with Able 5."
- Confirmation of Far/Near Recognition Symbols: "Far recognition is FM and JCR/BFT after icon passes Phase line "WHISKEY". Near recognition will be VF-17 panel displayed on vehicle hatch of ATGM vehicle."
- A request for the supported unit's SITREP: "Requests fuel, and class 1 upon arrival."

Movement and Maneuver

1-33. The *movement and maneuver warfighting function* is the related tasks and systems that move and employ forces to achieve a position of relative advantage over the enemy and other threats (ADRP 3-0). The weapons troop commander concentrates combat power using movement and maneuver to achieve surprise, shock, and dominance. Their effective maneuver facilitates other SBCT units to close with the enemy and engage in close combat.

1-34. The SBCT weapons troop is tasked to destroy enemy strong points and armored vehicles within capability, deny the enemy positions of tactical advantage, and support follow on forces freedom of maneuver. The nature of the ATGM and MGS platforms requires them to shoot first and avoid shooting multiple times from the same position to prevent being identified, fixed, or destroyed by the enemy.

Intelligence

1-35. Information that is analyzed and developed into intelligence is a powerful tool in the operational environment. Commanders use analyzed information to understand, visualize, describe, and direct the warfighting functions. The *intelligence warfighting function* is the related tasks and systems that facilitate understanding the enemy, terrain, weather and civil considerations and other significant aspects of the operational environment. Specifically other significant aspects of the operational environment includes threats, adversaries, the operational variables, and can include other aspects depending on the nature of operations (ADRP 3-0). These tasks are interrelated, require the participation of the command and staff, and are often conducted simultaneously. The intelligence warfighting function tasks facilitate the commander's visualization and understanding of the threat and other relevant aspects of the operational environment. To accomplish combat missions while engaging enemy targets from vulnerable ATGM and MGS vehicles, the SBCT weapons troop relies heavily on the battalion or brigade intelligence staff (S-2) section, and the combat information provided by other units.

Fires

1-36. The fires warfighting function comprises tasks and systems that provide collective and coordinated use of Army indirect fires and joint fires through the targeting process. It includes tasks that integrate and synchronize the effects of these types of fires with the other warfighting functions (refer to ADP 3-0 for more information). The SBCT weapons troop must be proficient at integrating direct and indirect fires in the execution of its mission.

1-37. Without its own fire support assets the weapons troop often coordinates with other fires units to include, company troop ,mortars, battalion mortars, field artillery batteries and battalions. Fires are planned by the weapons troop commander but must be coordinated and synchronized by the troop fire support officer (FSO) and the fire support team. They constantly coordinate with other fires elements to meet the intentions of the plan.

Sustainment

1-38. The *sustainment warfighting function* is the related tasks and systems that provide support and services to ensure freedom of action, extend operational reach, and prolong endurance (ADRP 3-0). The sustainment warfighting function includes the following tasks:

- Conduct logistics.
- Provide personnel services.
- Provide health service support.

1-39. SBCT weapons troop conducts sustainment with its own troop trains in coordination with supporting SBCT task forces and logistical elements from the brigade support battalion (BSB) often directly, to meet sustainment requirements.

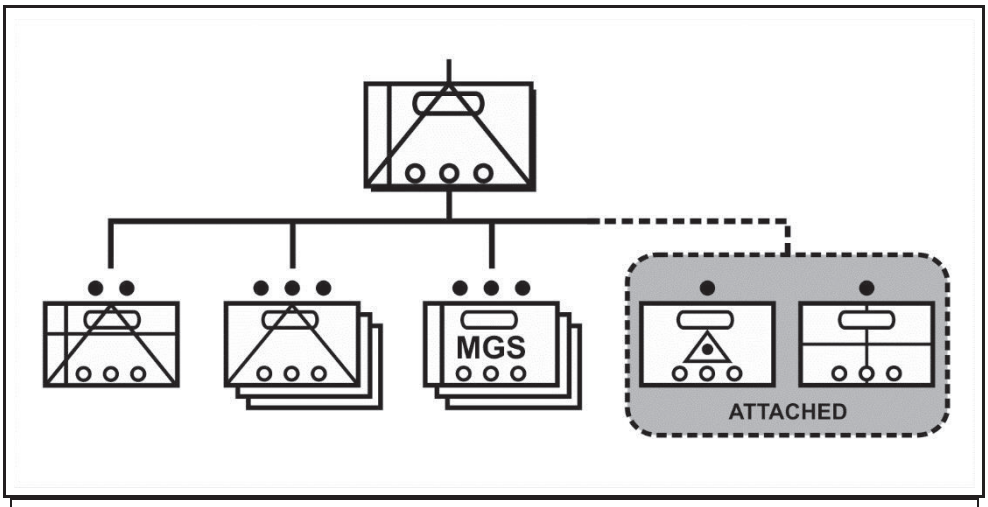
Protection

1-40. The *protection warfighting function* is the related tasks and systems that preserve the force so the commander can apply maximum combat power to accomplish the mission (ADRP 3-0). Preserving the force includes protecting personnel (combatant and noncombatant), physical assets, and information of the United States and multinational partners.

SECTION II – ORGANIZATION

1-41. The SBCT synchronizes all warfighting functions at the decisive point of their operation. The ATGM and MGS variants support the other Stryker units in the maneuver warfighting function by providing long range direct fires with TOW missile fires and fires from the 105mm (millimeter) main gun rounds respectively. By design, the Stryker family of vehicles do not have the level of protection to fight against heavily armored vehicles. This concept is still true for the MGS and ATGM variants and they must rely instead on their mobility and maneuverability in coordination with other units to effectively engage targets and then displace. They cannot exchange fires with Armored fighting vehicles and expect to survive the engagement.

1-42. The SBCT weapons troop combat power resides within its three MGS and three ATGM platoons. It also has as headquarters section with an assigned Infantry carrier vehicle (ICV). Attachments include a fires support team (FST) with a fire support vehicle (FSV) from the field artillery battalion to support with fires and medics with a medical support vehicle (MEV) from the medical platoon of the headquarters and headquarters troop (HHT) of the Cavalry squadron. Medic allocation consists of one medic per ATGM and MGS platoon and a senior medic for the headquarters section. Medics are not part of the crew for the ATGM or MGS vehicles and normally remain consolidated with the troop first sergeant (1SG). The SBCT weapons troop deploys worldwide to conduct unified land operations. (See figure 1-1, page 1-8.)



Legend: MGS = mobile gun system

Figure 1-1 SBCT weapons troop

ANTITANK GUIDED MISSILE PLATOON

1-43. The SBCT antiarmor platoon engages the enemy by means of long-range antiarmor fires and maneuvers to destroy or to repel his assaults by fire, and counterattack. The platoon consists of three ATGM vehicles. (See figure 1-2.) The antiarmor platoon does not have sections and does not fight as sections. The vehicles are assigned to the platoon leader, platoon sergeant, and squad leader. Each vehicle has four squad members assigned as the—

- Leader. (Also referred to as the vehicle commander.)
- Gunner.
- Driver.
- Assistant gunner. (Also referred to as the loader.)

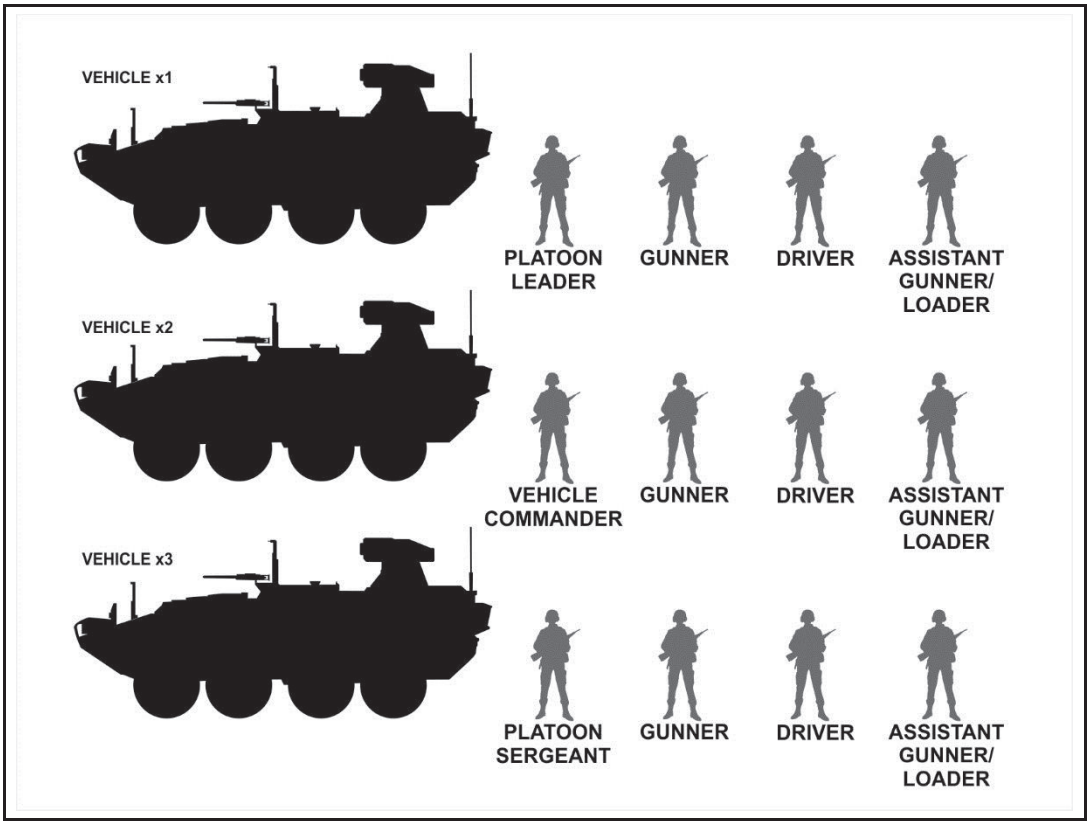


Figure 1-2. SBCT antitank guided missile platoon

1-44. The following list highlights the capabilities, limitations, and vulnerabilities of the SBCT ATGM platoon. Antiarmor leaders must be aware of these characteristics to effectively employ their unit.

1-45. Capabilities are as follows:

- The TOW system provides direct fire against armored targets out to 4500 meters and bunkers out to 3000 meters.
- The TOW system can fire two missiles before reloading.
- The TOW system is not just an antitank weapon.
- TOW can target command and control elements, crew served weapons, forward observers (FOs), and snipers.
- The TOW system can rotate 360 degrees with -20 degrees to +30 degree of elevation.
- The troop has organic medical and fire support personnel and equipment.
- The company has mission command systems that have the ability to provide common operational picture down to squad level.

1-46. Limitations are as follows:

- The TOW missile must be tracked to the target.
- The TOW system has a slow reload time.
- The antiarmor squad position is restricted to locations the vehicle can obtain.
- The TOW system cannot be dismounted.
- The vehicle must be stationary when the TOW missile is fired.
- The TOW missile time of flight is 23 seconds to 4500 meters.
- The TOW has a 75-meter backblast area.

- The troop has no organic maintenance or mortar support.
- The platoons do not have FOs assigned or attached.

1-47. Vulnerabilities are as follows:

- The TOW system has a significant firing signature and backblast area.
- TOW missile firing is restricted to the front 120-degree sector of the vehicle
- All vehicle hatches and ramp are closed during TOW missile launch.
- The antiarmor squad is vulnerable to dismounted attack.
- The M240B must be unloaded and stowed before firing TOW missiles.
- TOW missiles should not be fired over electric power lines, large bodies of water, or through trees or brush.

MOBILE GUN SYSTEM PLATOON

1-48. The MGS platoon provides precise long range direct fire in support of Infantry and Cavalry units. Its function is to destroy or suppress hardened enemy bunkers, machine gun positions, sniper positions, and long-range threats. It also creates Infantry breach points in urban, restricted, and open rolling terrain. The MGS 105 mm main gun provides the platoon with limited antiarmor, self-defense capabilities. The MGS is not a tank, however, and should not be employed in the same manner as a tank; nor should the MGS platoon be employed in the same manner as a tank platoon. (See figure 1-3.)

1-49. The MGS is also equipped with an exterior mounted telephone system that allows direct communication between Infantry forces and the gun system without the need for frequency modulation (FM) radio communications. The MGS 105mm main gun munitions includes Canister, HEP, SABOT, and HEAT rounds.

1-50. The MGS offers an array of capabilities on the modern battlefield. It can move rapidly in a variety of terrain conditions, negotiating soft ground, shallow trenches, small trees, and limited obstacles. The following factors, in combination, produce the shock effect that allows the MGS to close with and destroy the enemy in most weather and light conditions:

- Cross-country mobility.
- Enhanced target acquisition.
- Lethal firepower.
- Medium-strength armor protection.

1-51. Each vehicle is maintained and operated by a crew of three: vehicle commander, gunner, and driver. The platoon leader and platoon sergeant serve as two of the four vehicle commanders within the platoon. Reduced visibility when operating in restricted terrain such as built-up areas or dense woods limits the crew's situational awareness and creates vulnerability to dismounted enemy attacks. In such situations, the MGS usually requires another element to assist with its local security.

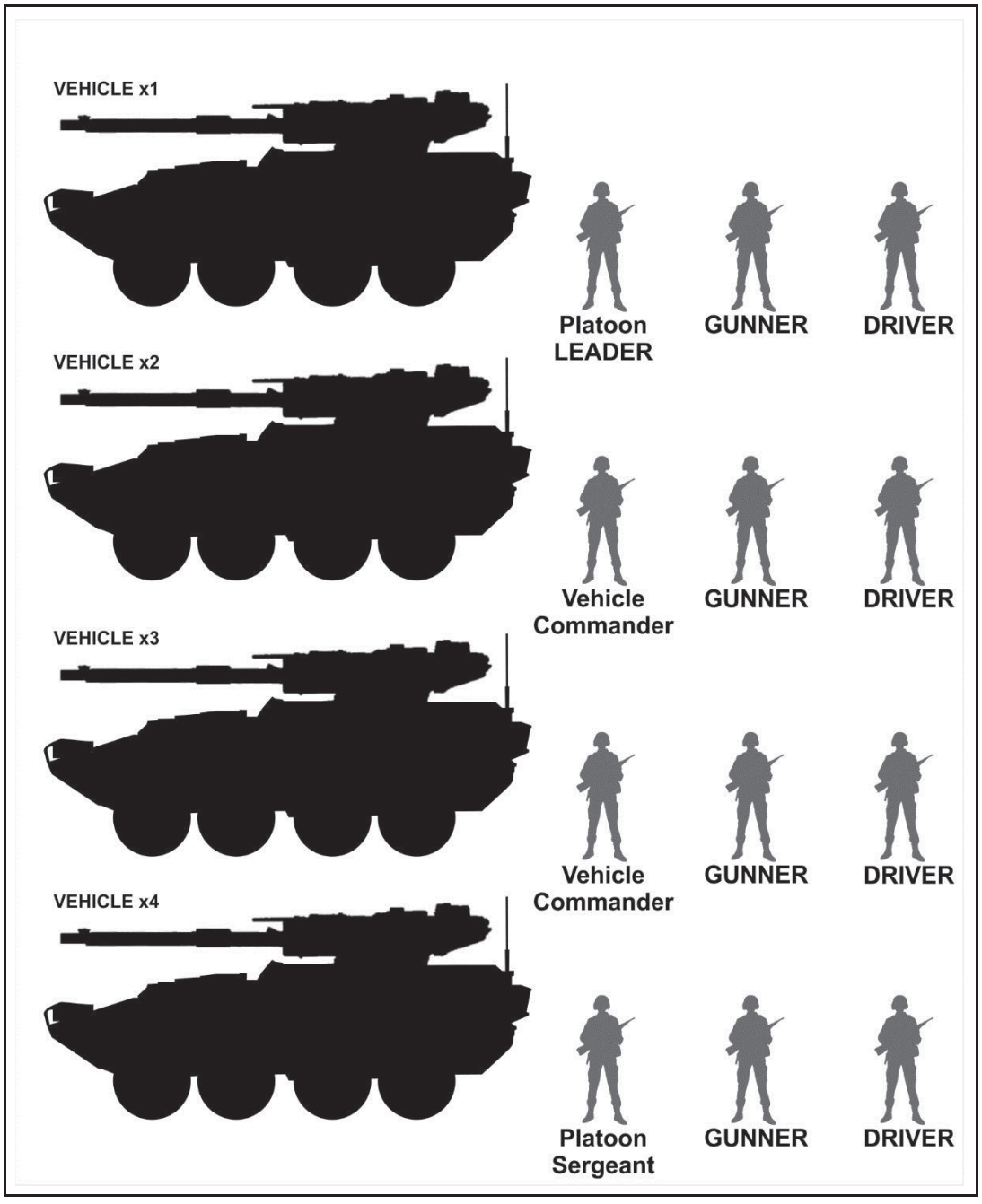


Figure 1-3. Mobile gun system platoon

HEADQUARTERS SECTION

1-52. The SBCT weapons troop is not resourced to operate a functional CP according to the modified table of organization and equipment (MTOE). However, establishing a CP may have a positive impact on the troop's day-to-day performance particularly during sustained operations.

1-53. The Soldiers manning the SBCT weapons troop CP assist the commander and his subordinate leaders to prepare for missions by—

- Provides a centralized point for information collection and dissemination, coordination, time management, and tracking the status of subordinate elements.
- Maintains a COP to higher and adjacent units.
- Provides communications with higher, lower, adjacent, and supporting units.
- Assists the commander in planning, coordinating, and issuing company operations orders (OPORD).

RESOURCING THE TROOP COMMANDER'S VEHICLE

1-54. The weapons troop commander's vehicle is used for mission command. It is an ICV variant with an enhanced communication suite. The weapons troop commander has only a single ICV in its headquarters section. It normally works closely with the FSV as its wingman. It is operated by a crew with personnel that include headquarters noncommissioned officer in charge, radio/telephone operator, communications noncommissioned officer (NCO), CBRN specialists, and a vehicle driver. Additional Soldiers and equipment essential to the tasks assigned based on the factors of METT-TC can be added.

HABITUAL ATTACHMENTS

1-55. The fire support team (FIST) and combat medics are normally attached whenever the company deploys.

TROOP AND PLATOON FIRE SUPPORT TEAM

1-56. A FIST from the squadron fire support platoon may be attached or placed operational control (OPCON) to the troop. The FIST headquarters personnel authorized for the SBCT weapons troop include an FSO, a fire support sergeant, a fire support specialist, an radio/telephone operator, and three FOs. This FIST comes with an FSV that support the weapons troop fires.

TROOP MEDICS

1-57. The basis of allocation for troop-level medical support is one senior combat medic for a troop and one combat medic for a maneuver platoon. This allocation is designed to place medical treatment assets as close to the point of injury as is possible.

1-58. The troop's emergency care sergeant is usually located with the company trains; and platoon medics are usually located with the 1SG. The emergency care sergeant cares for the sick, injured, or wounded troop personnel. Tactical combat casualty care (TC3) is provided in the operational environment by providing care in three stages: care under fire, tactical field care, and tactical evacuation under the training and supervision of the battalion surgeon. TC3 is provided in the operational environment by providing care in three stages: care under fire, tactical field care, and tactical evacuation under the training and supervision of the battalion surgeon. The emergency care sergeant performs TC3 under the supervision of the squadron surgeon or physician's assistant. The emergency care sergeant is responsible for—

- Overseeing and providing guidance to each platoon medic, as required.
- Training personnel to evaluate injured, wounded, or ill friendly and enemy personnel for priority of treatment as they arrive at the company casualty collection point (CCP).
- Overseeing sick call screening for the company.
- Requesting and coordinating for the evacuation of sick, injured, or wounded personnel with oversight from the company 1SG.
- Assisting in first aid training of the company personnel, and enhanced first aid procedures of combat lifesavers.
- Recommending locations for company CCPs.
- Providing guidance to the company's combat lifesavers.
- Monitoring the tactical situation, anticipating and coordinating health service support requirements, and class VIII resupply, as needed.
- Advising the troop commander and 1SG on mass casualty operations.

- Advising the troop commander and 1SG on unit field sanitation issues.
- Keeping the 1SG informed of the status of casualties and coordinating with him for additional sustainment requirements.
- Employing treatment vehicles with two medical equipment sets (MES) and tactical combat medical treatment assemblages.
- Assist the 1SG in maintaining hygiene of the unit with force health protection oversight and procedures.

SECTON III – ROLE OF THE SBCT WEAPONS TROOP

1-59. The SBCT weapons troop role is to facilitate the SBCT's maneuver by providing direct fires. Employed correctly and in synchronization with other maneuver units they facilitate the SBCT to close with the enemy; repel the enemy's attack by fire or allow other units break contact. Within the SBCT the weapons troop is assigned to the Cavalry squadron by MTOE. In garrison the Cavalry squadron manages the home station gunnery training, maintenance, and Soldier military occupational specialty development and assignment. In operations the weapons troop assignment is ultimately determined by the SBCT commander's orders. Common employment techniques used by the SBCT are:

- Pure.
- Split.
- Dispersed.

1-60. The pure employment technique includes transitioning the entire troop under operational control from task force to task force. This is the optimal course of action (COA) for redistributing long range direct fires at the decisive point. It requires multiple branches and sequels in planning requiring intelligence estimates to shift the weapons troop to the main effort. Pure employment is most vulnerable to METT-TC factors disrupting the synchronization of the operation. This puts the other task forces at risk of not having the weapons troop capabilities to support their operations.

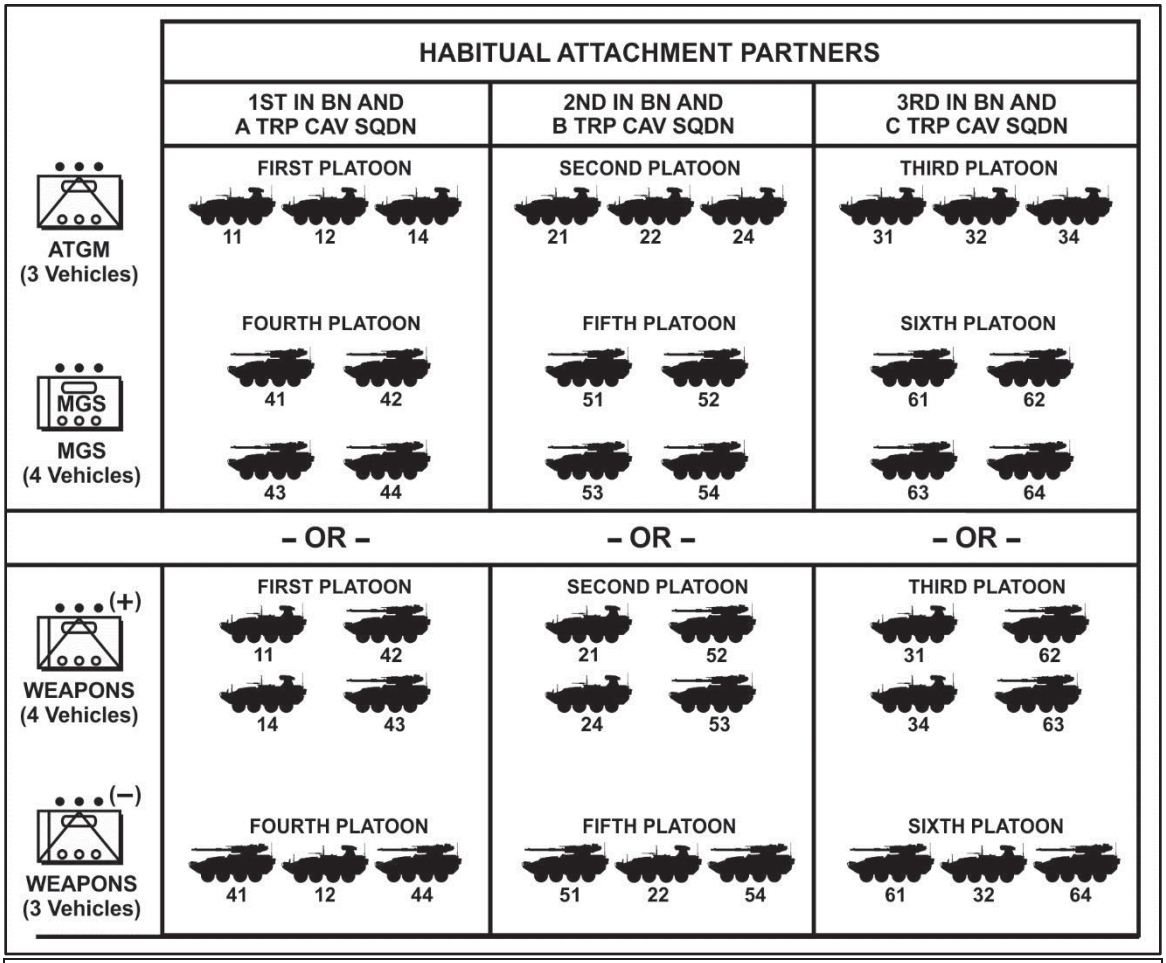
1-61. The pure employment technique supports reconnaissance, security, offense, and defense tasks throughout the SBCT by constantly transitioning the SBCT weapons troop to the main effort by phases. In this technique the weapons troop can be held in reserve or deployed forward and moves between task forces. This also gives the SBCT commander options to transition between employment techniques by switching between pure and split.

1-62. The split employment technique is when the weapons troop platoons are split between two to four task forces. It always maintains a troop headquarters with two to four of its platoons under a higher echelon control. The remainder of its platoons support other task forces. Split employment technique can be short or long duration based on the dispersion of the weapons troop platoons and mission command considerations.

1-63. Dispersed employment technique is when the weapons troop platoons have been dispersed to other tasks forces. This leaves two situations:

- The weapons troop headquarters has no platoons under its command. The headquarters section concentrates on the administrative and logistics support of its platoons or is assigned other duties by the higher echelon commander.
- The weapons troop has been task organized with Infantry or Cavalry platoons replacing some of its ATGM and MGS platoons and is normally assigned its own area of operation or a specific mission.

1-64. At the platoon and section level task organizing ATGM sections with MGS sections has tactical advantages. This combination within the troop form three platoons of two ATGM and two MGS; with another three platoons of one ATGM and two MGS. Ideal employment is for ATGM to engage at long range to the flank or front of enemy targets while MGS maneuver to rear or flank of enemy targets. Simultaneous engagements with both weapon systems make it difficult for the enemy locate the friendly firing positions. This technique facilitates other units to close with and destroy or the opportunity to break contact. The weapons troop commander organizes the troop to support the SBCT by aligning platoons with other units they will likely support. (See figure 1-4, page 1-14.)



Legend: ATGM = antitank guided missile, BN = battalion, CAV = cavalry, IN = Infantry, MGS = mobile gun system, TRP = troop, SQDN = squadron

Figure 1-4. SBCT weapons platoons

SECTION IV – DUTIES AND RESPONSIBILITIES

1-65. This section describes the duties and responsibilities of key personnel in the SBCT weapons troop. The troop leadership guides the employment and sustainment of the unit.

TROOP COMMANDER

1-66. The troop commander commands the troop. With the assistance of the executive officer (XO) and 1SG, he positions the headquarters section to best support the SBCT concept of operations. He executes mission command with the SBCT's area of operations communicating orders and guidance to subordinate leaders. He directs his subordinate leaders in clear, complete combat orders. His major duties include leadership, training, tactical employment, and sustainment of his troop. Other commander duties include the following:

- Commands through his subordinate leaders.
- Employs his troop to accomplish its mission according to the higher commander's intent and concept.
- Conducts troop-leading procedures (TLPs) for troop tactical missions.
- Maintains situational awareness and understanding.

- Resources the platoons and requests additional support when needed.
- Ensures the troop CP effectively battle tracks the situation and status.
- Provides a timely and accurate tactical picture to the higher commander and subordinate units.
- Implements effective measures for security and accountability of forces and systems.
- Develops the leadership and tactical skill of his subordinate leaders.

EXECUTIVE OFFICER

1-67. The XO is a primary assistant to the troop commander. The XO serves as second in command and tracks the tactical employment of the troop, usually from a location the commander identifies as the second most critical. In the event of the troop commander's absence or incapacitation, the XO is responsible for commanding the troop. The XO is the primary sustainment planner and coordinator. Other XO duties include the following:

- Ensures accurate, timely tactical reports are sent to the higher headquarters.
- Assumes command of the troop as required.
- In conjunction with the 1SG, plans and supervises the company sustainment effort.
- Assists in preparation of OPORD, specifically paragraph 4 (sustainment).
- Conducts tactical coordination with higher, adjacent, and supporting units.
- Assists the commander when issuing orders to the troop headquarters and attachments, as required.
- Conducts additional missions, as required. These could include serving as officer in charge for a quartering party, or as the leader of the detachment left in contact in a withdrawal.
- Performs as liaisons or planner for air ground operations. This may include serving as the landing zone (LZ) or pickup zone (PZ) control officer.
- Assists the commander with preparations for follow-on missions, to include rehearsal site preparation.
- Assists the commander in refining intelligence products during planning and portraying the enemy force during rehearsals.
- Manages the company timeline.
- Manages sustainment survivability assets (such as an armored combat earthmover or dozer during defensive tasks).
- Facilitates the integration of attachments and enablers to the company.
- Leads the company command post, if established.
- Serves as movement control officer.
- Assists the commander and supply sergeant with managing the property book office and company hand receipts.
- Coordinates and monitors maintenance status and reports.

FIRST SERGEANT

1-68. The 1SG is a primary advisor to the troop commander and expert on individual and NCO skills. He assists the commander in planning, coordinating, and supervising all activities to support the unit mission. He performs the functions identified as critical by the commander. Among others, these functions include resupply, casualty evacuation operations, coaching, teaching, and mentoring other company NCOs. Other 1SG duties include the following:

- Executes and supervises routine operations. This includes enforcing the tactical standard operating procedures (SOPs), planning and coordinating training, coordinating and reporting personnel and administrative actions, and supervising supply, maintenance, communications, field hygiene, and casualty evacuation operations.
- Supervises, inspects, or observes matters designated by the commander. Examples include observing and reporting on a portion of the company's area of operations (AO) or inspecting fighting positions and range cards.

- Plans, rehearses, and supervises key sustainment actions in support of the tactical mission. These activities include resupplying of class I, III, and V products and materials; ensuring maintenance and recovery, medical support, and casualty evacuation procedures are known and in place; and processing detainees and EPWs.
- Conducts training and ensures proficiency in individual and NCO skills and small unit collective skills to support the SBCT weapons troop mission essential task list.
  - In conjunction with the commander, establishes and maintains the foundation for troop discipline.
  - Assists the commander in maintaining accountability.
  - Ensures medical assets remain flexible and responsive to tactical operations.
  - Assists and coordinates with the XO and is prepared to assume the XO's duties.
  - Leads task-organized elements or subunits on designated missions.

ANTITANK GUIDED MISSILE PLATOON LEADER

1-69. The platoon leader is responsible for the tactical employment, collective training, administration, personnel management, and sustainment of his platoon. He must know his Soldiers and how to employ them. He alone bears personal responsibility for the positioning and employment of all assigned or attached weapons. Other platoon leader duties include the following:

- Leads the platoon in support of troop and SBCT missions. He bases his actions on the mission assigned, the concepts the supported commander, and his own estimate of the situation.
- Plans operations with the help of the platoon sergeant, squad leader, and other key personnel.
- Analyzes tactical situations and employs the full capabilities of his platoon's equipment to accomplish the mission.
- Executes knowledge management tasks.
- Prepares the platoon sector sketch.
- Keeps the commander informed of his actions.
- Conducts call for fire missions.

1-70. Serves as vehicle commander on one of the platoon ATGM vehicles, which means he—

- Ensures the combat readiness and tactical employment of his vehicle.
- Detects and identifies targets.
- Issues fire commands.
- Controls fire and movement.
- Assists the gunner when necessary.
- Acts as the primary gunner for the vehicle M240B machine gun.

ANTITANK GUIDED MISSILE PLATOON SERGEANT

1-71. As the senior and most experienced NCO in the platoon, the platoon sergeant assists and advises the platoon leader. He supervises the platoon's administration, sustainment, and maintenance, and leads the platoon in the platoon leader's absence. He also supervises individual training and advises the platoon leader on appointments, promotions, reductions, assignments, and Soldier discipline. His tactical expertise in platoon operations includes the maneuver of the platoon and employment of all weapons. Other platoon sergeant duties include the following:

- Coordinates and supervises company-directed platoon resupply operations.
- Collects, prepares, and forwards sustainment status updates and requests to company headquarters.
- Sends casualty reports to higher headquarters, establishes casualty collection points in accordance to plan and METT-TC, and coordinates and supervises medical evacuation.
- Maintains platoon strength information, and receives and orients replacements.
- Ensures ammunition and supplies are properly and evenly distributed.
- Ensures Soldiers maintain all equipment.
- Monitors the morale, discipline, and health of platoon members.

- Supervises the platoon medic.
- Ensures Soldiers are cross trained in all duties of the squad.
- Serves as vehicle commander on one of the platoon ATGM vehicles. (Refer to paragraph 1-59, page 1-13.)

ANTITANK GUIDED MISSILE SQUAD LEADER

1-72. The ATGM squad leader is responsible for the combat readiness and tactical employment of his squad. His responsibilities include the health, welfare, discipline, and training of squad Soldiers. Other squad leader duties include the following:

- Supervises equipment maintenance.
- Keeps the platoon leader and platoon sergeant informed of events that affect the tactical situation and status of the squad.
- Employs the squad according to the orders of the platoon leader.
- Requests squad resupply.
- Serves as vehicle commander on one of the platoon ATGM vehicles. (Refer to paragraph 1-59, page 1-13.)

ANTITANK GUIDED MISSILE GUNNER

1-73. The gunner observes the AO to detect enemy targets. He operates the TOW launcher as directed by the vehicle commander. He also maintains the M240B machine gun and serves as the M240B machine gun alternate gunner. Other gunner duties include the following:

- Verifies identification of targets before engaging.
- Determines target engagement feasibility.
- Engages targets.
- Recognizes and eliminates firing angle limitations.
- Conducts TOW-launcher operational checks.
- Prepares range cards for the TOW and M240B machine gun.
- Maintains TOW weapon system and M240B machine gun.
- Provides assistance in navigation and communications.
- Prepares the system for loading the launcher, engaging targets, and reloading.

DRIVER

1-74. The driver maneuvers the carrier in accordance with the vehicle commander's directions. General duties include driving the carrier tactically, performing evasive maneuvers, and positioning the carrier in a firing position. Other driver duties include the following:

- Maintains the vehicle in accordance with technical manual (TM) 9-2355-311-10-7-1, TM 9-2355-311-10-7-2, and TM 9-2355-311-10-7-3.
- Observes sectors of fire.
- Repositions the vehicle when required by the vehicle commander or gunner.
- Finds and uses covered and concealed routes and positions.
- Camouflages the carrier and firing position as needed.
- Helps the loader store missiles and ammunition, and provides vehicle security as needed.

ASSISTANT GUNNER

1-75. The assistant gunner loads the TOW launchers in cooperation with the gunner and commander. Other assistant gunner duties include the following:

- Inspects and stows encased TOW missiles.
- Prepares missiles for loading.
- Loads the launcher.
- Helps driver maintain and camouflage the vehicle.

- In the event of a misfired missile, removes it from the launcher.
- Provides vehicle security as needed.

MOBILE GUN SYSTEM PLATOON LEADER

1-76. The MGS platoon leader is accountable to the commander and is responsible for the discipline and training of the Soldiers in the platoon, the maintenance of the equipment, and the platoon's success in combat. The MGS platoon leader has the following additional duties to go along with the mentioned above duties of a platoon leader.

- Leads the platoon during missions. He bases his actions on the mission assigned, the concepts the supported commander, and his own estimate of the situation.
- Plans operations with the help of the platoon sergeant, section leaders, and other key personnel.
- Sends casualty reports to higher headquarters, establishes casualty collection points in accordance to plan and METT-TC, and coordinates and supervises medical evacuation.
- Executes knowledge management tasks.
- Prepares the platoon sector sketch.
- Keeps the commander informed of his actions.
- Conducts call for fire missions.
- Must be proficient in the tactical employment of his vehicle and crew and of the platoon in concert with a company.
- Is the subject matter expert on the capabilities and integration of the MGS vehicle?
- Develops SOPs and TTP for direct support missions to Infantry platoons and squads.
- Advises the company on all missions involving the usage of the MGS vehicle and platoon. (Refer to ATP 3-20.16 for more information.)

MOBILE GUN SYSTEM PLATOON SERGEANT

1-77. The MGS platoon sergeant has the following additional duties to go along with the mentioned above duties of a platoon sergeant. Additional duties of the MGS platoon sergeant include—

- Coordinates and supervises platoon resupply operations.
- Collects, prepares, and forwards sustainment status updates and requests to company headquarters.
- Sets up casualty collection points, coordinates and supervises medical evacuation, and sends casualty reports to higher headquarters.
- Maintains platoon strength information, and receives and orients replacements.
- Ensures ammunition and supplies are properly and evenly distributed.
- Ensures Soldiers maintain all equipment.
- Monitors the morale, discipline, and health of platoon members.
- Supervises the platoon medic.
- Ensures Soldiers are cross trained in all duties of the squad.
- Provides the tactical and technical knowledge that enables him to serve as mentor to the other members of the company on the capabilities and limitations of the MGS vehicle.
- Serves as a master gunner for the MGS platoon and must be master gunner qualified. (Refer to ATP 3-20.16 for more information.)

SUPPLY SERGEANT

1-78. The supply sergeant requests, receives, issues, stores, maintains, and turns in supplies and equipment for the SBCT weapons troop. He coordinates all supply requirements and actions with the XO or the 1SG and the squadron logistics staff officer (S-4). The supply sergeant communicates with the SBCT weapons troop using the task force administration/logistics radio net JCR/BFT, or with a Secret Internet Protocol Router phone. The supply sergeant's specific responsibilities are to— (See chapter 6 of this publication for more information on sustainment duties.)

- Control the SBCT weapons troop cargo truck and water trailer, and supervise the supply clerk and armorer.
- The supply sergeant establishes and maintains the company's property accountability system.
- Monitor SBCT weapons troop activities and the tactical situation.
- Anticipate and report logistical requirements.
- Coordinate and monitor the status of the SBCT weapons troop sustainment requests.
- Coordinate and supervise the organization of the SBCT weapons troop logistics package (LOGPAC) in the field trains.
- Assist the XO with managing the company commanders hand receipts.

SIGNAL SUPPORT NONCOMMISSIONED OFFICER

1-79. The signal support NCO supervises the operation, maintenance, and installation of organic digital, wire, and field FM communications. During tactical missions, he travels with the company maintenance team (CMT).

1-80. His responsibilities include sending and receiving routine traffic and making required communications checks. The signal support NCO may—

- Perform limited troubleshooting of the SBCT weapons troop organic communications equipment. He may provide the link between the SBCT weapons troop and the task force for maintenance of communications equipment.
- Supervise all activities regarding the SBCT weapons troop communications security equipment, which entails the requisition, receiving and signing for material, receipting, training, maintenance, security, and employment of this equipment and related materials.
- Assist the commander in planning and employment of the communications systems. The signal support specialist may assist in preparation of the signal portion of paragraph 5 of the OPORD using the commander's guidance.
- Supervise or assist with SBCT weapons troop command post tasks. These include relaying information, monitoring the situation, establishing the command post security plan and radio watch schedule, and informing the commander and subordinate elements of significant events.

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Chapter 2
Reconnaissance and Security

The role of the SBCT weapons troop during the reconnaissance and security phase of the SBCT operation is to provide additional firepower forward and to support the collection of information. This provides the security force more options if they encounter enemy forces. The weapons troop is able to destroy targets of opportunity, prevent the formation from becoming decisively engaged, support counter reconnaissance, and engage small unit Armored formations forward shaping the SBCTs follow on operations. The weapons troop does not perform reconnaissance or security tasks independently. At the very least it must have an Infantry or Scout units operating within supporting distances.

SECTION I – RECONNAISSANCE

2-1. *Reconnaissance* is a mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary, or to secure data concerning the meteorological, hydrographical, or geographical characteristics and the indigenous population of a particular area. Reconnaissance primarily relies on the human dynamic rather than technical means. (Refer to JP 2-0 for more information.)

2-2. Reconnaissance identifies terrain characteristics, enemy and obstacles to movement, and the disposition of enemy forces and civilian population so the platoon leader can maneuver his forces freely and rapidly. Reconnaissance before unit movements and occupation of assembly areas is critical to protecting the force and preserving combat power. It keeps the force free from contact as long as possible so that it can concentrate on its decisive operation.

2-3. Reconnaissance can be passive or active. Passive reconnaissance techniques includes map and photographic surveillance. Active methods available include mounted and dismounted ground reconnaissance and reconnaissance by fire. The weapons troop can destroy enemy elements interfering or preventing the continued friendly force reconnaissance mission. This enables friendly reconnaissance forces to remain undiscovered by the enemy. Active reconnaissance operations are classified as stealthy or aggressive. The SBCT weapons troop supports reconnaissance operations in by attaching itself with another maneuver element. They may augment the fight for information, consolidate gains, and support efforts to maintain continuous reconnaissance.

2-4. Human interactions, whomever they are with are crucial to information collection as well. Once trust is built amongst the population and the host-nation security force (HNSF) more information is likely to be obtained. It is important to not just rely on technology, but to interact one on one with the population and HNSF to build relationships and trust.

RECONNAISSANCE FUNDAMENTALS

2-5. The fundamentals of successful reconnaissance operations are as follows:

- Ensure continuous reconnaissance.
- Do not keep reconnaissance assets in reserve.
- Orient on the reconnaissance objective.
- Report information rapidly and accurately.
- Retain freedom of maneuver.

- Gain and maintain enemy contact.
- Develop the situation rapidly.

2-6. Effective reconnaissance is continuous. Before an operation, reconnaissance focuses on filling gaps in intelligence about the enemy and terrain. During an operation, reconnaissance focuses on providing the commander with updated information that verifies the enemy's composition, dispositions, and intentions as the operation progresses. After an operation, reconnaissance focuses on maintaining contact with the enemy to determine his next move and collecting intelligence necessary for planning subsequent operations.

2-7. The commander uses the reconnaissance objective to coordinate his unit's reconnaissance efforts. The reconnaissance objective is a terrain feature, geographic area, or an enemy about which the commander wants to obtain additional information (FM 3-90-1).

2-8. Reconnaissance assets acquire and report accurate and timely combat information about the enemy, civil considerations, infrastructure, and the terrain over which operations are to be conducted. Combat information may quickly lose its value. Reconnaissance assets report exactly what they see and, if appropriate, what they do not see.

2-9. Reconnaissance assets retain mobility to successfully complete their missions. Reconnaissance assets have clear engagement criteria that support the commander's intent. They employ proper movement and reconnaissance techniques, use overwatching fires, and SOPs.

2-10. Once a unit conducting reconnaissance gains contact with the enemy, it maintains that contact unless the commander directing the reconnaissance orders otherwise or the survival of the unit is at risk. This does not mean that individual scout and reconnaissance teams cannot break contact with the enemy. The commander of the unit conducting reconnaissance is responsible for maintaining contact using all available resources.

2-11. When a reconnaissance asset encounters an enemy force or an obstacle, it quickly determines the threat it faces. For an enemy force, it determines the enemy's composition, dispositions, activities, and movements and assesses the enemy intent as well as the effects to the friendly force. For an obstacle, it determines the type and extent of the obstacle and whether it is covered by fire. Obstacles can provide the attacker with combat information concerning the location of enemy forces, weapon capabilities, and organization of fires.

FORMS OF RECONNAISSANCE

2-12. The forms of reconnaissance operations are—

- Zone.
- Area.
- Route.
- Reconnaissance in force.
- Special (normally conducted by SOF).

ZONE RECONNAISSANCE

2-13. A *zone reconnaissance* is a directed effort to obtain detailed information concerning all routes, terrain, enemy forces, and obstacles to include areas of chemical and radiological contamination within a zone defined by specific boundaries (ADRP 3-90). Zone reconnaissance is executed when the enemy situation is vague, or when information concerning cross-country trafficability is required. (Refer to ADRP 3-90 for more information.) Zone reconnaissance can require augmentation from engineers, CBRN reconnaissance platoon, human intelligence and civil affairs team to answer detailed information about the civilian population, bridges, infrastructure or CBRN hazard area. Similar to route reconnaissance, mission variables and the commander's intent dictate the SBCT weapons troop actions during a zone reconnaissance.

2-14. Zone reconnaissance tasks are as follows:

- Find and report all enemy forces within the zone.
- Clear all enemy forces in the designated AO within the capability of the unit conducting reconnaissance.
- Determine the trafficability of all terrain within the zone, to include built-up areas.

- Locate and determine the extent of all contaminated areas in the zone.
- Evaluate and classify all bridges, defiles, overpasses, underpasses, and culverts in the zone.
- Locate any fords, crossing sites, or bypasses, and reinforcing obstacles to include built-up areas in the zone.
- Locate all obstacles and create lanes as specified in execution orders.
- Report the above information to the commander directing the zone reconnaissance, to include providing a sketch map or overlay.

AREA RECONNAISSANCE

2-15. *Area reconnaissance* is a form of reconnaissance that focuses on obtained detailed information about the terrain or enemy activity within a prescribed area (ADRP 3-90). The area can be any location that is critical to the unit's operations. Examples include easily identifiable areas covering a large space (such as towns or military installations), terrain features (ridgelines, wood lines, choke points), or a specific point (a bridge or a building).

2-16. Additional assets for signal intelligence (SIGINT), geospatial intelligence, human intelligence, and all-source intelligence reside within the military intelligence company (MICO) to assist in area reconnaissance. These intelligence assets increase the ability to detect potential enemy threats and provide early warning. Maintaining situational awareness and requesting intelligence reports for specific areas in a routine or timely manner provide a better operational understanding before conducting area reconnaissance. The tasks of an area reconnaissance are the same as those for a zone reconnaissance and are conducted in the same manner.

ROUTE RECONNAISSANCE

2-17. *Route reconnaissance* is a form of reconnaissance that focuses along a specific line of communication, such as a road, railway, or cross-country mobility corridor (ADRP 3-90). A route reconnaissance is a directed effort to obtain detailed information on a specific route and on all terrain from which the enemy can influence movement along that route. A route reconnaissance is usually conducted when the commander wants to use the route in question. Trafficable routes are made easier to determine in an SBCT because the Stryker vehicles are made of the same chassis. Consideration will include the heavy expanded mobile tactical truck cargo is the largest and heaviest vehicle for logistics organic to the SBCT. Usually the most limiting factors on routes are structures such as tunnels, overpasses, fords and bridges, require some technical analysis. Refer to ATP 3-34.81 for more information on route classification.

2-18. Route reconnaissance tasks are as follows:

- Find, report, and clear all enemy elements that can influence movement along the route.
- Determine the trafficability of the route; can it support the friendly force?
- Reconnoiter all terrain that the enemy can use to dominate movement along the route, such as choke points, ambush sites, and PZs, LZs, and drop zones.
- Reconnoiter all built-up areas, contaminated areas, and lateral routes along the route.
- Evaluate and classify all bridges, defiles, tunnels and underpasses, and culverts along the route.
- Locate any fords, crossing sites, or bypasses, and reinforcing obstacles to include built-up areas along the route.
- Locate all obstacles, interdict and reduce explosive hazards and create lanes as specified in execution orders.
- Report the above route information to the headquarters initiating the route reconnaissance mission, to include providing a sketch map or a route overlay.

RECONNAISSANCE IN FORCE

2-19. *Reconnaissance in force* is a deliberate combat operation designed to discover or test the enemy's strength, dispositions, and reactions or to obtain other information (ADRP 3-90). Battalion-sized task forces or larger organizations normally conduct reconnaissance in force missions. The SBCT weapons troop will not conduct a reconnaissance in force independently, but may participate as part of a larger force. Tasks for reconnaissance in force include—

- Penetrating the enemy's security area and determine its size and depth.

- Determining the location and disposition of enemy forces.
- Attacking enemy positions.
- Using local reserves or major counterattack forces, employing fires, adjusting positions, and employing specific weapon systems to force the enemy to react.
- Determining weaknesses in the enemy's disposition for exploitation.
- Locating specified obstacles and create lanes.
- Entering areas of operation in complex terrain not previously occupied by friendly forces, such as urban environments.

PLANNING

2-20. The command support relationship of the SBCT weapons troop will change more often than most other elements in the SBCT. This is because the SBCT weapons troop is a brigade asset assigned to the Cavalry squadron by MTOE. In operations the weapons troop assignments will depend on the most effective task organization, based on mission type. Initially the Cavalry squadron commander incorporates the weapons troop pure into their planning cycle unless specified not to do so. Ultimately the SBCT commander determines their assignment unless he delegates it to another task force commander.

2-21. Advance warning of the task organization changes that involve attaching or detaching elements of the SBCT weapons troop is critical to the planning process. Placing a liaison officer in the Cavalry squadron main command post often referred to as the tactical operations center and having a direct point of contact at the SBCT plans cell are techniques to gain that information quicker. The Troop commander assess all task organization changes and ensures they are logistically sustainable. Once that has been confirmed he initiates movement or linkup for attachments or detachments.

2-22. The SBCT weapons troop follows TLPs when supporting reconnaissance operations. Often it will be conducted on a condensed time line. *Troop-leading procedures* are a dynamic process used by small-unit leaders to analyze a mission, develop a plan, and prepare for an operation (ADP 5-0). These procedures enable leaders to maximize available planning time while developing effective plans and preparing their units for an operation. Troop-leading procedures consist of the following eight steps:

- Step 1. Receive the mission.
- Step 2. Issue a warning order.
- Step 3. Make a tentative plan.
- Step 4. Initiate movement.
- Step 5. Conduct reconnaissance.
- Step 6. Complete the plan.
- Step 7. Issue the order.
- Step 8. Supervise and refine.

2-23. Planning is continuous for the SBCT weapons troop, as it must anticipate branches and sequels to operations as well as constant adjustments in task organization. The main purpose is to get adequate firepower in support of the SBCT at the decisive point and at the decisive moment.

2-24. Time distance analysis is an important planning tool for the SBCT weapons troop commander. This analysis determines how much time the commander has to relocate his forces. The troop commander often connects these to his higher task force and SBCT commander's decision points, PIR, environmental conditions, and operational conditions in order to execute. Finally the weapons troop commander analyzes potential competing priorities and establishes a hierarchy of actions to execute for his decision matrix.

COMMANDERS RECONNAISSANCE PLANNING GUIDANCE

2-25. The SBCT weapons troop commander develops his plan to support reconnaissance based on the supported commander's guidance and overall plan. The commander's guidance enables the troop commander to clarify his own intent for subordinate leaders. Reconnaissance and security guidance is contained in the five-paragraph operation order. The commander's reconnaissance guidance is how the commander communicates the way to conduct the directed form of reconnaissance. Commanders may adjust guidance

by phases. The commander's guidance consists of focus, tempo of reconnaissance, engagement and disengagement criteria, and displacement criteria. (Refer to ATP 3-20.96 and FM 3-98 for more information.)

2-26. The troop commander evaluates the required tasks and the troop's capabilities to accomplish the mission. If the troop does not have the time or resources to complete all of the tasks, the troop commander informs the squadron commander. The supported commander issues further guidance on tasks the troop must complete, restates the priority of the tasks, usually clear from the reconnaissance objective, or augments the troop. If, after starting the reconnaissance, the troop commander determines that the troop cannot complete an assigned task it must report to the supported commander and await further instructions.

Focus

2-27. Focus allows the troop commander to determine which tasks the troop must accomplish first, where to concentrate the reconnaissance activities, and the assets required. It narrows the scope of operations to get important information to squadron operations. Reconnaissance focus links the tasks of answering the higher commander's critical information requirements (CCIRs), supporting targeting, and filling information requirement voids. A CCIR is an information requirement identified by the commander as being critical to facilitating timely decisionmaking. The two key elements are friendly force information requirements and PIRs (JP 3-0). The focus might be terrain-oriented, threat security force-oriented, or oriented on the civilian population. The commander designates a reconnaissance objective to define his focus further.

Objective

2-28. The troop commander narrows the focus further by defining a reconnaissance objective. The reconnaissance objective consists of (confirm or deny) information about a specific geographical location, civilian population, or threat activity, allowing the unit to set priorities and focus on the reconnaissance objective when under time limits. Normally when the SBCT weapons troop is supporting the Cavalry squadrons reconnaissance mission the enemy situation is vague or expected. The SBCT weapons troop role is to facilitate the Cavalry squadron's achievement of the reconnaissance objectives by deterring, neutralizing, destroying or defeating, enemy within sector or supporting its reconnaissance by fire.

Tempo of Reconnaissance

2-29. Tempo of reconnaissance refers to the level of detail and covertness required of the weapons troop to best accomplish reconnaissance tasks. Tempo of reconnaissance uses four terms, rapid, deliberate, stealthy, and forceful. (Refer to FM 3-98 for more information.) The commander must clearly articulate for his subordinates how he interprets these terms.

2-30. Reconnaissance tempo uses factors such as planning time, movement formations, and methods. The troop commander visualizes the tempo of reconnaissance through the analysis of three mission variables of METT-TC: mission, enemy, and time.

2-31. The commander defines which key reconnaissance tasks to accomplish by specifically stating it in his end state of his intent paragraph. Subordinate leaders exercise individual initiative in meeting the commander's intent. The commander must clearly articulate for his subordinates how he interprets those terms.

Engagement/Disengagement and Criteria

2-32. The commander develops his engagement and disengagement criteria based on established rules of engagement and analysis of the METT-TC variables. He establishes which targets the troop is to engage, under which circumstances to use direct or indirect fires, and which targets they are to hand over to a maneuver element. He issues guidance to define—

- Engagement and disengagement criteria.
- Bypass criteria.
- Priority of fires.
- Fire support coordination measures, weapons and control status.
- Direct fire planning.
- Guidance on actions on contact.

- Reconnaissance handover criteria.
- Rules of engagement and rules for the use of force.

Displacement Criteria

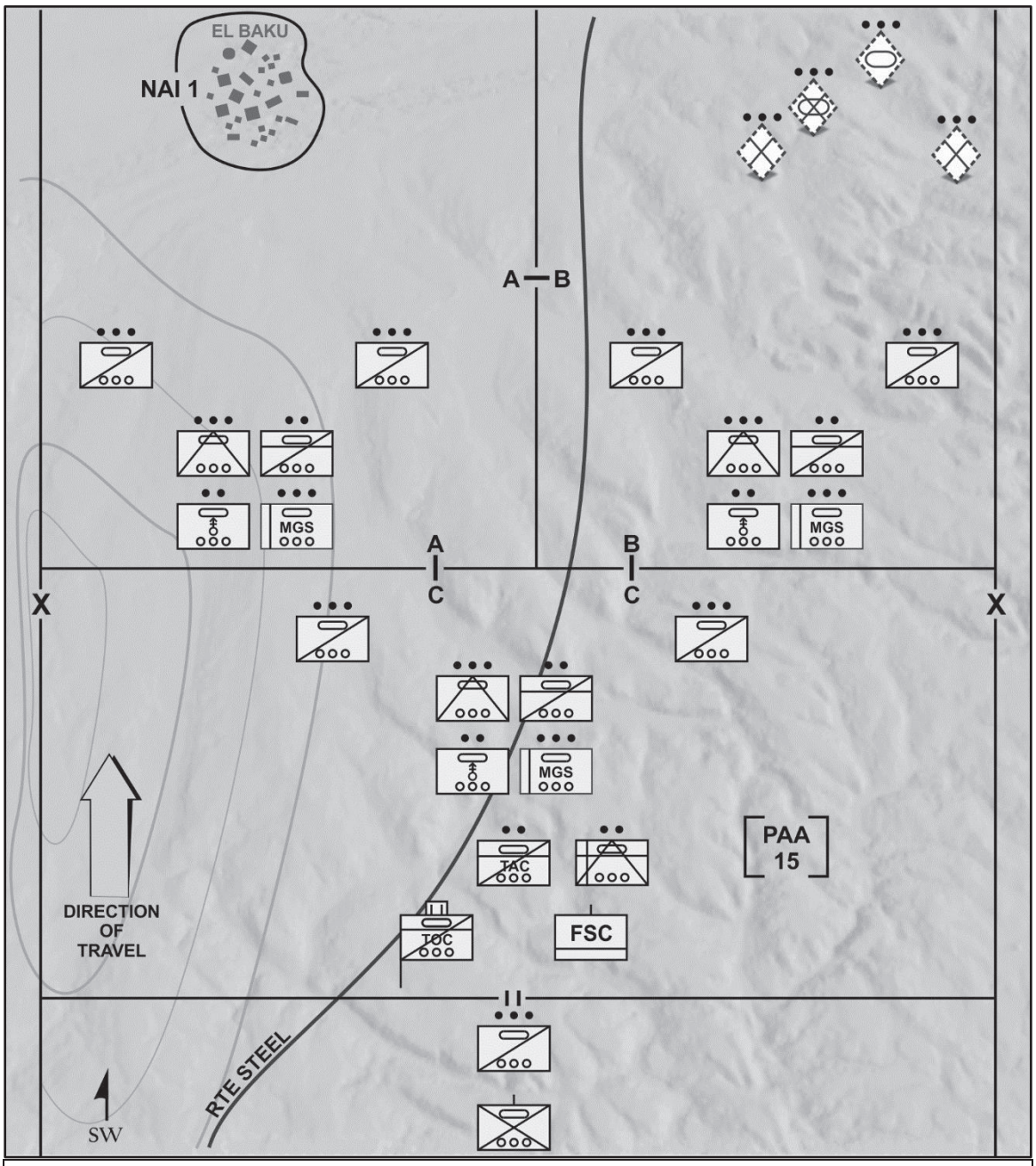
2-33. Displacement criteria define triggers for a planned withdrawal, passage of lines, or reconnaissance handover between units. As with engagement and disengagement criteria, the conditions and parameters set out in displacement criteria integrate the commander's intent with tactical feasibility.

TASK ORGANIZATION AND ASSIGNMENTS

2-34. During the reconnaissance phase of the SBCT operation the SBCT will likely select a pure task organization with the weapons troop to support the Cavalry squadron's tasks of zone reconnaissance, area reconnaissance or reconnaissance in force. The Cavalry squadron will likely task organize the weapons troop into one of three distinguishable ways METT-TC depending (See ATP 3-20.96 for more information).

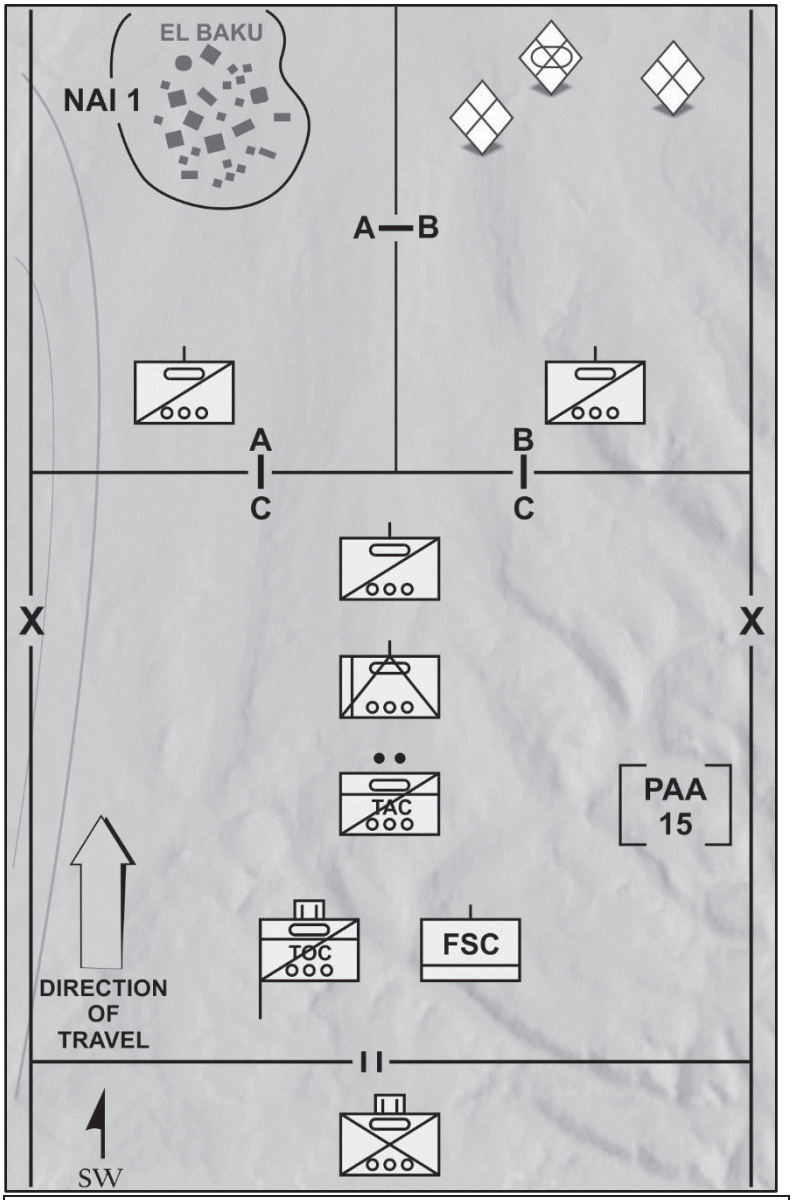
- Keep the troop pure to follow and support the squadron formation.
- Split ATGM, MGS or weapons platoons to each of the Cavalry troops and maintain a troop minus maneuver element.
- Disperse ATGM, MGS, and weapons platoons to each of the Cavalry troops.

2-35. Key to each task organization is to keep the elements of SBCT weapons troop towards the rear of the formation allowing the scouts forward to identify enemy forces and attrite them piecemeal as they move into the security area. This allows the ATGM and MGS to maneuver to positions of advantage to engage the enemy. It also prepares the SBCT weapons troop to transition to offense or defense in support of the Infantry elements when the reconnaissance or security phases ends (see figure 2-1, and figure 2-2, page 2-8).



Legend: FSC = forward support company, MGS = mobile gun system, PAA = position area for artillery, TAC = tactical command post, TOC = tactical operations center, RTE = route, SW = southwest.

Figure 2-1. SBCT weapons troop dispersed in reconnaissance and security tasks



Legend: CP = command post (main), FSC = forward support company, NAI = named area of interest, PAA = position area for artillery, TAC = tactical command post, SW = southwest

Figure 2-2. SBCT weapons troop pure in reconnaissance and security tasks

2-36. Advantages for the SBCT in this formation include but are not limited to:

- More firepower forward in the SBCT formation.
- The ability to identify and engage armored enemy formations early reducing the time from sensor to shooter to neutralize the enemy.
- The ability to break contact (range and firepower) if the Cavalry squadron becomes decisively engaged.
- Allows the scout element to remain stealthy and the SBCT weapons troop element to engage to target at long range.
- Provides the Cavalry squadron overmatch with firepower in the counter reconnaissance fight.

- The ability to fight for information if needed.
- The ability to seize and retain key terrain METT-TC dependent.
- Allows the weapons troop to establish conditions for follow on forces such as the Infantry battalion. Sets the conditions far forward in advance preventing the enemy's ability to disrupt the main effort.

2-37. Disadvantages for the SBCT in this formation include but are not limited to:

- Compromising the main firepower of the SBCT potentially leaving the Infantry Battalions with less capability at the SBCT's decisive point.
- The additional firepower may influence the Cavalry squadron commander to issue different engagement criteria encouraging the Cavalry formation for engage more enemy.
- The logistics package for the assigned forward support company (FSC) may not support the SBCT weapons troop with specialty skills such as ammunition handling, TOW and 105mm main gun repair and maintenance.
- The task organization change may compromised due to METT-TC factors.

PREPARE

2-38. Preparation is simultaneous with planning for the SBCT weapons troop during the reconnaissance and security phase. Every Soldier must be gainfully employed in either conducting analysis, coordination with other elements in support of planning; or they must conduct pre-combat checks, acquire necessary classes of supply, or maintenance. Priorities of work and standard operating procedures must be efficient during this phase in order to gain and maintain initiative.

2-39. The final actions of preparation include rehearsals. At a minimum, combined arms rehearsal, medical evacuation and vehicle recovery should be rehearsed by the SBCT weapons troop and its elements. Focus, tempo, engagement and displacement criteria must be stated, refined, and confirmed by participating members. Intelligence updates will be continuous throughout the preparation phase and final incorporation into the plan can occur during the rehearsal.

EXECUTE

2-40. Execution phase begins with movement to the line of departure for the operation. It culminates upon either a transition to another phase of the SBCT operation, task organization change, changes in the enemy situation or operating area, achievement of the reconnaissance objectives, or directed guidance by the SBCT commander. During the reconnaissance the SBCT weapons troop will follow and support the Cavalry squadron with long range direct fire weapon systems capable of acquiring and engaging targets. The SBCT weapons troop organizes itself according to the higher echelons reconnaissance technique.

2-41. There are two reconnaissance techniques commanders employ to answer information requirements: reconnaissance push and reconnaissance pull. Commanders employ these techniques based on their level of understanding of the operational environment combined with the time available to refine their understanding. In selecting one technique over the other, the commander considers the following:

- Degree of the situational understanding of the enemy.
- Time available to collect the information.
- Leadership ability of subordinate commanders.
- Proficiency of subordinate units to plan and rapidly react for uncertain situations.

2-42. *Reconnaissance-push* is reconnaissance that refines the common operational picture, enabling the commander to finalize the plan and support shaping and decisive operations. It is normally used once the commander commits to a scheme of maneuver or course of action (FM 3-90-2). Reconnaissance push is used when commanders have a relatively thorough understanding of the operational environment. In these cases commanders 'push' reconnaissance assets into specific portions of their areas of operation to confirm, deny, and validate planning assumptions impacting operations. Reconnaissance push emphasizes detailed, well-rehearsed planning.

2-43. *Reconnaissance-pull* is reconnaissance that determines which routes are suitable for maneuver, where the enemy is strong and weak, and where gaps exist, thus pulling the main body toward and along the path

of least resistance. This facilitates the commander's initiative and agility (FM 3-90-2). Reconnaissance pull is used when commanders are uncertain of the composition and disposition of threat forces in their areas of operation, information concerning terrain is vague, and time is limited. In these cases, reconnaissance assets initially work over a broad area to develop the enemy situation. As they gain an understanding of enemy weaknesses, they then 'pull' the main body to positions of tactical advantage. Reconnaissance pull knowingly emphasizes opportunity at the expense of a detailed, well-rehearsed plan, and unity of effort. Plans are based on several viable branches or COAs triggered by decision points that reconnaissance assets operate to answer associated commander's critical information requirement. Leaders at all levels must understand and rehearse branches and sequels (see FM 3-98 for more information).

ASSESS

2-44. Assessment is constant during a reconnaissance. It occurs at the same time as execution and does not end until a change of mission is executed. As part of the assessment the information gained from the reconnaissance is analyzed and shared to feed the SBCT's intelligence process to generate SBCT commander decisions.

SECTION II – SECURITY

2-45. *Security operations* are those operations undertaken by the commander to provide early and accurate warning of enemy operations, to provide the force being protected with time and maneuver space within which to react to the enemy, and to develop the situation to allow the commander to effectively use the protected force (ADRP 3-90). Security operations enable the commander to detect enemy operations, protect another unit, and develop the situation. Security operations include reconnaissance aimed at reducing terrain and enemy unknowns; gaining and maintaining contact with the enemy to ensure continuous information collection; and providing early and accurate reporting of combat information to the protected force. Security forces orient in any direction from a stationary or moving force.

FUNDAMENTALS OF SECURITY OPERATIONS

2-46. The five fundamentals of security operations are—

- Provide early and accurate warning.
- Provide reaction time and maneuver space.
- Orient on the force, area, or facility to be protected.
- Perform continuous reconnaissance.
- Maintain enemy contact.

PROVIDE EARLY AND ACCURATE WARNING

2-47. The security force provides early and accurate warning by detecting the threat force quickly and reporting combat information accurately to the commander. Early warning of threat activity provides the commander with the time, space, and information he needs to retain the tactical initiative and to choose the time and place to concentrate against the enemy. Placement of communication specifically retransmission stations is vital to establishing long-range communication with higher and adjacent units. At a minimum, the security force should operate far enough from the main body to prevent enemy ground forces from observing or engaging the main body with direct fire. The use of ATGM and MGS optics particularly with the thermal images can enhance long range observation.

PROVIDE REACTION TIME AND MANEUVER SPACE

2-48. The security force operates as far from the protected force as possible within supporting range of the protected force, consistent with mission variables. Increased distance, coupled with effective communications, will yield greater reaction time and maneuver space for the protected force commander. The security force fights as needed to gain and retain adequate time and space for the protected force commander, allowing him to maneuver and concentrate forces to counter the threat.

ORIENT ON THE FORCE, AREA, OR FACILITY TO BE PROTECTED

2-49. The security force focuses all its actions on protecting the secured force or facility and providing maximum early warning of threat activity. It operates between the main body and known or suspected enemy units. The security force moves as the main body moves and orients on its movement. The security force commander has to know the main body's scheme of maneuver and maneuver his force so it remains between the main body and the enemy. The value of terrain occupied by the security force depends on the operational area security it provides to the main body commander.

PERFORM CONTINUOUS RECONNAISSANCE

2-50. Security comes in large part from knowing as much as possible about the threat and terrain within the assigned AO. This detailed knowledge results from ongoing, focused reconnaissance that aggressively and continuously reconnoiters key terrain; seeks the location, composition, and disposition of the threat; and attempts to determine the threat's COA early. Stationary security forces use combinations of observation posts (OPs), patrols, and other information collection assets to perform continuous reconnaissance. Moving security forces accomplish this fundamental by performing area-, zone-, or route-reconnaissance in conjunction with temporary OPs and battle positions (BPs).

MAINTAIN ENEMY CONTACT

2-51. Once gained, contact is not broken unless otherwise directed. The individual or sensor that first makes contact does not have to maintain it. However, the security force, collectively, maintains contact. The security force continuously conducts information collection on the threat's activities, and prevents the threat from surprising the main body or endangering adjacent friendly forces.

2-52. The fundamentals of maintaining enemy contact require the following:

- Continuous contact (visual, electronic, sensor, or a combination).
- Capability to use direct and indirect fires.
- Freedom to maneuver.
- Depth (of observers in time and space).

FORMS OF SECURITY

2-53. Leaders categorize security operations in terms of the degree of security provided and the amount of combat power required. (Refer to FM 3-90-2 for more information.) There are five primary forms of security operations :

- *Screen* is a security task that primarily provides early warning to the protected forces.
- *Guard* is a security task whose primary task is to protect the main body by fighting to gain time while also observing and reporting combat information and preventing enemy ground observation of and direct fire against the main body. Units conducting a guard mission cannot operate independently because they rely upon fires and close combat forces assets of the main body.
- *Cover* is a security task to protect the main body by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct fire against the main body. Unlike a screening or guard force, the covering force is a self-contained force capable of operating independently of the main body.
- *Area security* is a security task conducted to protect friendly forces, installations, routes, and actions within a specific area.
- *Local security* is a security task that includes close in security activities conducted near a unit to prevent surprise by the enemy (ADRP 3-90).

2-54. The SBCT weapons troops supports screens and guards with its task organized forces and participates in area security and cover as part of a larger force. The screen, guard, and cover, respectively contain increasing levels of combat power and provide increasing levels of security for the main body. However, the more combat power in the security force means less for the main body.

SCREEN

2-55. A screen primarily provides early warning by observing, identifying, and reporting enemy actions. It provides the least amount of security of any security mission. Generally, a screening force engages and destroys enemy reconnaissance elements within its capabilities, but otherwise fights to prevent from being decisively engaged or fixed.

2-56. A screen is appropriate to cover gaps between forces, the exposed flanks or rear of stationary and moving forces, or the front of a stationary formation. Units use screens when the likelihood of enemy contact is remote, the expected enemy force is small, or the friendly main body needs only a minimum amount of time, once it is warned, to react effectively. A screening force primarily uses indirect fires or close air support (CAS) to destroy enemy reconnaissance elements and slow the movement of other enemy forces. Units usually accomplish screening by establishing a series of OPs and conducting patrols to ensure adequate surveillance of the assigned AO.

2-57. Screen tasks are to—

- Allow no enemy ground element to pass through the screen undetected and unreported.
- Maintain continuous surveillance of all avenues of approach into the designated area under all visibility conditions.
- Destroy or repel all enemy reconnaissance within its capabilities.
- Locate the lead elements of each enemy advance guard and determine its direction of movement in a defensive screen.
- Maintain contact with enemy forces and report any activity in the AO.
- Maintain contact with the main body and any security forces operating on its flanks.
- Impede and harass the enemy within its capabilities while displacing.

2-58. The SBCT weapons troop normally conducts a screen mission pure or split with the Cavalry squadron. Normally, the Cavalry squadron and weapons troop will task organize scout sections with ATGM and MGS sections. They will use a technique known as “hunter killer teams.” Scouts sections will establish OP’s in depth along a screen line and position ATGM and MGS in positions of tactical advantage. Upon identification of enemy elements meeting engagement criteria; the scouts will alert the ATGM and MGS elements to engage from specific positions in the security area. The information passed to ATGM and MGS elements will be assessed by their leaders as to the best means to engage the target limiting their exposure and ensuring its destruction.

2-59. Counterreconnaissance is an essential component of security operations. The security force should deny the enemy information and intelligence concerning the friendly force. The security force accomplishes this by destroying, defeating, or deceiving enemy reconnaissance units or sensors according to engagement criteria and the rules of engagement (ROE).

GUARD

2-60. A guard differs from a screen in that a guard force contains sufficient combat power to defeat, cause the withdrawal of, or fix the lead elements of an enemy ground force before it can engage the main body with direct fire. A guard force uses all means at its disposal, to include decisive engagement, to prevent the enemy from penetrating to a position where it could observe and engage the main body. It operates within the range of the main body’s fire support weapons, deploying over a narrower front than a comparable-size screening force to permit concentrating combat power.

2-61. The three types of guard operations are as follows: advance, flank, and rear guard. The commander can assign a guard mission to protect either a stationary or a moving force.

- The advance guard is responsible for clearing the axis of advance or designated portions of the AO of enemy elements. This allows the main body to move unimpeded, prevents the unnecessary delay of the main body, and defers the deployment of the main body for as long as possible. An advance guard for a stationary force is defensive in nature. It defends or delays according to the main body commander’s intent. An advance guard for a moving Stryker force is offensive in

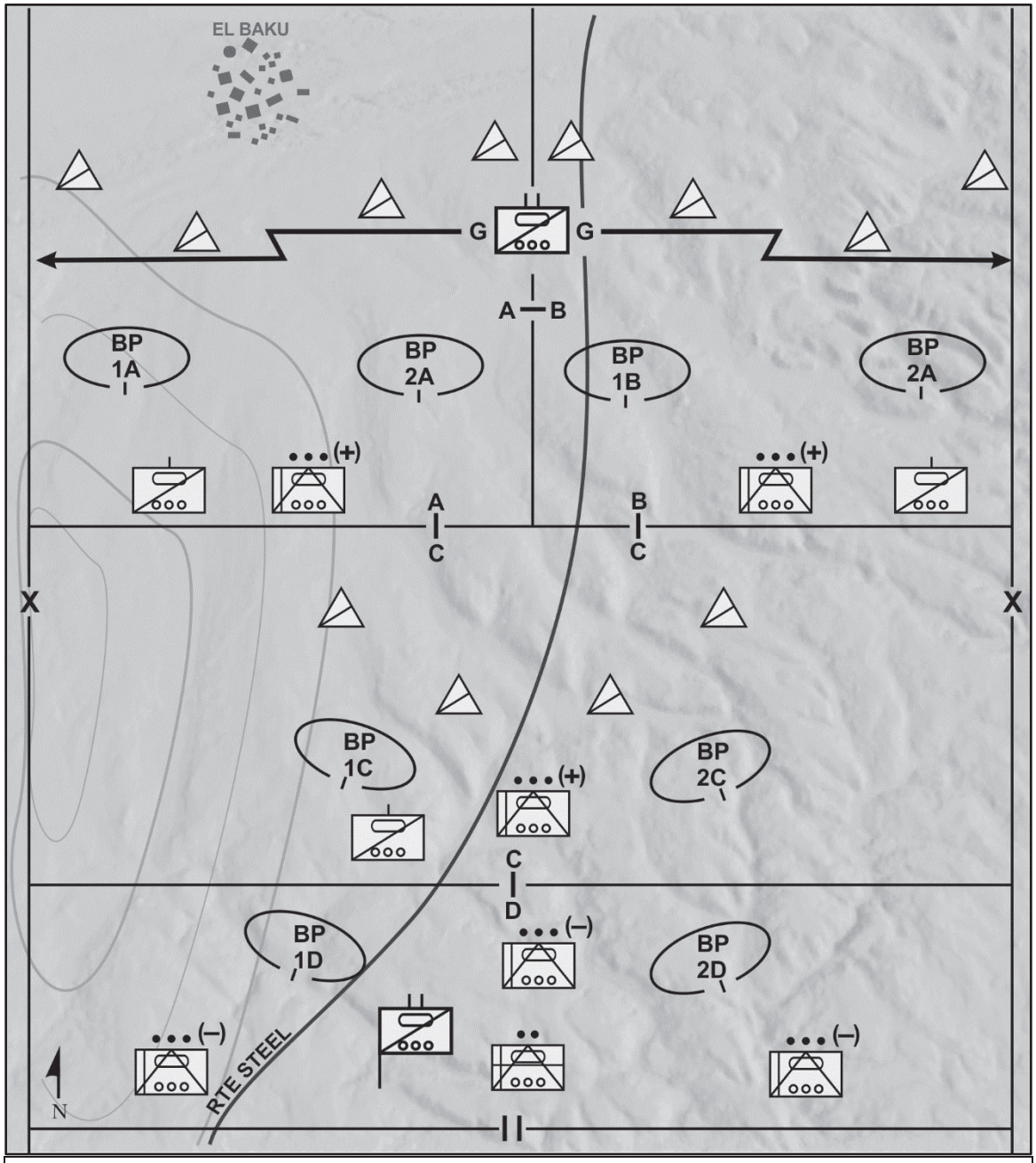
nature and normally conducts a movement to contact and tries to initiate contact with dismounted elements.

- A flank guard protects against an exposed flank of the main body. The commander of the main body designates the general location of the flank guard's positions. AOs assigned to the flank guard should be sufficiently deep to provide early warning and reaction time. However, flank guards remain within supporting range of the main body.
- The rear guard protects the exposed rear of the main body. This occurs during offensive tasks when the main body breaks contact with flanking forces or during a retrograde. The commander may deploy a rear guard behind both moving and stationary main bodies. The rear guard for a moving force displaces to successive BPs along phase lines or delay lines in depth as the main body moves. The nature of enemy contact determines the exact movement method or combination of methods used in the displacement (successive bounds, alternate bounds, and continuous marching).

2-62. A unit conducting a guard performs certain tasks within its capabilities unless ordered otherwise. If a unit does not have the time or other resources to complete all of these tasks, it informs the commander assigning the mission of the shortfall and requests guidance on which tasks to complete or the priority of tasks. After starting the guard, if the unit determines that it cannot complete an assigned task, such as cause deployment of the enemy advance guard, it reports this to the commander and awaits further instructions.

2-63. The SBCT weapons troop normally conducts a guard mission pure with the Cavalry squadron. (See figure 2-3, page 2-14.) Normally, the Cavalry squadron and troop will organize in depth. They will establish a series of OP's to identify enemy moving within the security area. The will pass the information to the weapons troop to mass at point of tactical advantage to engage the enemy. The weapons troop can also expect to respond to scout elements that have been engaged and are endanger of becoming fixed.

2-64. The Cavalry squadron is most vulnerable when collapsing the guard. The weapons troop will be used to provide overwatch. It is recommended that weapons troop elements use bounding overwatch to cover elements during this task.



Legend: BP = battle position, RTE = route, N = north

Figure 2-3. SBCT weapons troop pure in a guard

COVER

2-65. The SBCT weapons troop is not structured to conducting a cover on its own. A covering force is a self-contained force capable of operating independently of the main body, unlike a screening or guard force to conduct the cover task (FM 3-90-1). A covering force, or portions of it, often becomes decisively engaged with enemy forces. Therefore, the covering force has to have substantial combat power to engage the enemy and accomplish its mission. A covering force develops the situation earlier than a screen or a guard force. It fights longer and more often and defeats larger enemy forces.

2-66. While a covering force provides more security than a screen or guard force, it requires more resources. A covering force accomplishes all the tasks of screening and guard forces. A covering force for a stationary force performs a defensive mission, while a covering force for a moving force generally conducts offensive actions. A covering force normally operates forward of the main body in the offense or defense, or to the rear for a retrograde.

AREA SECURITY

2-67. Area security operations may be offensive or defensive in nature. They focus on the protected force, installation, route, or area. Forces to protect range from echelon headquarters through artillery and echelon reserves to the sustaining base. Protected installations can be part of the sustaining base or they can constitute part of the area's infrastructure. Areas to secure range from specific points (bridges and defiles) and terrain features (ridge lines and hills) to large population centers and their adjacent areas.

2-68. Area security operations can require the execution of a wide variety of supporting operations and tasks. SBCT weapons troop conducts area security as part of a larger force. They can be employed as part of the reserve, in support of areas, or in areas that are suited for long range engagements.

2-69. When conducting an area security mission, the SBCT weapons troop prevents threat ground reconnaissance elements from directly observing friendly activities within the area being secured. It prevents threat ground maneuver forces from penetrating the defensive perimeters established by the commander. The SBCT weapons troop can execute security tasks through ambushes and preemptive strikes proactively and with greater precision.

2-70. An analysis of mission variables enables the commander to determine the augmentation for the SBCT weapons troop, with particular consideration given to the need for aviation, engineers, and artillery. Early warning of threat activity is paramount when conducting area security missions, and provides the commander with time and space to react to threats. Proper intelligence analysis and information collection planning, coupled with dismounted/mounted patrols and aerial reconnaissance, is essential to successful operations, especially when securing fixed sites. Failure to conduct continuous reconnaissance can create a vulnerable seam through which the enemy can execute an infiltration or attack.

2-71. During area security operations civilians will be present. Therefore, leaders ensure Soldiers understand current ROE. However, leaders are always responsible for protecting their forces and consider this responsibility when applying the ROE. Restrictions on conducting operations and using force need to be explained clearly and understood by everyone. Soldiers need to understand their actions, no matter how minor, may have far-reaching positive or negative effects. They need to realize both friendly or hostile media and adversary information activities can quickly exploit their actions, especially the manner in which they treat the civilian population.

2-72. When a perimeter is not feasible, the SBCT weapons troop secures the area by establishing a presence and conducting operations throughout the area. The SBCT weapons troop establishes perimeters around base camps, critical infrastructure, and high-value assets, while other units conduct operations to establish presence, provide security, and conduct stability tasks. The troop can position a reaction force between several secured perimeters. Other missions or tasks in support of area security may include the following:

- Screens along zones of separation or other designated areas.
- Route or convoy security of critical lines of communication.
- Checkpoints to monitor or control movement.

LOCAL SECURITY

2-73. Local security includes any local measure(s) taken by units to prevent surprise by the enemy. It involves avoiding detection by the enemy or deceiving the enemy about friendly positions and intentions. Local security is an important part of maintaining the initiative. The requirement for maintaining local security is an inherent part of all operations. Units use both active and passive measures to provide local security. Active measures include OPs, patrols, and conducting stand-to. Passive measures include camouflage, noise and light discipline, and sensors to maintain surveillance over the area immediately around the unit.

2-74. The SBCT weapons troop is responsible for maintaining its own security at all times. ATGM and MGS vehicles are vulnerable from attacks on its rear and sides from Infantry. The weapons on these vehicles have arming distances on their main weapon systems, as well as limitations on the angles that their weapons depress or elevate. Platoons and sections should establish mutually supporting positions for Stryker vehicles for 360 degree local security. In addition to maintaining security for its own elements, the SBCT weapons troop may implement local security for other units as directed by the SBCT task force commander. Examples of such situations include, but are not limited to, the following:

- Provide security for engineers as they emplace/clear obstacles or construct survivability positions.
- Establish mounted OPs to maintain surveillance of enemy infiltration and reconnaissance routes.
- Conduct patrols to cover gaps in observation and to clear possible enemy OP from surrounding areas.
- Supply and logistical operations.

SECTION III – RECONAISSANCE HANDOVER AND TRANSITION

2-75. Reconnaissance and security handover is an event that occurs in the SBCT's operation that causes a shift in the main effort. If the reconnaissance and security phase is successful it will set the condition for follow forces to conduct offensive or defensive tasks. The SBCT weapons troop and its subordinate platoons should prepare to reorganize under control of a follow on task force as SBCT transitions phases of the operation.

2-76. To initiate the reconnaissance and security handover; the Cavalry squadron contacts the lead element from the task force behind it and begins the linkup process and information sharing. Normally the scout platoon of the SBCT Infantry battalion is the first element to conduct the linkup with the Cavalry squadron. During this process an assessment is conducted between the SBCT commander and staff, the Cavalry squadron, and the follow on SBCT task force to determine if operational variables and criteria are suitable for the transition. If so then guidance and operational control SBCT weapons troop and its ATGM and MGS platoons are given over to the SBCT task force. This element oversees the task organization change and handover until complete.

2-77. A decision point and a conditions check to assess should be made by the SBCT commander supported by information from both the Squadron and SBCT staff to determine if it is prudent. When they transition to the main part of an offense or defense coordination must occur between the SBCT weapons troop and the SBCT Infantry battalion. A linkup point, phase line, or coordination point graphic control measure should depict where the handover process occurs. Additionally a refuel and rearm on the move before the ATGM and MGS transfer units is ideal.

TRANSITION TO OFFENSE

2-78. The SBCT weapons troop transitions to the offense after the Cavalry squadron and the Infantry battalion have completed reconnaissance handover. Key to the handover is the coordination of their resupply, security, and acknowledgement between the losing element (Cavalry squadron), gaining element (Infantry battalion), and the weapons troop.

2-79. The SBCT weapons troop can participate in the transition via two techniques. The first is to remain in place preferably overwatching a named area of interest or target area of interest or facilitating the Infantry elements maneuver to the objective. The second may require a physical linkup. This is likely during an SBCT movement to contact attack when friendly forces have not made contact with the enemy force or a deliberate

attack that requires planning and coordination. Using this technique it is best to linkup in secured areas and the having the SBCT weapons troop move to a position that the SBCT Infantry battalion or one of its subordinate elements secure. From this position it is easier to task organize into smaller elements.

TRANSITION TO DEFENSE

2-80. The SBCT weapons troop transitions to the defense after the Cavalry squadron collapses the screen or guard, identifies an enemy force of considerable strength, or the SBCT conducts a retrograde. Keys to their transition are the same as in offense.

2-81. The SBCT weapons troop can participate in the transition via two techniques. The first is to remain in place and Infantry elements move to their position and establish a defense. The second is for the SBCT weapons troop to move to the SBCT Infantry battalion. Using this technique the SBCT weapons troop is vulnerable during their movement from fratricide as well from enemy contact. It is recommended that an element from the gaining unit links up and guides them to their positions in the defense.

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Chapter 3
Offense

Offensive tasks lets the commander seize the initiative (choose when and where to fight), retain the initiative, and effectively exploit his troop's strengths while exploiting the enemy's weakness. The commander may conduct offensive tasks to deprive the enemy of resources, seize decisive terrain, deceive or divert the enemy, collect information, or fix an enemy in position. The SBCT weapons troop and its subordinate elements conduct offensive tasks as part of a larger force often task organized to company/team and below size units. The SBCT weapons troops and its subordinate platoons assist the Infantry element's engagement in close combat. This chapter covers basics of the offense, common offensive planning considerations, movement to contact, attack, and transitions.

SECTION I – BASICS OF THE OFFENSE

3-1. The main purpose of the offense is to defeat, destroy, or neutralize the enemy force. Additionally, commanders conduct offensive tasks to secure decisive terrain, to deprive the enemy of resources, to gain information, to deceive and divert the enemy, to hold the enemy in position, to disrupt the enemy's attack, and to set up the conditions for future successful operations. (Refer to ADRP 3-90 for more information.)

CHARACTERISTICS OF THE OFFENSE

3-2. The main feature of offensive tasks is taking and maintaining the initiative. The aim of the commander in the offense is to defeat the enemy. Audacity, concentration, surprise, and tempo characterize the conduct of offensive tasks and are components of initiative. Initiative—within the higher commander's intent, combined with maneuver and fires, makes possible the conduct of decisive offensive tasks. (Refer to ADRP 3-90 for more information.)

AUDACITY

3-3. Audacity is achieved by boldly executing a simple plan of action. Commanders must exercise audacity by developing bold, inventive plans that produce decisive results while violently applying combat power. Commanders understand when and where to take risks, avoid hesitation when executing their plan in order to seize, retain, or exploit the initiative.

CONCENTRATION

3-4. Concentration is the massing of overwhelming effects of the combined arms team to achieve a single purpose. The troop commander must avoid set patterns or obvious movements that would indicate the timing or direction of the attack. He designates, sustains, and shifts the main effort as necessary. Subsequent volleys beyond the initial engagement may be against an enemy that has identified your location. Each vehicle may only get a single shot before displacing, and so maximizing the effects of an engagement is critical. However, this does not mean all fires must be initiated simultaneously. Alternating fires by position and weapons platform type can be effective in exploiting enemy reaction time.

SURPRISE

3-5. Commanders achieve surprise by striking the enemy at a time or place, or in a manner, for which he is unprepared, by assessing the enemy commander's intent and denying that commander the ability to gain situational understanding. Firing from concealed position simultaneously allows the weapons troop to

capitalize on achieving surprise. Displacing immediately after the engagement keeps the enemy confused and disoriented allowing for multiple limited engagements.

3-6. The enhanced digital communications and information systems found at the troop level facilitate the ability concentration of synchronized combat power against the enemy by quickly converging on identified targets. The SBCT weapons troop provides the most effective concentration when it engages targets from multiple positions surrounding a single engagement area.

RAPID TEMPO

3-7. Tempo is a combination of speed and mass that creates pressure on the enemy. Commanders build the appropriate tempo to provide the necessary momentum for attacks to achieve their objectives.

3-8. Controlling or altering tempo, deliberate or rapid, is necessary to retain the initiative. At the tactical level, a rapid tempo focuses on key pieces of information, terrain, entails a small number of tasks, and allows attackers to quickly penetrate barriers and defenses and destroy enemy forces in depth before they can react.

3-9. Commanders adjust the tempo to achieve synchronization. Speed is preferred in order to keep the enemy off balance, but establishing the conditions for decisive actions may require the tempo to be slowed as the pieces are set in place. Once ready, the tempo is increased, and the action takes place rapidly.

OFFENSIVE TASKS

3-10. The four primary offensive tasks are movement to contact, attack, exploitation, and pursuit. The SBCT weapons troop can participate in an exploitation or pursuit as part of a larger force by conducting movement to contact or attack as part brigade and higher echelon formations. (Refer to FM 3-90-1 for more information.)

SEQUENCE OF THE OFFENSE

3-11. This chapter discusses executing movement to contact and attack offensive tasks using the following methodology:

- Gain and maintain enemy contact.
- Disrupt the enemy.
- Fix the enemy.
- Maneuver.
- Follow through.

3-12. This sequence provides a framework to discuss the execution of an offensive task and is not the only method a commander may use to achieve success. The steps normally overlap one another during the conduct of offense and the first three are typically supporting efforts, while maneuver is the main effort. Follow through is a sequel or a branch to the plan based on the current situation.

FORMS OF CONTACT

3-13. In both offensive and defensive tasks, contact occurs when a member of the SBCT weapons troop encounters a situation that requires a lethal or nonlethal response. These situations may entail one or more of the following forms of contact: (Refer to ADRP 3-90 for more information.)

- Visual.
- Direct fire.
- Indirect fire.
- Obstacles.
- Aerial.
- CBRN.
- Electronic warfare.
- Nonhostile.
  - Adversary.
  - Supporters.
  - Neutrals.

ACTIONS ON CONTACT

3-14. The SBCT weapons troop should execute actions on contact using a logical, well-organized process of decision making and action that entails the following four steps: (Refer to FM 3-90-1 for more information.)

- Deploy and report.
- Evaluate and develop the situation and COA.
- Choose a COA.
- Execute the selected COA.

3-15. This four-step process, with some steps often conducted simultaneously, is not intended to generate a rigid, lockstep response to the enemy. Rather, the goal is to provide an orderly framework that enables the SBCT weapons troop and its platoons to survive the initial contact, and then apply sound decision making and timely actions to complete the operation. Ideally, the company sees the enemy (visual contact) before being seen by the enemy; it then can initiate physical contact on its own terms by executing the designated COA.

3-16. Once the lead elements of a force encounter the enemy, they conduct actions on contact. The unit treats obstacles like enemy contact, and assumes that the obstacles are covered by fire. The unit's security force gains tactical advantage over an enemy force by using tempo and initiative to conduct actions on contact. Doing so allows the unit to gain and maintain contact without becoming decisively engaged. How quickly the unit develops the situation is directly related to its security. This tempo is directly related to the unit's use of well-rehearsed SOPs and drills.

3-17. Commanders understand that properly executed actions on contact require time at both platoon and company levels. To develop the situation fully, a platoon or company may have to execute flanking movement; conduct reconnaissance; or call for and adjust indirect fires. Each of these activities requires time. The commander balances the time required for subordinate elements to conduct actions on contact with the need of the company or battalion to maintain momentum.

Deploy and Report

3-18. Events that occur during initial contact depend on whether the contact is expected or unexpected. The first step of actions on contact concludes with the unit deployed, the enemy suppressed or destroyed, and the commander sending a contact report to battalion headquarters. The following paragraphs examine some variables the company commander faces in both contact situations.

Expected Contact

3-19. If the commander expects contact (based on reports or through his own reconnaissance or by other means), he will already have deployed the company by transitioning to the bounding overwatch movement technique. For the weapons troops and its platoons this likely occurs when supporting Infantry and Cavalry formation and responding to contact those units have already made. If the troop is alert to the likely presence of the enemy, it has a better chance of establishing first visual contact and then physical contact on its own terms. Contact, either visual or physical, usually is made by an overwatching or bounding platoon, which initiates the actions on contact. In a worst-case scenario, a previously undetected (but expected) enemy element may engage the platoon. The platoon in contact would conduct a battle drill for its own survival and then initiate actions on contact.

3-20. Deployment in expected contact requires final coordination with the friendly element if responding to Infantry or Cavalry elements to ensure they are clear of surface danger zones (SDZs) and friendly fires. This normally occurs en route. Accurate spot reports of enemy direction and description as well as fire control measures alleviate the confusion (see chapter 9 of this publication for more information).

Unexpected Contact

3-21. In some cases, the SBCT weapons troop makes unexpected contact with the enemy while using traveling or traveling overwatch. The element in contact or, if necessary, the entire troop may deploy using battle drills to survive the initial contact. When making unexpected contact, the platoon in contact immediately sends a contact report. The most efficient way to provide situational understanding and update the COP to the task force is through digital reports sent by platoons in contact. The SBCT weapons troop and

platoons develop SOPs that harness the capabilities of JCR/BFT while destroying the enemy force and protecting the rest of the force.

3-22. The SBCT weapons troop is most vulnerable to unexpected contact with enemy forces at close range. To avoid the likelihood of occurrence elements of the weapons troop should follow intermix or follow Infantry and Cavalry formations. The same fire control coordination and considerations should be taken into account as expected contact. Vehicle crews do have the inherent right to self-defense and must do so in such matters. Infantry and Cavalry units must be aware of this when working with one another.

Evaluate and Develop the Situation

3-23. The commander evaluates the situation and continues to develop it while the SBCT weapons troop deploys. The commander quickly gathers as much combat information as possible, either visually or more often, through reports of the platoon(s) in contact. He analyzes the combat information to determine critical operational considerations, to include the following:

- The size of the enemy element.
- Location, composition, activity, and orientation of the enemy force.
- The impact of obstacles and terrain.
- Enemy capabilities.
- Probable enemy intentions.
- How to gain positional advantage over the enemy.
- The friendly situation (location, strength, and capabilities).
- Possible friendly COA to achieve the specified end state.

3-24. The SBCT weapons troop commander sends a report to task force once he determines the size of the enemy force his unit encountered. However, after evaluating the situation, the commander may discover that he does not have enough information to identify the necessary operational considerations. To make this determination, he further develops the situation according to the task force commander's intent, using a combination of the following capabilities:

- Reconnaissance; employing platoons or unmanned aircraft system (UAS).
- Maneuver (this includes flanking maneuver to gain additional information by viewing the enemy from another perspective).
- Indirect fire.
- Reconnaissance by fire.

Choose a Course of Action

3-25. After developing the situation and determining that he has enough information to make a decision, the troop commander selects a COA that meets the requirements of the task force commander's intent and is within the troop's capabilities.

Execute the Selected Course of Action

3-26. The troop transitions to maneuver when executing a COA. It continues to maneuver throughout execution, either as part of a tactical mission task or to advance while in contact to reach the point in the AO from which it executes its tactical mission task. The weapons troop can employ a number of tactical mission tasks as COAs, any of which may be preceded (or followed) by additional maneuver. Some of these tasks are as follows:

- Attack by fire.
- Support by fire.
- Create a breach point or Reduce obstacle.
- Bypass.
- Disengagement.
- Exfiltrate.
- Follow and assume.
- Follow and support.

3-27. More information becomes available to the troop commander as execution continues. The commander may have to alter his COA during execution based on the emerging details of the enemy situation. (For example, as the SBCT weapons troop maneuvers to destroy what appears to be a motorized Infantry platoon, it discovers an additional mechanized Infantry platoon and tank platoon.) The commander analyzes and develops the new situation. He selects an alternate COA, such as establishing a support by fire (SBF) position to support another company's maneuver against the newly discovered enemy force.

Recommend a Course of Action to the Higher Commander

3-28. Once the troop commander selects a COA, keeping in mind the commander's intent, he informs the task force commander, who has the option of disapproving it based on its impact on the overall mission. Unit standard operating procedure (SOP) may provide automatic approval of certain actions to avoid delay.

FORMS OF MANEUVER

3-29. The commander selects the form of maneuver based on his analysis of METT-TC. The commander then synchronizes the contributions of all warfighting functions to the selected form of maneuver. An operation may contain several forms of offensive maneuver. (Refer to FM 3-90-1 for more information.) The six forms of maneuver are as follows:

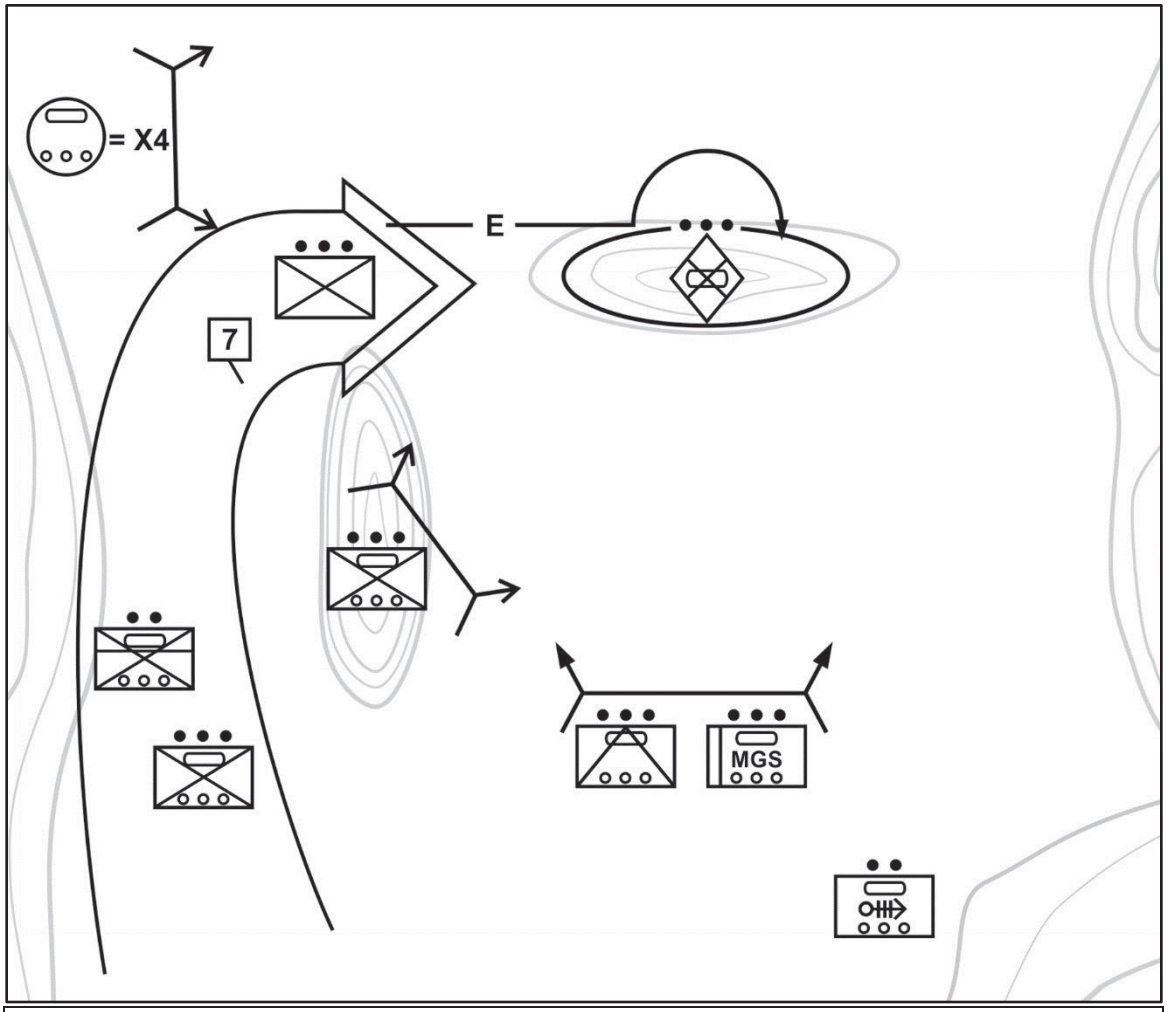
- Envelopment.
- Flank attack.
- Turning movement.
- Frontal attack.
- Penetration.
- Infiltration.

ENVELOPMENT

3-30. *Envelopment* is a form of maneuver in which an attacking force seeks to avoid the principal enemy defenses by seizing objectives behind those defenses that allow the targeted enemy force to be destroyed in their established positions (FM 3-90-1). At the tactical level, envelopments reemphasize on seizing terrain, destroying specific enemy forces, and interdicting enemy withdrawal routes. The commander's decisive operation focuses on attacking an assailable flank. Envelopment also produces great psychological shock on the enemy. The attacking force creates an assailable flank if none is available. The four varieties of envelopment are single envelopment, double envelopment, encirclement, and vertical envelopment.

3-31. When operating pure of with the Cavalry squadron the weapons troop and its platoons conduct single envelopment and encirclement. This normally occurs for targets of opportunity or against enemy reconnaissance forces. They destroy enemy forces on or beyond the objective but do occupy for a short amount of time. Occupation of the objective is normally passed off to follow on forces.

3-32. In support of Infantry ATGM and MGS platoons fix an enemy element with support by fires to allow Stryker Infantry to maneuver to a position of advantage at the flank or rear of the enemy. The Infantry dismount and assault the objective from a position of advantage. During the assault the ATGM and MGS must coordinate with the frontline trace of the Infantry element through visual means to prevent fratricide (See figure 3-1, page 3-6).



Legend: MGS = mobile gun system

Figure 3-1. Envelopment

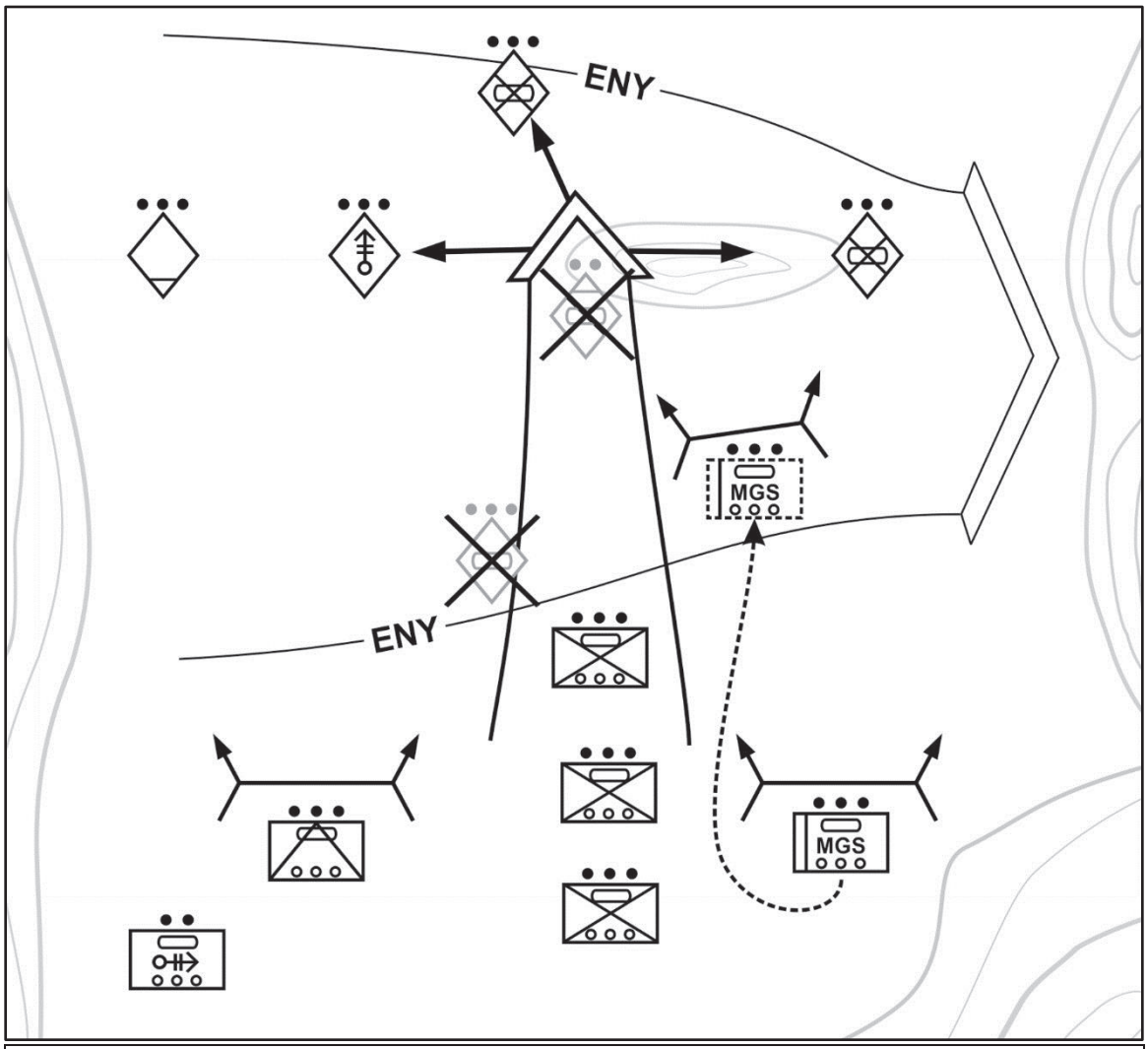
FLANK ATTACK

3-33. A *flank attack* is a form of offensive maneuver directed at the flank of an enemy force (FM 3-90-1). A flank is the right or left side of a military formation and is not oriented toward the enemy. It is usually not as strong in terms of forces or fires as is the front of a military formation. A flank may be created by the attacker through the use of fires or by a successful penetration. A flanking attack is similar to an envelopment but generally conducted on a shallower axis. It is designed to defeat the enemy force while minimizing the effect of the enemy‘s frontally-oriented combat power.

3-34. The primary difference between a flank attack and an envelopment is one of depth. A flank attack is an envelopment delivered squarely on the enemy’s flank. Conversely, an envelopment is a flank attack delivered beyond the enemy’s flank and into their rear area, but short of the depth associated with a turning movement. Smaller-size tactical units, such as maneuver battalions, companies, and platoons, are more likely to conduct flank attacks than larger tactical units. This is largely a result of troop-to-space ratios and sustainment and mission command.

3-35. The SBCT weapons troop conducts flank attacks normally as the decisive operation directed at the flank of the enemy. (See figure 3-2.) They use mission command systems, mobility of their Stryker vehicles, to initiate the flank attack unaware to the enemy normally at their center or rear of their formation. They

capitalize on situations where speed and simplicity are the main factors and, ultimately, keeping the initiative. The main effort normally comprised of MGS initiates the assault on the enemy's flank. This attack is further sustained when followed and supported by Infantry who move to the center and then expand to the far, front and rear of enemy formation. A supporting effort comprised of ATGMs engages the enemy's front allowing the signature of the ATGM fires to be masked during the confusion of battle. Indirect fires using high explosive and smoke mix add to further confusion allowing the Infantry, MGS and ATGM platoons to withdraw respectively.



Legend: ENY = enemy, MGS = mobile gun system

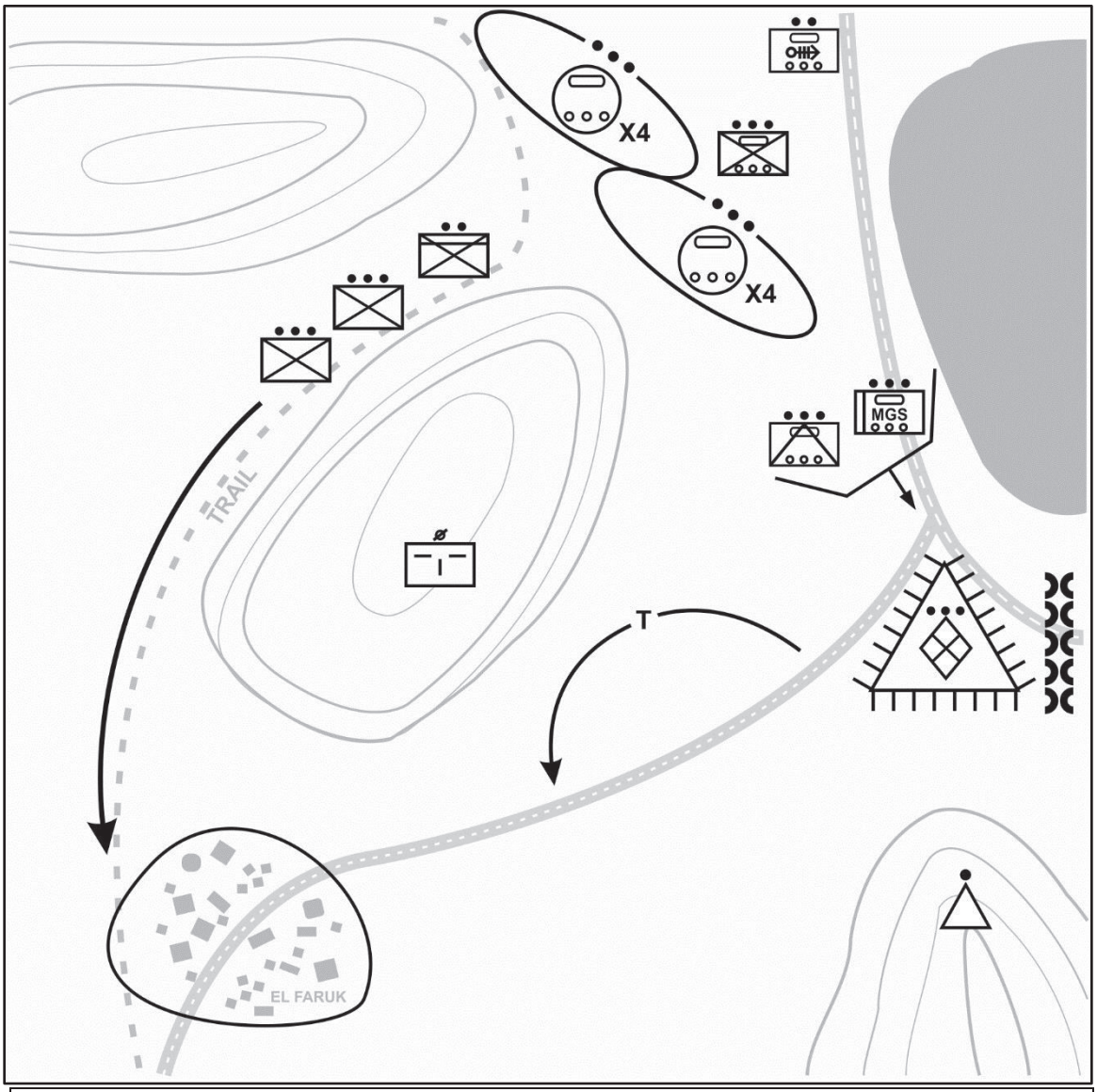
Figure 3-2. Flank attack

TURNING MOVEMENT

3-36. A *turning movement* is a form of maneuver in which the attacking force seeks to avoid the enemy's principle defensive positions by seizing objectives behind the enemy's current positions thereby causing the enemy force to move out of their current positions or divert major forces to meet the threat (FM 3-90-1).

3-37. The SBCT weapons troop uses information sharing through mission command systems with the mobility of the Stryker platform to maneuver in order to seize vital areas in the enemy's support area before the main enemy force can withdraw or receive support or reinforcements. A turning movement differs from envelopment because the force conducting a turning movement seeks to make the enemy force displace from

their current locations. An enveloping force seeks to engage the enemy in their established location from an unexpected direction. This is normally conducted with Infantry and Cavalry units who help secure the objective in a turning movement. (See figure 3-3.)

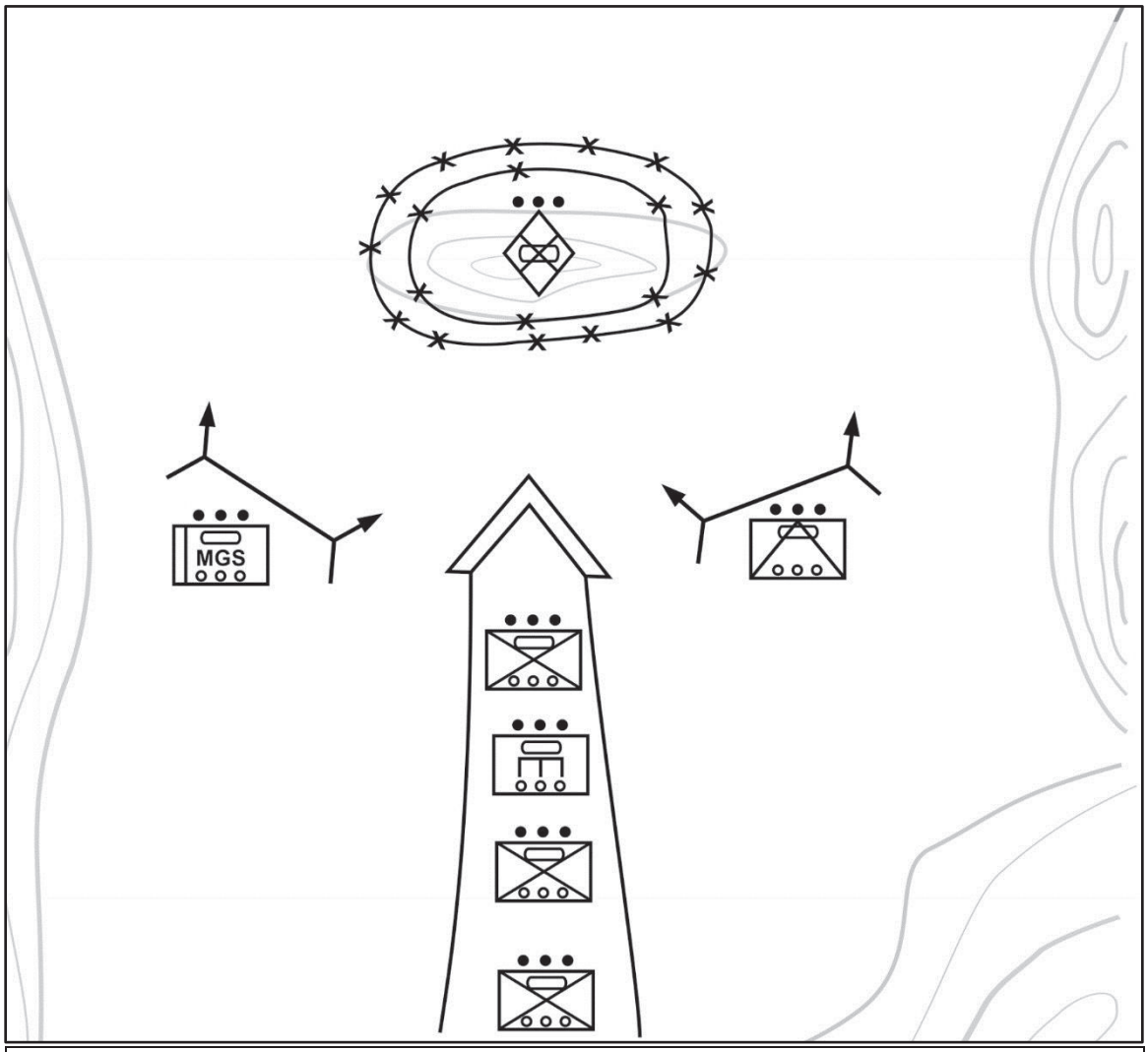


Legend: MGS = mobile gun system

Figure 3-3. Turning movement

FRONTAL ATTACK

3-38. In a *frontal attack* the attacking force destroys a weaker enemy or fixes a larger enemy force in place over a broad front (FM 3-90-1). An attacking force can use a frontal attack to rapidly overrun a weak enemy force. The SBCT weapons troop uses a frontal attack with MGS and ATGM, supported by fires and CAS. Most common is an attack by fire independently or its platoons may conduct a support by fire in support of Infantry. (See figure 3-4.)

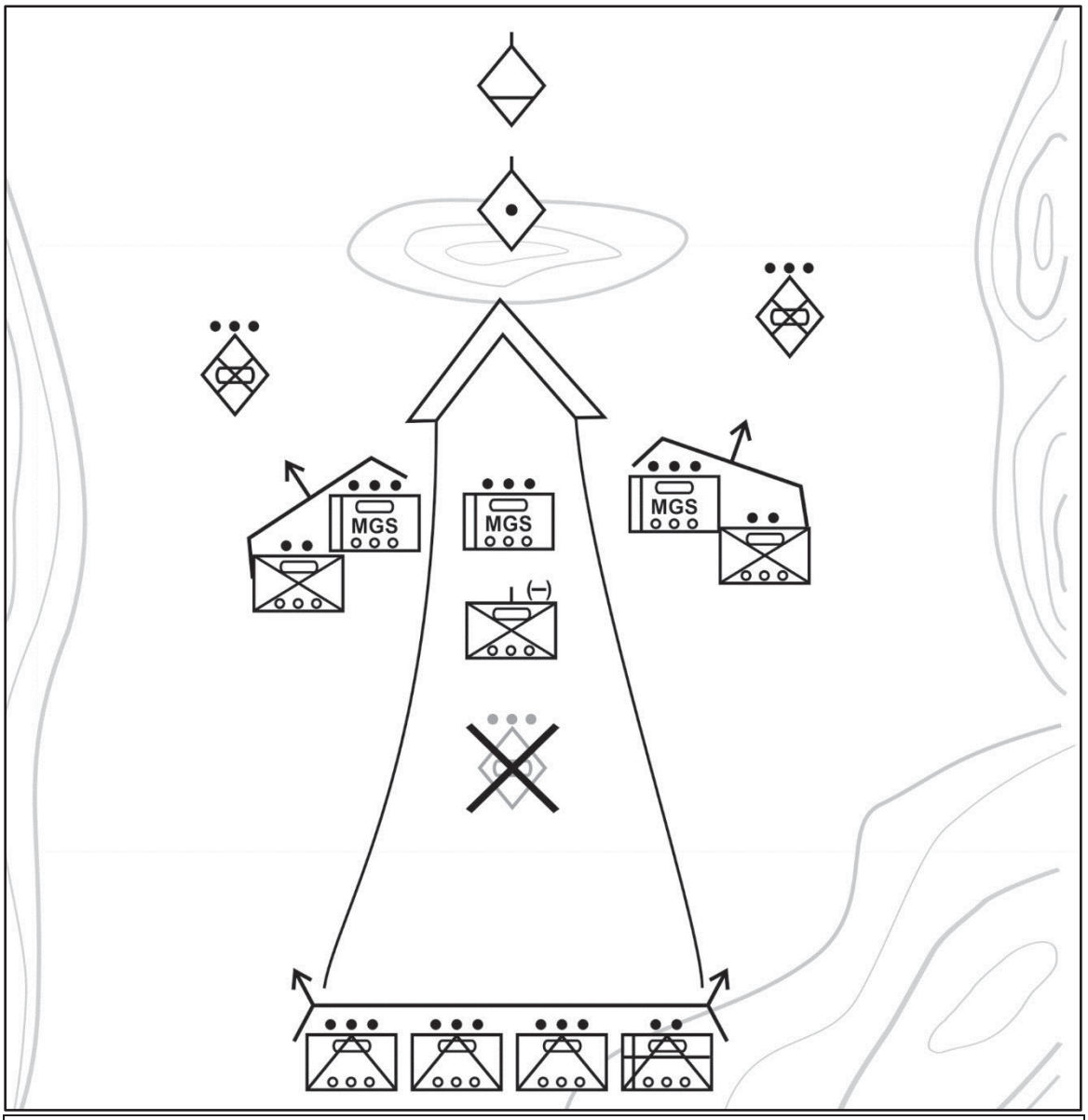


Legend: MGS = mobile gun system

Figure 3-4. Frontal attack

PENETRATION

3-39. A *penetration* is a form of maneuver in which an attacking force seeks to rupture enemy defenses on a narrow front to disrupt the defensive system (FM 3-90-1).The penetration extends from the enemy's main defensive positions through the security area into the enemy support area. The SBCT weapons troop commander employs a penetration when there is no assailable flank, enemy defenses are overextended and weak spots are detected in the enemy's positions, or time pressures do not permit envelopment. They use fires and effects to support maneuvering units. Most common is an attack by fire independently or its platoons may conduct a support by fire in support of Infantry. (See figure 3-5.)



Legend: MGS = mobile gun system

Figure 3-5. Penetration

INFILTRATION

3-40. An *infiltration* is a form of maneuver in which an attacking force conducts undetected movement through or into an area occupied by enemy forces to occupy a position of advantage behind those enemy positions while exposing only small elements to enemy defensive fires (FM 3-90-1). Infiltration occurs by land, water, air, or a combination of means. Moving and assembling forces covertly through enemy positions is time consuming. To infiltrate successfully, the force avoids detection and engagement. Since this requirement limits the size and strength of the infiltrating force—and infiltrated forces alone can rarely defeat an enemy—infiltration is normally used in conjunction with and in support of other forms of maneuver.

COMMON OFFENSIVE PLANNING CONSIDERATIONS

3-41. The warfighting functions are critical tactical activities the commander can use to review, prepare, and execute planning. Synchronization and coordination between the warfighting functions are critical for success. The following paragraphs discuss selected warfighting functions and other additional planning considerations.

MISSION COMMAND

3-42. The commander's mission and intent determine the scheme of maneuver and the allocation of available resources. All planning for offensive tasks address the mission variables of METT-TC. The mission command function of offensive tasks for the SBCT weapons troop include:

- Commander's intent.
- Mission objectives, to include task and purpose, for each subordinate element.
- Scheme of maneuver.
- Location of key leaders.
- Suspected enemy locations and courses of action.
- Courses of action.
- Required control measures/graphics.
- Priorities of fire.
- Bypass criteria.
- Reporting requirements.
- Primary, alternate, contingency, and emergency communications.

3-43. The weapons troop commander will have multiple considerations for mission command. The weapons troop and its platoons can potentially be supporting four task forces simultaneously under normal situations in the offense. It can also count on multiple task organization changes and transitions from operation to operation. Coordination is key for this unit.

3-44. The weapons troop commander must build relationships with supported task forces. Together, they exchange of ideas to develop creative solutions to shared challenges. Successful mission command in the offense fosters a greater understanding of the operational environment and solution development (See ADRP 6-0 for more information). This results in teams that—

- Are adaptive and anticipate transitions.
- Accept risks to create opportunities.
- Influence friendly, neutrals, adversaries, enemies, and unified action partners.

MOVEMENT AND MANEUVER

3-45. The commander conducts maneuver to avoid enemy strengths and to create opportunities to increase the effects of friendly fires. The commander achieves surprise by making unexpected maneuvers, rapidly changing the tempo of ongoing missions, avoiding observation, and using deceptive techniques and procedures. The commander seeks to overwhelm the enemy with one or more unexpected actions before the enemy has time to react in an organized fashion. This happens when the troop conducting the attack is able to attack the enemy from a position of strength or from an unexpected location or direction.

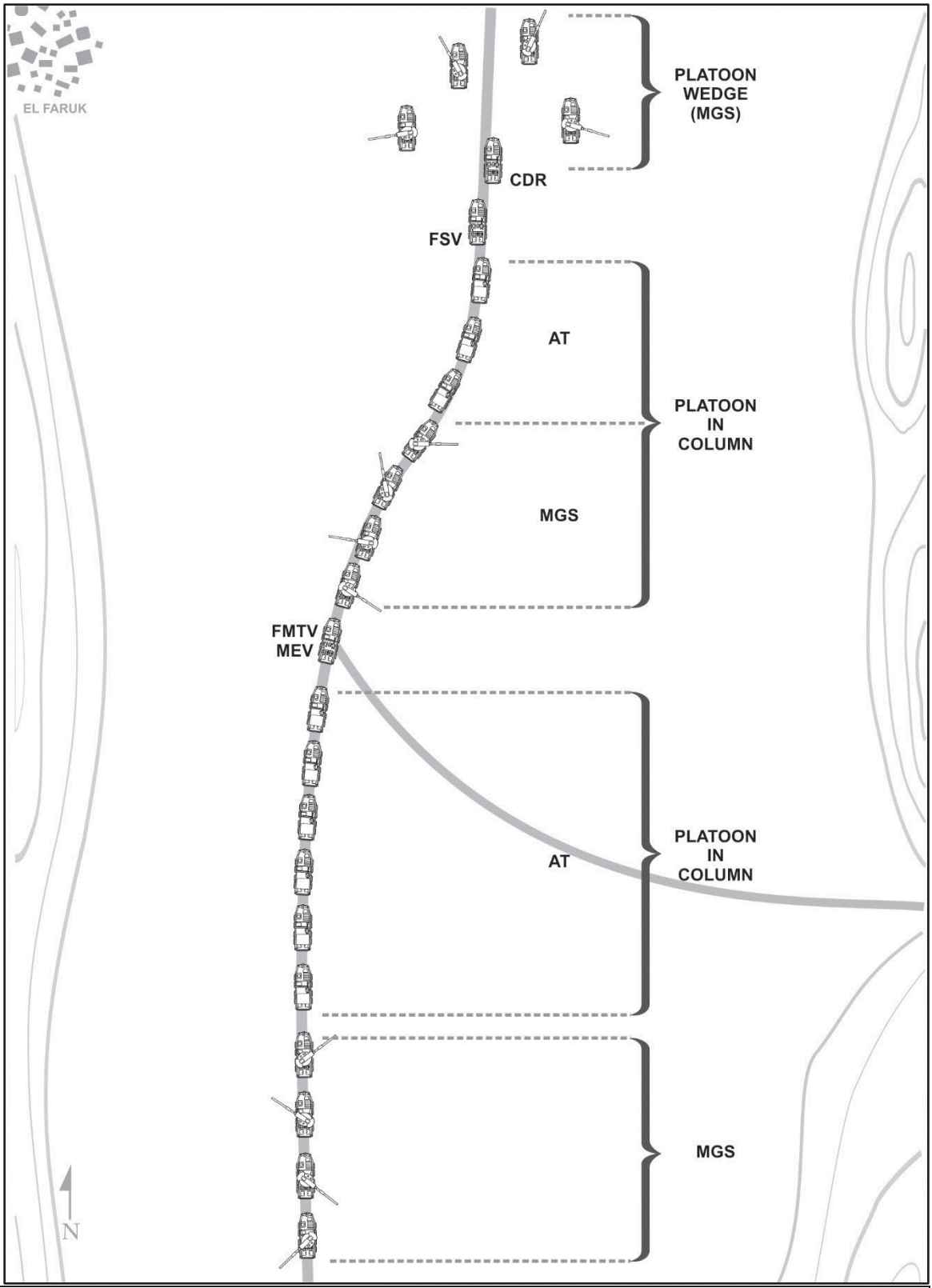
Formations

3-46. The weapons troop commander selects what formation and order of units to deploy his forces based on the factors of METT-TC. Each formation provides the commander with flexibility to achieve a specific outcome. Commanders can shift formations as needed as factors of METT-TC change to maintain the initiative.

3-47. The weapons troop commanders' role is to coordinate the maneuver of its subordinate forces to synchronize their maneuver and formation to accomplish to overall mission. METT-TC will impact the decision making of subordinate leaders to select formations that optimally support their maneuver. The weapons troop rapidly shifts to a combination of elements working to complement each other's maneuver. This includes adjacent units maneuvering close to the weapons troop.

Column

3-48. The column formation allows the troop to make contact with one platoon and maneuver with the other trail platoons. It is a flexible formation, allowing easy transition to other formations. It provides good all-around security and allows fast movement. It provides good dispersion and aids maneuver and control, especially in limited visibility. The troop can deliver a limited volume of fire to the front and to the rear, and a high volume to the flanks. (See figure 3-6.)

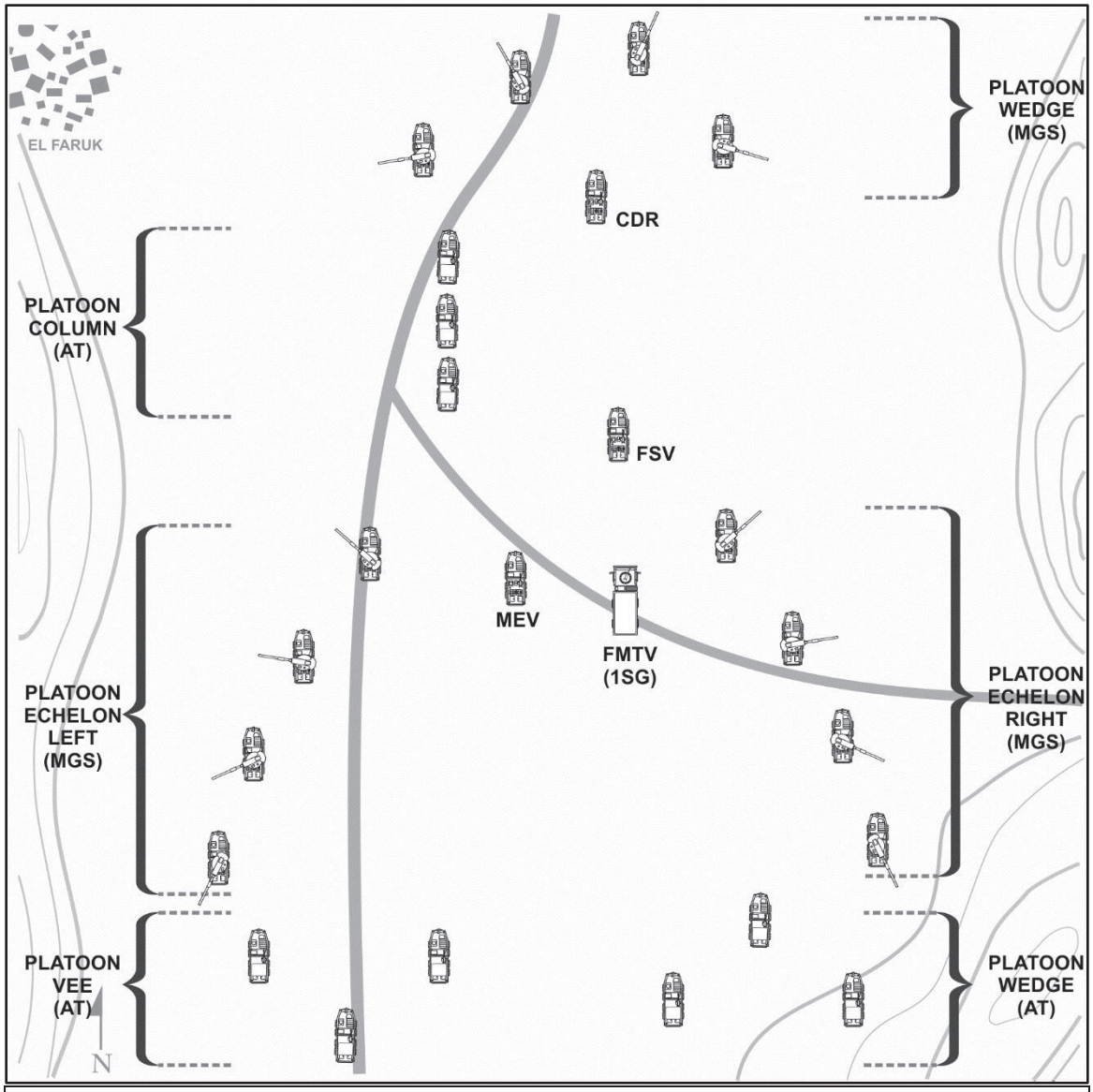


Legend: AT = antitank, CDR = commander, FSV = fire support vehicle, FMTV = family of medium tactical vehicles, MEV = medical evacuation vehicle, MGS = mobile gun system

Figure 3-6. SBCT weapons troop in column formation

Troop Wedge

3-49. The troop wedge formation allows the commander to make contact with a small element and still maneuver the remaining platoons. If the troop is engaged from the flank, one platoon is free to maneuver. This formation is hard to control, but it allows faster movement than the troop Vee formation. (See figure 3-7.)



Legend: AT = antitank, CDR = commander, FSV = fire support vehicle, FMTV = family of medium tactical vehicles, MEV = medical evacuation vehicle, MGS = mobile gun system

Figure 3-7. SBCT weapons troop in a wedge formation

Troop and Platoon Vee

3-50. The troop Vee formation has two platoons forward to provide immediate fire on contact or to flank the enemy. It has one platoon centered trailing the two forward platoons. If the troop is engaged from either flank, two platoons can provide fire, and at least one platoon is free to maneuver. This formation is hard to control and slows movement. The troop commander designates one of the forward platoons as the base platoon. (See figure 3-8.)

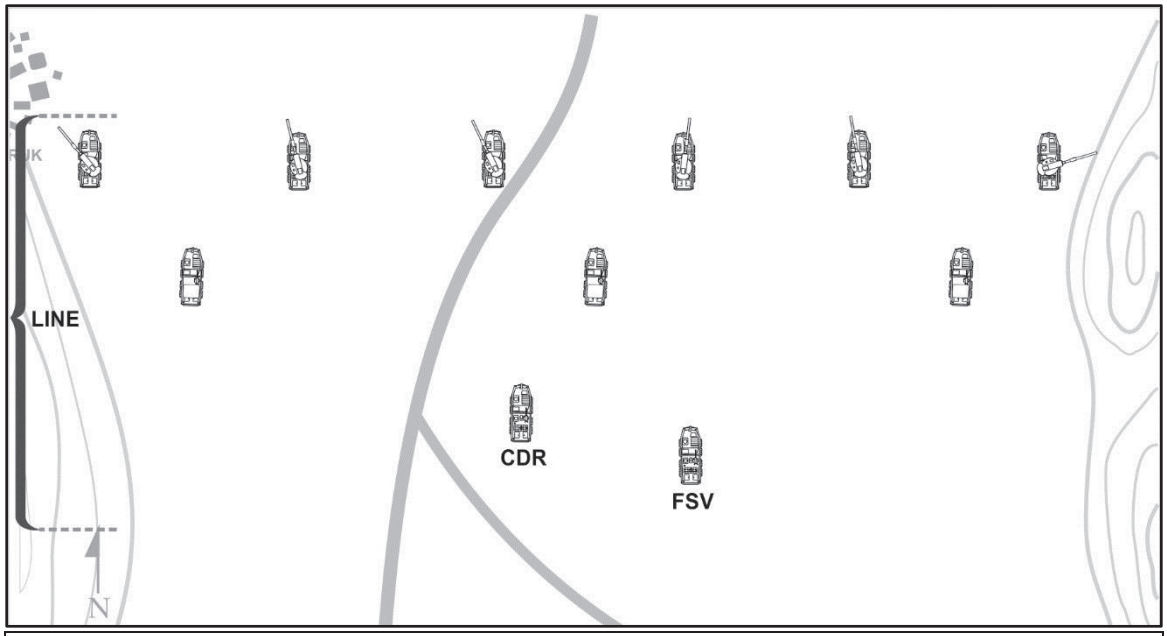


Legend: CDR = commander, FSV = fire support vehicle.

Figure 3-8. SBCT weapons troop in a Vee formation

Troop Line

3-51. The troop line formation puts all platoons forward along the same direction of movement, and it provides for the delivery of maximum fire to the front, but less to the flanks. It is the most difficult formation to control. The troop commander designates a base platoon, normally the center one, for the others to guide on. Flank and rear security is generally poor, but is improved when the flank platoons use echelon formations. (See figure 3-9.)

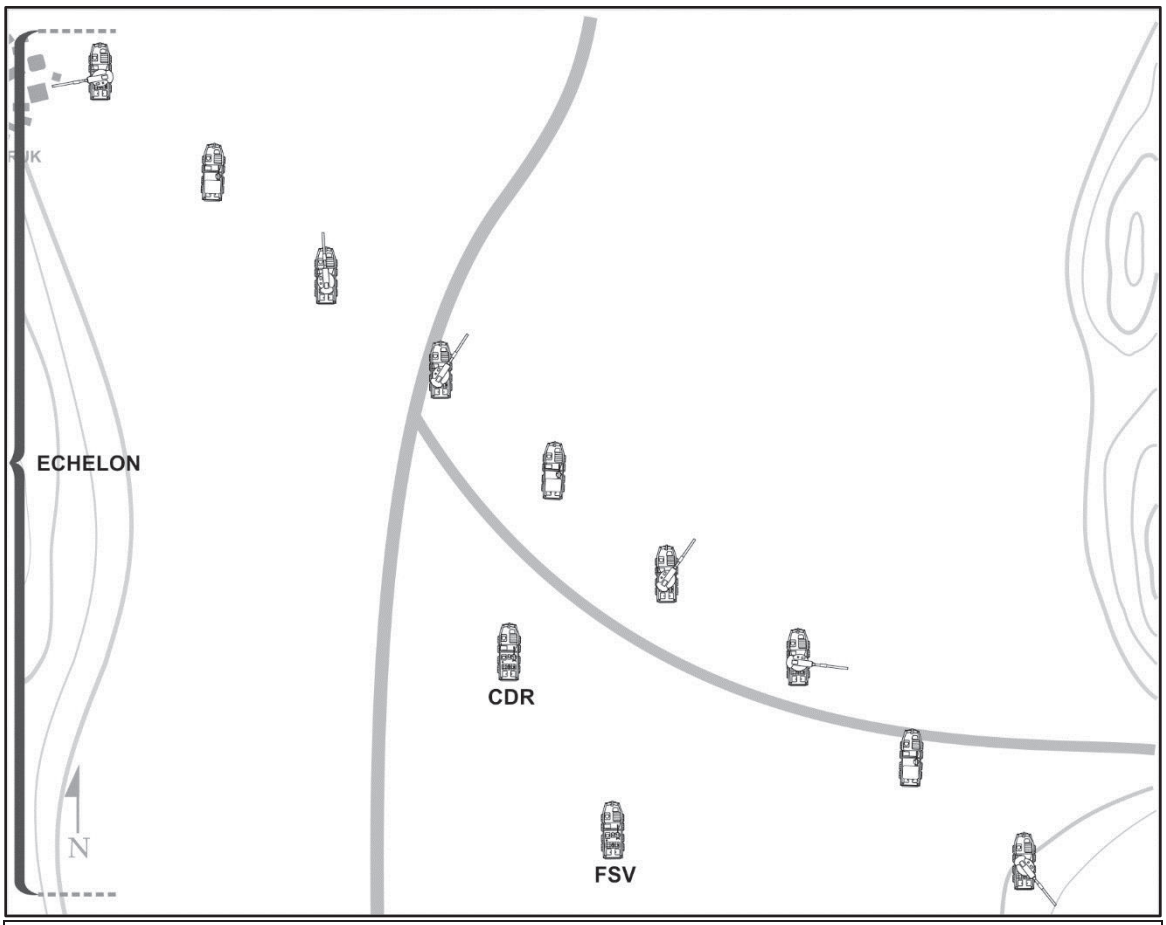


Legend: CDR = commander, FSV = fire support vehicle

Figure 3-9. SBCT weapons troop in a line formation

Echelon Right or Left

3-52. The echelon right or echelon left formation is used if the situation is vague and the troop commander anticipates enemy contact to the front or on one of the flanks. Normally, an obstacle or another friendly unit exists on the flank of the troop opposite the echeloned flank, preventing enemy contact on that side. This formation provides a good volume of fire and protection to the echeloned flank, but less to the opposite flank. (See figure 3-10.) ATGM should not perform echelon right or left formation while moving. The ATGM vehicle must be at a stop to fire its missile. This negates all the benefits from moving in echelon.



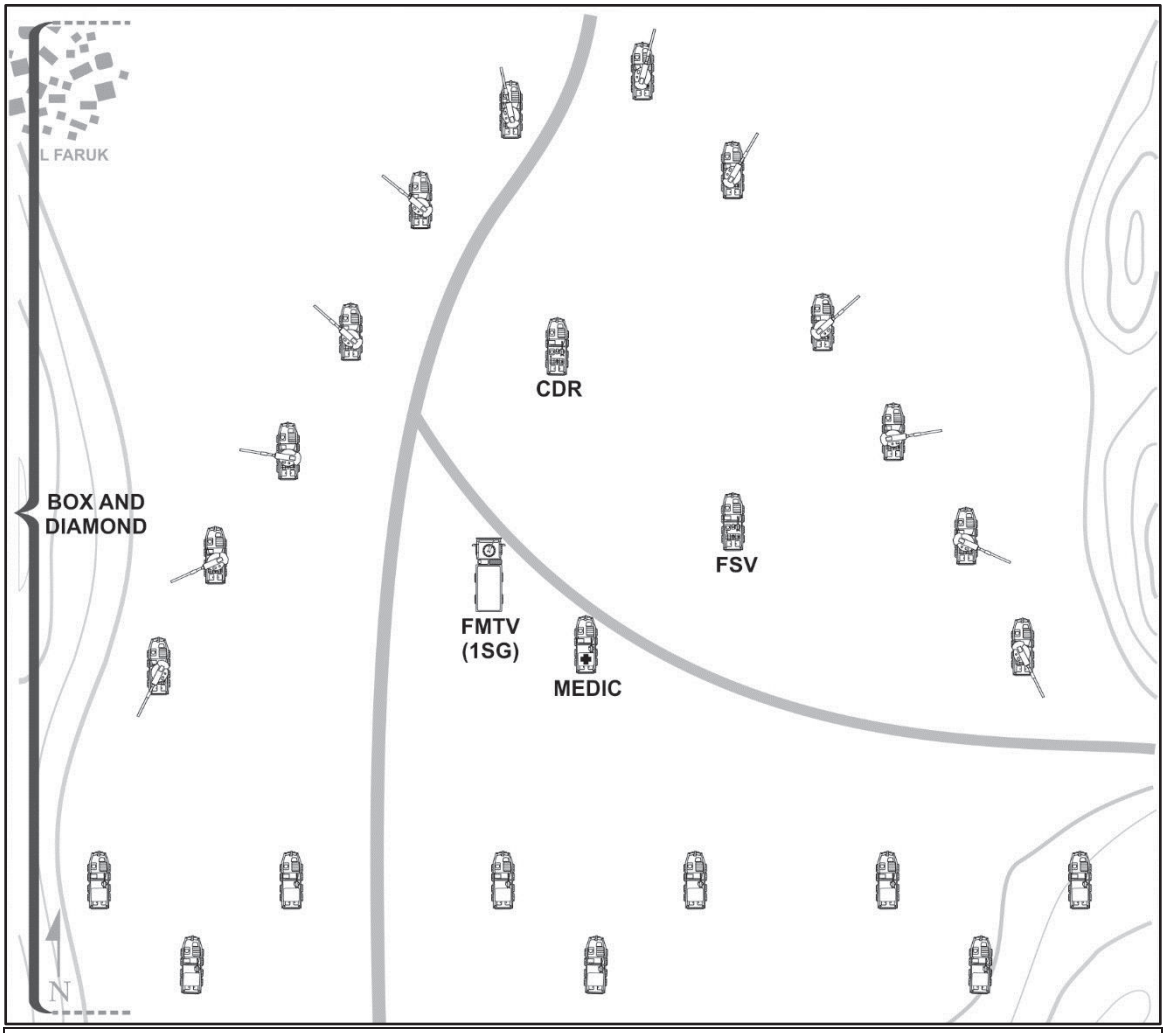
Legend: CDR = commander, FSV = fire support vehicle

Figure 3-10. SBCT weapons troop in an echelon formation

Box and Diamond

3-53. The box information is useful when general information about the enemy is known, and the SBCT weapons troop requires flexibility and depth in its attack. The diamond formation is a variation of the box formation. The SBCT weapons troop uses box and diamond formations (see figure 3-11, page 3-18) when it has four maneuver forces. Both the box and the diamond formations—

- Provide the best flexibility for maneuver.
- Enable easy transition into all other formations.
- Distribute firepower forward and to the flanks.
- Are easy to control.
- Provide all-around security.
- Facilitate rapid movement.
- Provide protection of accompanying maneuver enhancement and sustainment elements located in the center of the formation.



Legend: CDR = commander, FMTV = family of military vehicles, FSV = fire support vehicle, MEDIC = medical, 1SG = first sergeant

Figure 3-11. SBCT weapons troop in a box and diamond formation

Formation Selection

3-54. The troop commander selects the formation that provides the proper control, security, and speed. Table 3-1 compares the movement formations.

Table 3-1. Comparison of movement formations

Formation	*Security*	*Fires*	*Control*	*Speed*
Column	Good dispersion Good all-round security	Good to front and rear Excellent to the flanks	Easy to control Flexible formation	Fast
Line	Excellent to the front Poor to the flank and rear	Excellent to the front Poor to the flank and rear	Difficult to control Inflexible formation	Slow
Wedge	Good all-round security	Good to the front and flanks	Less difficult to control than the line Flexible formation	Faster than the line
Vee	Better to the front	Very good to the front	Very difficult to control	Slow
Echelon	Good to the echeloned flank and front	Good to the echeloned flank and front	Difficult to control	Slow
Box	Good dispersion Good all-round security	Very good to front and rear Very good to the flanks	Easy to control Flexible formation	
Diamond	Good dispersion Good all-round security	Very good to front and rear Very good to the flanks	Easy to control Flexible formation	
File	Least secure Effective use of concealment	Poor	Easy to control	Fast

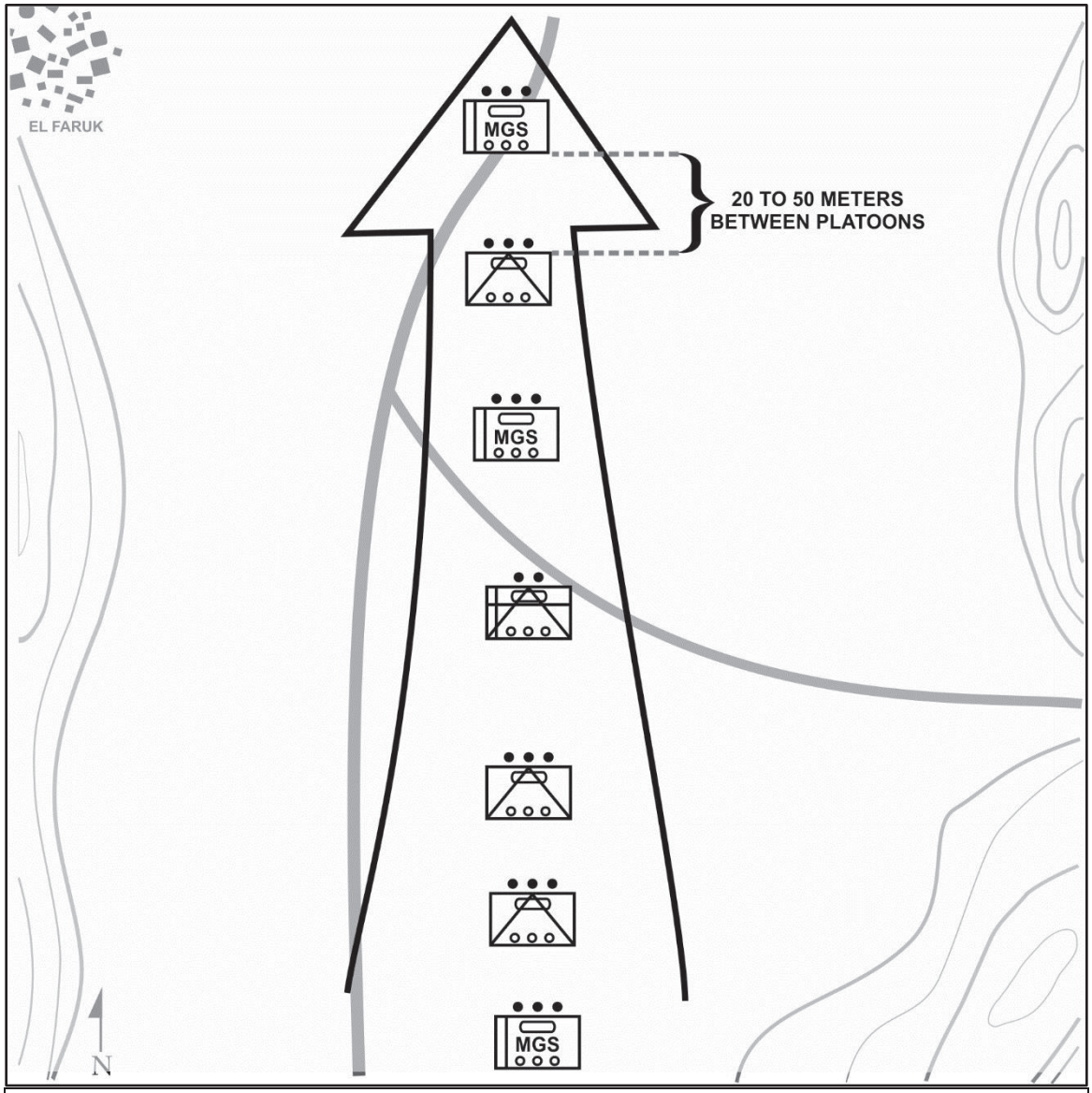
3-55. Combat formations allow a unit to move in the AO in a posture suited to the senior commander's intent and mission. A unit may employ a series of combat formations during the course of an attack; each has its advantages and disadvantages. Subordinate units within a combat formation can employ their own combat formations consistent with their particular situation. The commander considers the advantages and disadvantages of each formation with both mounted and dismounted elements in the areas of leading, influencing, maintenance, firepower orientation, ability to mass fires, and flexibility when determining the appropriate formation for a given situation.

Movement Techniques

3-56. All combat formations use one or more of the three movement techniques: traveling, traveling overwatch, or bounding overwatch (FM 3-90-1). The weapons troop should generally be behind some friendly element such as Infantry or Cavalry, and as such, speed is the critical factor in getting to a designated location. When supporting other formations, platoons need to be in a tactical formation suited to their specific situation.

Traveling

3-57. Continuous movement characterizes the traveling technique. It is best suited for situations in which enemy contact is unlikely and speed is important. (See figure 3-12.)

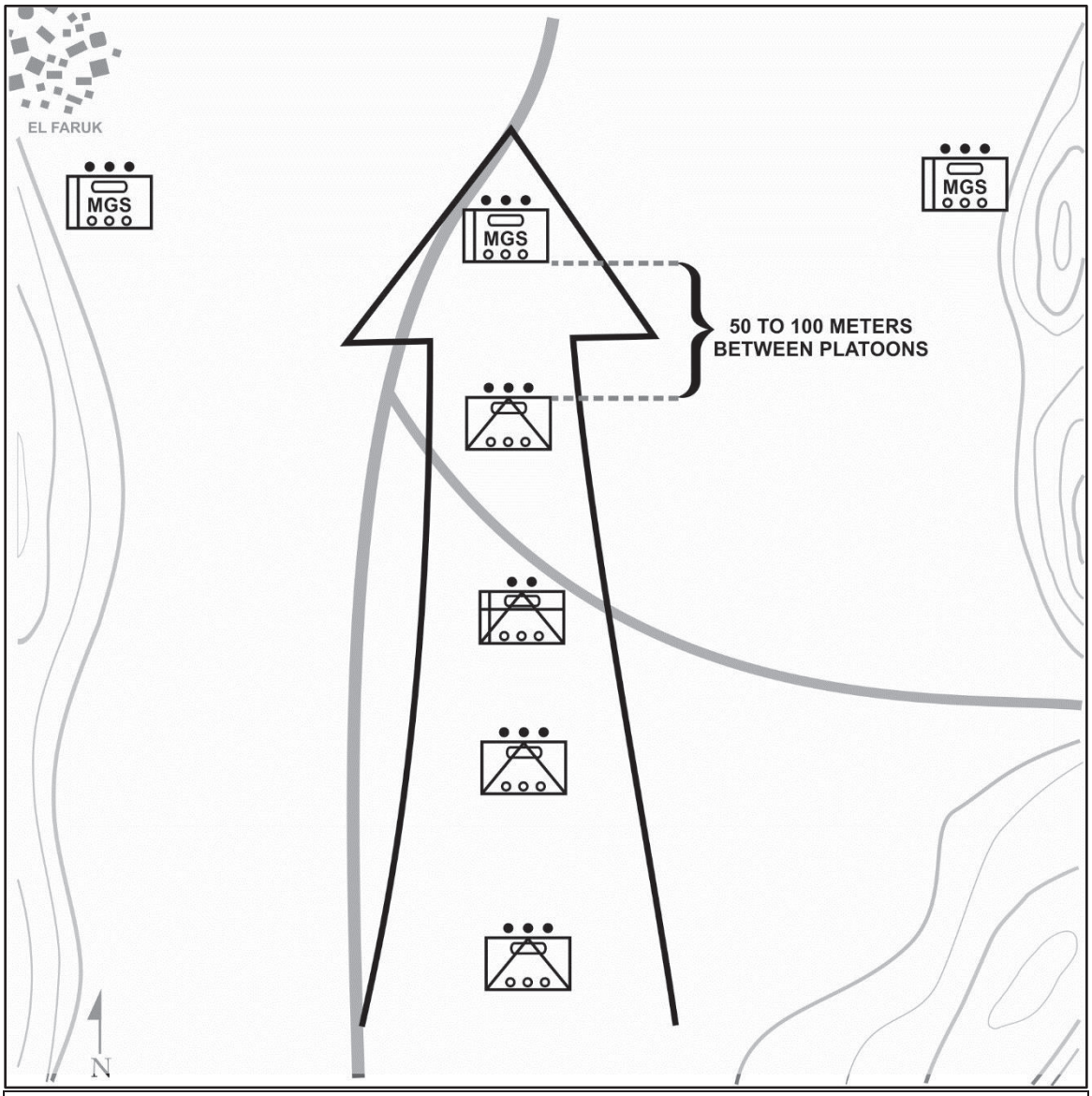


Legend: MGS = mobile gun system, N = north

Figure 3-12. Traveling movement technique

Traveling Overwatch

3-58. Traveling overwatch is an extended form of traveling that provides additional security when speed is desirable but contact is possible. The intent is to maintain depth, provide flexibility, and maintain the ability to maneuver if contact occurs. MGS is preferred vehicle to overwatch Infantry and Cavalry units. When the ATGM and MGS are moving in the same element, the ATGM should overwatch the MGS forward of its position. (See figure 3-13.)



Legend: MGS = mobile gun system, N = north

Figure 3-13. Traveling overwatch movement technique

Bounding Overwatch

3-59. Bounding overwatch is used when contact is expected. It is the most secure, but slowest, movement technique. The purpose of bounding overwatch is to deploy before contact, giving the unit the ability to protect a bounding element by immediately suppressing an enemy force. The troop can employ either of two bounding methods; alternate or successive.

3-60. A technique to employ for the length of a bound is based on half the distance of the maximum effective range of weapon system or line of sight of the overwatching element. For example: When ATGM and MGS move together in a formation. MGS should bound no further than 2 km (roughly half the maximum effective range of the TOW) forward of the ATGM. This allows the overwatching element to cover the bounding element by allowing enough range to identify and engage an enemy. The bounding element selects a covered position within that range and then becomes the overwatching element.

3-61. For MGS platoons this technique is simple having four vehicles and can divide into sections. ATGM platoons have difficulty due to a three vehicle formation and the TOW weapons system covering their movement. The TOW is limited in that it cannot shoot on the move and the missile flies at a relative slow rate of speed for covering the move. ATGM platoons work best conducting successive bounds with other units.

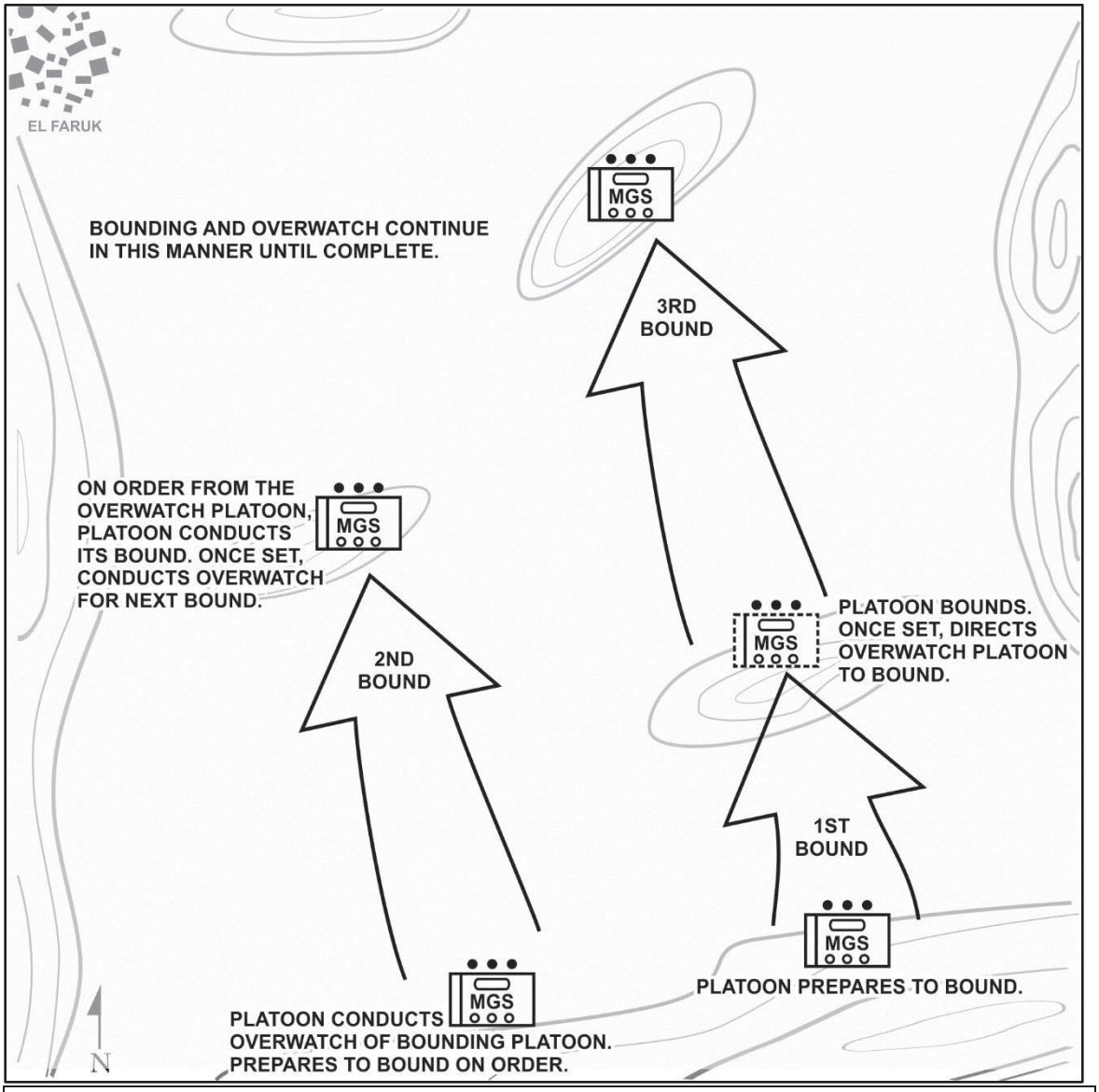
Alternate Bounds

3-62. Covered by the rear element, the lead element moves forward, halts, and assumes overwatch positions. The rear element advances past the lead element and takes up overwatch positions. This sequence continues, as needed, with only one element moving at a time. This method is usually more rapid than successive bounds. This technique is used for MGS pure formations. (See figure 3-14.)

Successive Bounds

3-63. In the successive bounding method, the lead element covered by the rear element, advances and assumes overwatch positions. The rear element then advances to an overwatch position abreast of the lead element, halts, and assumes overwatch. The lead element then moves to the next position, and so on. Only one element moves at a time, and the rear element avoids advancing beyond the lead element. This method is easier to control and more secure than the alternate bounding method, but it is slower.

3-64. Successive bounds are preferred when ATGM and MGS work with Infantry and Cavalry units. When ATGM and MGS sections move with one another they use a mix of alternate and successive bounds between the formations. The MGS sections use alternate bounds between the two vehicles while the ATGM section uses successive bounds with the trail MGS vehicle. This movement is conducted in a platoon Vee formation. (See figure 3-15, page 3-24.)



Legend: MGS = mobile gun system, N = north

Figure 3-14. Bounding overwatch alternate bounds

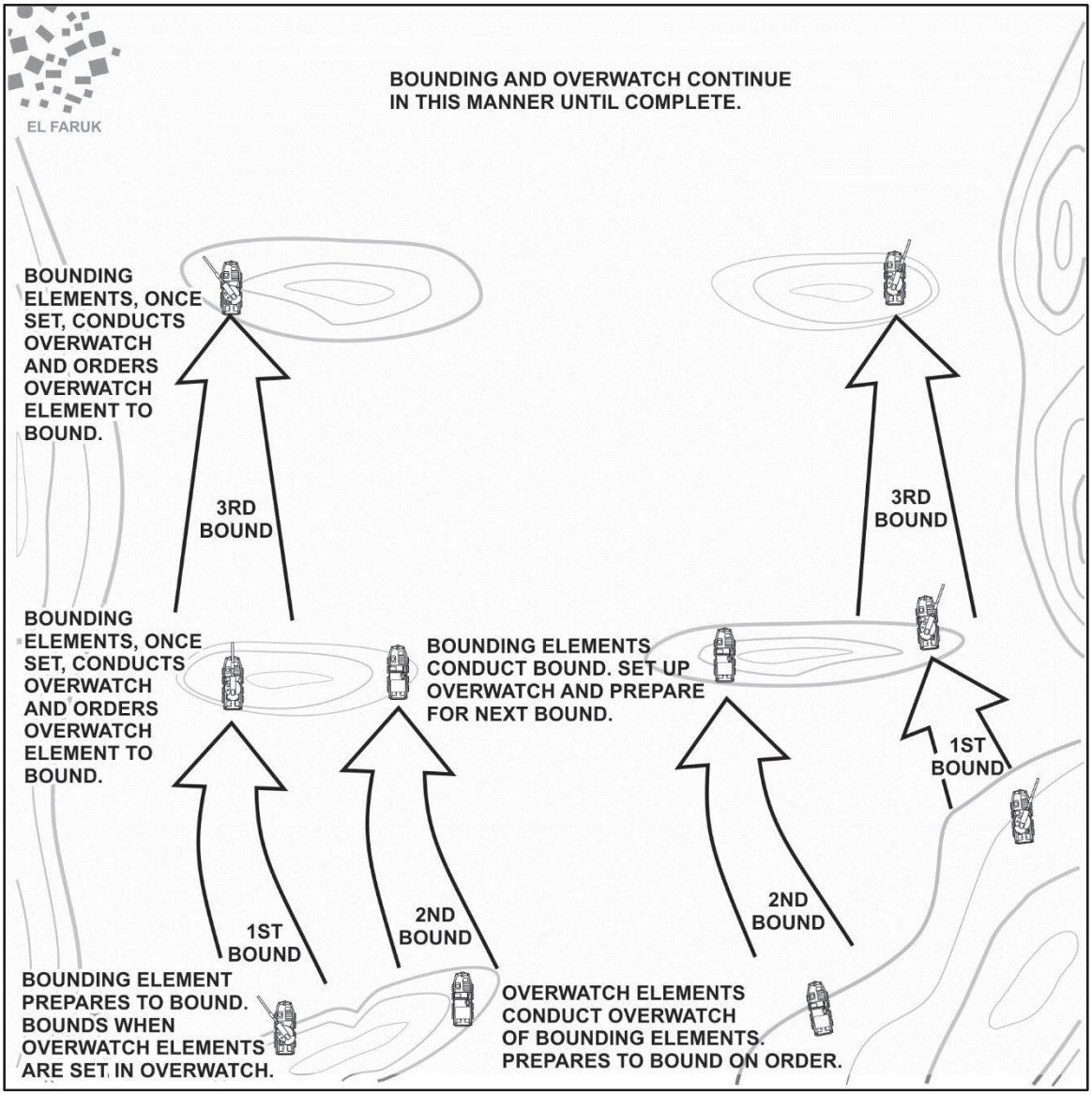


Figure 3-15. Bounding overwatch successive bounds

3-65. The commander's use of standard formations enables the unit to shift rapidly from one formation to another, giving additional flexibility when adjusting to changes in the mission variables. This results from the commander rehearsing subordinates so that they can change formations using standard responses to changing situations, such as actions on contact. By designating the combat formation planned for use, the commander—

- Establishes the geographic relationship between units.
- Indicates probable reactions once the enemy makes contact with the formation.
- Indicates the level of security desired.
- Establishes the preponderant orientation of subordinate weapons systems.
- Postures friendly forces for the attack.

3-66. The troop should try to make enemy contact with the smallest possible friendly force at terms that are favorable. This is achieved by the reconnaissance task conducted by the higher echelon to support the SBCT weapons troop maneuver. This allows most of the troop freedom to maneuver against the enemy force.

INTELLIGENCE

3-67. The commander, uses threat templates, the situation template, the most probable COA, the most dangerous COA, civil consideration products, terrain products, and other intelligence products to identify any aspect within the operational environment that will affect the friendly force and enemy force. Because of his command support relationships with other task organizations the weapons troop commander has many intelligence sections to leverage for his understanding. The commander has access up to four task force intelligence sections the SBCT intelligence section and MICO. The weapons troop commander manages information collection efforts and intelligence production throughout his intelligence sections through the use of focused CCIRs and PIRs. The commander should receive timely intelligence briefs from the task force intelligence sections, such as the COIST, MICO, or S-2. Regular intelligence briefs and directing intelligence production through regularly updating CCIRs and PIRs help the commander make more informed command decisions. (Refer to ADRP 2-0, ADRP 5-0, and ATP 2-01.3 for more information.)

FIRES

3-68. Leader's conduct fire support planning concurrently with maneuver planning at all levels. The SBCT and SBCT weapons troop typically use top-down fire support planning, with bottom-up refinement of the plans. As part of the top-down fire planning system, the squadron includes a fires annex (annex D) with its OPORD. The troop commander refines the fire plan from higher headquarters to meet his mission requirements and to ensure that these refinements are incorporated into the higher headquarters' plan. The weapons troop does not have any indirect fires systems in its formation. It relies on the fires from the field artillery batteries and mortars from surrounding troops, companies of battalions. The weapons troop FSO and commander develop their fire support plan with considerations requesting area and general support of fires based on proximity.

3-69. A clearly defined concept of operations enables the troop commander to articulate precisely how he wants indirect fires to affect the enemy during the different phases of the operation. This allows the SBCT weapons troop FSO to develop a fire support plan coordinated with adjacent and higher elements.

SUSTAINMENT

3-70. The objective of sustainment in offensive tasks is to ensure the tactical commander maintains the momentum. The commander wants to take advantage of windows of opportunity and launch offensive tasks with minimum advance warning. Therefore, sustainment planners, and operators anticipate these events and maintain the flexibility to support the offensive plan. A key to successful offensive tasks is the ability to anticipate the requirement to push support forward, specifically regarding ammunition, fuel, and water. The 1SG supervising the supply sergeant requests classes of supply packages that are designed specifically to the company. Planning future rates of consumption based on assigned missions must be considered as the troop coordinates its resupply at a specific time and location. All Stryker vehicles and personnel can carry up to 72 hours of supply and conduct resupply to carry that capacity when necessary. (See chapter 8 of this publication for more information.)

Logistics

3-71. Sustainment maintains momentum of the attack by delivering supplies as far forward as possible. In order for the SBCT weapons troop to get their required supplies it may require them to send combat power elements to provide security for the transport of supplies and logistics packages to their company for emergency situations or operations beyond 72 hours. The commander can use throughput distribution and preplanned and preconfigured packages of essential items to help maintain offensive momentum and tempo. The XO and 1SG ensure that the supply packages support the troop commander's plan.

Health Service Support

3-72. The burden on medical resources increases based on the intensity of offensive tasks and distances as the force advances. The commander reallocates medical resources as the tactical situation changes. The 1SG and emergency care sergeant advise the commander to enhance the company's responsive and effective health service support.

PROTECTION

3-73. The rapid tempo and changing nature of offensive tasks present challenges when protecting friendly assets. The forward movement of subordinate units is critical if the commander is to maintain the initiative necessary for successful offensive tasks. High operational tempo is a key means the commander employs to ensure the survivability of his force by denying the enemy a chance to plan, prepare, and execute an effective response to friendly offensive tasks.

3-74. The commander protects subordinate forces to deny the enemy the capability of interfering with ongoing missions. That protection meets the commander's legal and moral obligations to the organization's Soldiers. To help protect the force, the commander addresses all protection tasks during the unit's planning, preparation, and execution, while he assesses the effectiveness of those protection tasks. Some of these protection assets will need to be requested from higher headquarters. (Refer to FM 3-90-1 and ADRP 3-37 for more information.)

ADDITIONAL PLANNING CONSIDERATIONS

3-75. Additional offensive task planning considerations include the following:

- Urban environment.
- Mountainous terrain.
- Desert environment.
- Jungle environment.
- Subsurface areas.

URBAN ENVIRONMENT

3-76. Offensive tasks in an urban environment aim to destroy, defeat, or neutralize an enemy force. However, the purpose may be to achieve some effect relating to the population or infrastructure of the urban area. The SBCT weapons troop is at a disadvantage unless augmented with Infantry in the urban environment. The urban environment negates the weapons troops ability to detect and engage targets at long distances. The ATGM and MGS variants are vulnerable to attacks from their blind spots above, below and behind the vehicle. Rubble and debris in the urban area may limit the ability to maneuver. Rubble may also limit the effectiveness of the TOW. Dust from missile launch and impact limits the use of day optics. Fires and burning materiel within the urban area may limit the use of the thermal weapon sight.

3-77. No matter the purpose, commanders should use a combined arms approach for successful offensive operations. The SBCT weapons troops will often be task organized pure, split, or dispersed and can task organize ATGM and MGS vehicles with Infantry as low as squad level. The ATGM and MGS vehicles themselves provide limited protection with their armor and can engage enemy safely and accurately once enemy strong point have been identified. The weapons troop has the firepower to support building breaches using MGS if ROE allow; suppress or destroy significant fortified emplacements with the use of .50cals, and M-240's. Often elements of the weapons troop will help isolate objectives by placing them in positions along streets long distances. They can also support infiltration by deploying the smoke salvos on the vehicles.

3-78. The optimal missile the ATGM employs is TOW BB in the urban environment. The fragmentation of the titanium warhead case renders the room useless as a fighting position and destroys any enemy personnel within the blast radius. A single TOW BB missile creates a 22-inch hole in eight-inch double reinforced concrete. Firing a second TOW BB missile below the first creates a breach hole in the wall. It completely destroys an 8 by 8 foot cinder block wall. Leaders must ensure the TOW is not used against targets within the maximum safe arm distance, 65 or 200 meters depending on missile. The TOW BB is extremely effective against fortified positions. Within urban areas, the TOW is best employed along major thoroughfares.

3-79. Backblast is more of a concern during combat in urban areas than in open country. The backblast can pick up and throw any loose rubble in the caution zone. The channeling effect of walls and narrow streets is even more pronounced due to the greater backblast. If the TOW missile backblast strikes a wall at an angle, it can pick up debris or be deflected and cause injury to unprotected personnel. When firing a TOW missile from inside buildings, all personnel should wear appropriate protection. Firing a TOW missile in an open

street will increase the backblast. The surrounding buildings and width of street will affect the backblast area. (See figure 3-16.)

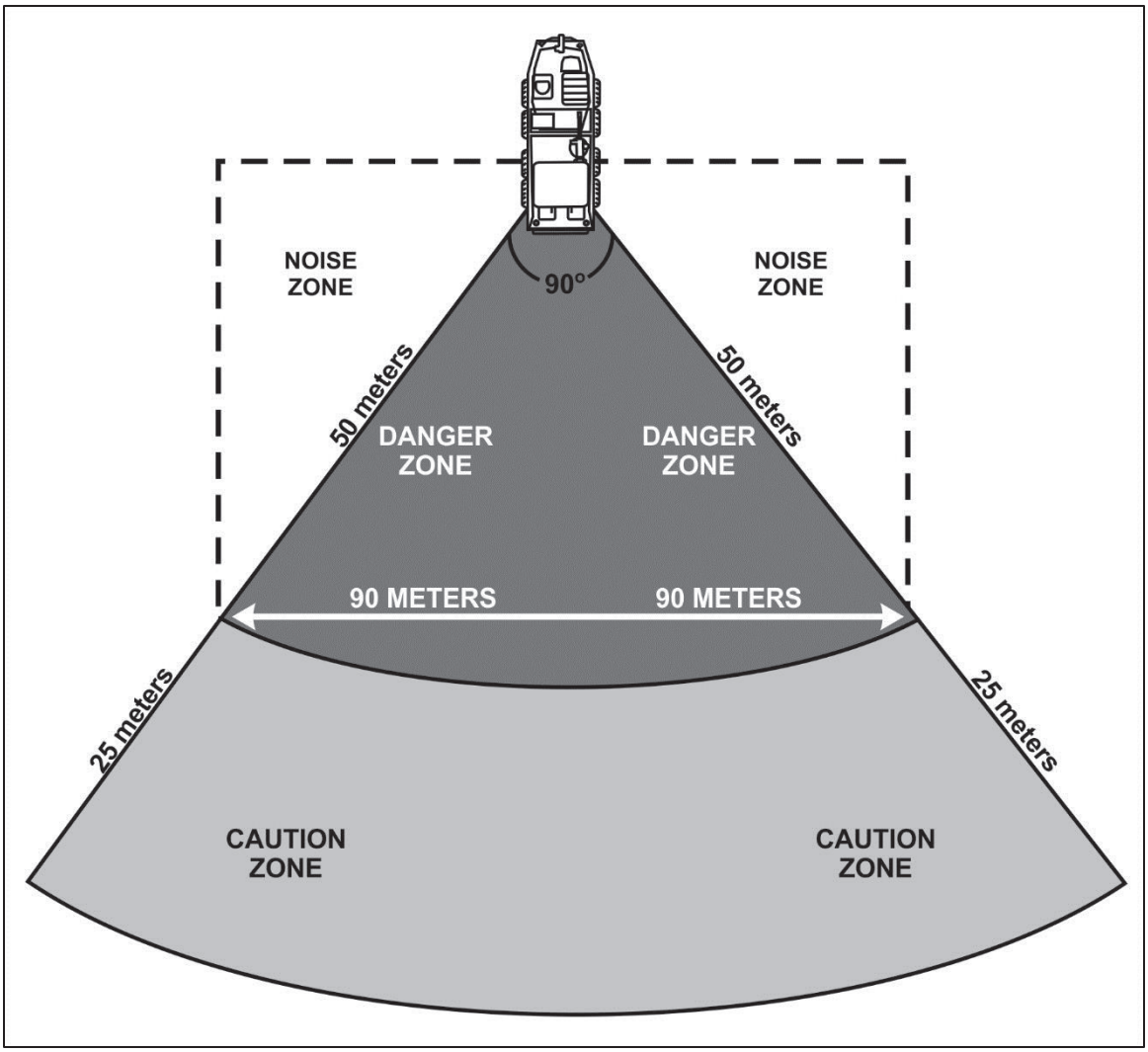
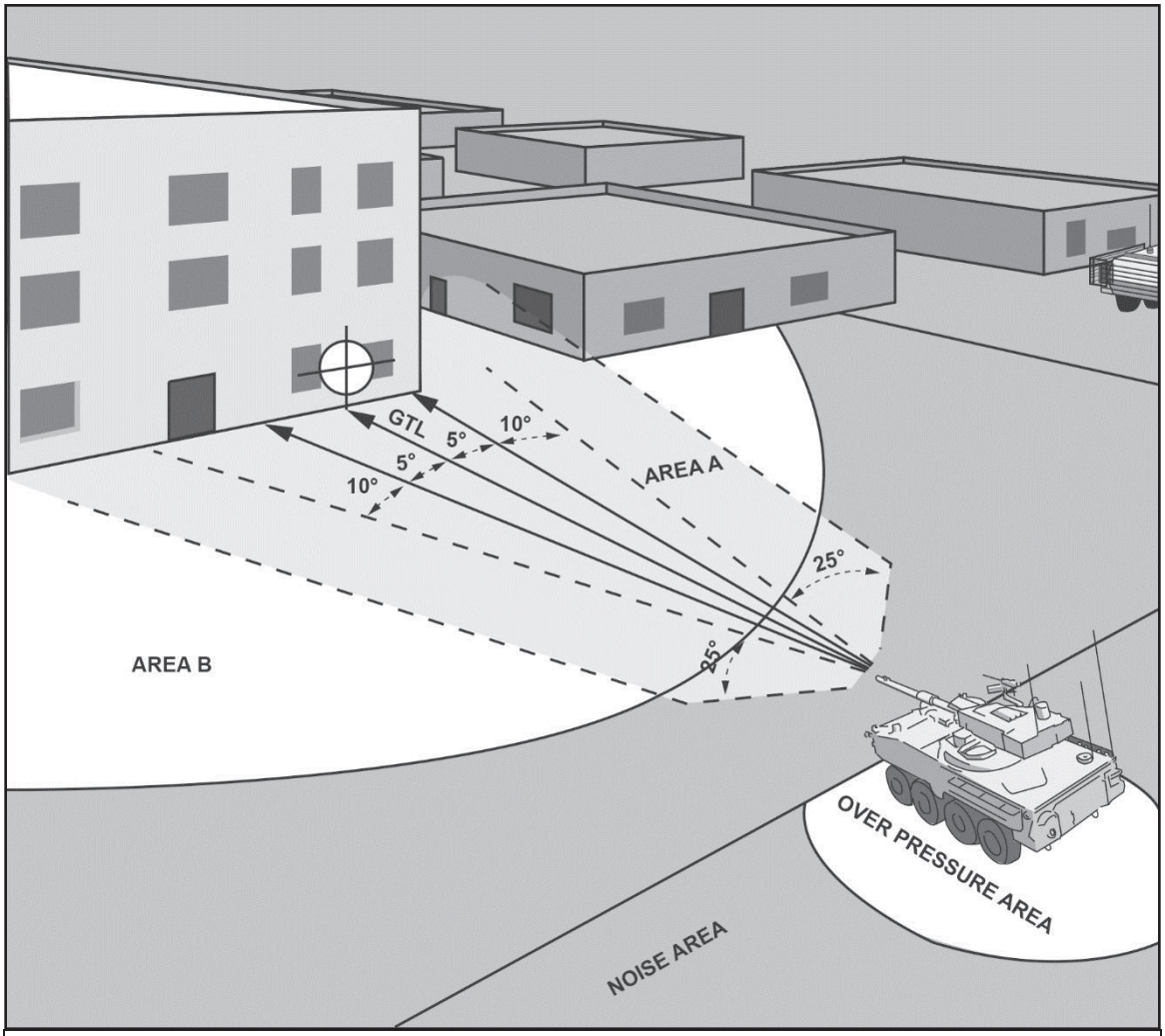


Figure 3-16. TOW missile backblast in an open street

3-80. The MGS is a versatile vehicle in the urban environment for engaging enemy in various fortified positions. Its multiple round selections and rate of fire can reduce most structures in the urban environment or provide just the right amount of firepower needed to minimize collateral damage. Munitions selection may include the following rounds; high-explosive plastic tracer, high-explosive antitank tracer (HEAT-T), and canister. Each has capabilities suited for engaging different types of structures. Considerations for the MGS is its close proximity to Soldiers before it engages targets with its main gun and the arming distances of its rounds see table 3-2, page 3-28 and figure 3-17, page 3-29.

Table 3-2. Munition selection

Round	*Arming Distance*	*Max Effective Range*	*Optimal Target*	*Blast effects at point of impact 0 obliquity*	*Max angle of obliquity to structure*
M393A3 HEP-T	11 to 33 meters	3000m	Wall Breach (Reinforced Concrete, Mud/ Adobe wall), Field Fortifications, Bunker Defeat.	300 m radius for debris (under testing)	80
M456A2 HEAT-T	2 to 5 meters	3000m	Secondary Armor Defeat, Field Fortifications, Light Armor Vehicles, Bunker Defeat	300 m radius for debris (under testing)	60
M1040 Canister	Muzzle. *Max range NTE 300 meters. Optimum range <=100m.	Structures 250m. Troops 550m.	Wood, Troops behind cinder blocks. C-wire, and technical vehicle barrier.	Circumference expands exponentially from muzzle. By 300m, spread has expanded to approximately 60m.	Not recommended for use on structures. It can have a significant impact on a concrete wall, but round of choice should be HEP.
Legend: HEP = high explosive plastic, HEP-T = high explosive plastic tracer, max = maximum, m = meter, NTE = not to exceed.					



Legend: 5° = variation of aim, 10° = ricochet of round, 25° = explosion of round along gun target line out 300M, Area B = explosion at impact point 300M, GTL = gun target line, M = meter

Figure 3-17. MGS surface danger zone considerations in urban environment

3-81. Blast effect radius needs to be included in planning considerations. Secondary effects of munitions round casing discard, noise, blast radius, shrapnel of target point of impact, and collateral damage. The angle of the MGS to the breach point may extend the blast and debris field and should also be considered. Whenever possible a zero degree obliquity to the target breach point is desired. Targets cannot exceed more than 80 degree obliquity to the target (See ATP 3-21.11 for more information).

MOUNTAINOUS TERRAIN

3-82. Combat in mountainous terrain presents units with complicated and ever-shifting hazards, difficulties, opportunities, and risks. A disciplined and prepared SBCT weapons troop that is task-organized with and supported by the other members of the combined arms team facilitates success. A unit fighting in the mountains overcomes difficulties, measures risks, and exploits opportunities to close with the enemy and defeat them. They face and overcome the challenges of fighting in areas where technological supremacy can be negated by even the most crude and nontechnical enemy actions. Leaders should prepare for mountain missions in a manner that allows their units to adapt to the challenges. (Refer to ATTP 3-21.50 for more information.)Mountainous terrain is characterized by one or more of the following:

- High altitudes.
- Gently rolling slopes and steep cliffs.
- Varying amounts of vegetation (heavy, light, or none).
- Timberline.
- Rocky ground.
- Wet or dry stream beds.
- Glaciated peaks.
- Compartmentalization.
- Mountain weather is characterized by the following:
  - Extreme conditions (such as scorching hot, subfreezing, violent thunderstorms, and blizzards).
  - Large temperature differences between
  - Day and night.
  - Sudden atmospheric disturbances.

3-83. SBCT weapons troops conducting offensive, defensive, and stability tasks in mountainous terrain are able to adapt and skillfully use the environmental challenges to their advantage. The design of the landscape, coupled with climatic conditions, creates a unique set of characteristics in mountainous terrain that are described below.

Working with Infantry

3-84. The upper levels of mountainous terrain are characterized by a lack of trafficable roads. Dismounted units execute the mission when use of motorized vehicles is restricted. The weapons troops moves in support of Infantry and Infantry moves in support of the weapons troop through mountainous terrain. The Infantry secure high ground, low ground and check points that the weapons troop is vulnerable to attack from. The weapons troop provide long range fires on enemy positions that the Infantry cannot range or provide lethal effect to with their weapons systems.

Decentralized Small-Unit Operations

3-85. Mountainous terrain environments do not support the movement and maneuver of large units requiring conflicts to be fought at the platoon, section and squad level. Mountainous terrain can separate brigades from battalions, battalions from companies, and companies from platoons for long periods. Communication with higher and adjacent units can be difficult at times and requires rehearsed and effective primary, alternate, contingency, and emergency plan. Intent with clearly defined endstate conditions should be clearly communicated to allow platoon and section level leaders to take actions according to the commander's intent in case communications cannot be maintained.

Degraded Mobility and Increased Movement Times

3-86. The ruggedness of mountainous terrain may restrict mobility to file type formations on roads and trails. A relatively short distance from point to point may be an arduous movement over steep, rocky, uneven terrain, with multiple trail switchbacks that increase the distance traveled. In mountainous terrain, the Infantry dismount to move through defiles, choke points, and other restricted terrain at higher or lower elevations. This allows the Stryker vehicles to move along routes where they are vulnerable to ambush or unable to return fire on enemy positions that are placed beyond elevation or depression of mounted weapon systems. The weapons troop will engage targets near the limits of direct fire weapons from intervening crests, hills, ridges, gullies, depressions, and other terrain features. Periodic link up points should be planned along traveled routes to resupply the infantry element.

Unique Sustainment Techniques

3-87. Sustainment in a mountainous terrain is a challenging and time-consuming process. Terrain and weather complicate sustainment tasks to include logistics resupply, medical evacuation, casualty evacuation (CASEVAC), and Soldier health and hygiene. The network of restrictive mountain roads rarely supports resupply vehicles with a large turning radius, or two-way traffic. Often, vehicle traffic can use more terrain favorable routes at lower elevations along the base of mountains and through rivers and streams. Movement of supplies includes air, vehicle, foot, and animal. Each technique has its own challenges in mountainous terrain.

Operations in Thinly Populated Areas

3-88. The populace that reside in mountainous terrain live in small villages in the valleys with some scattered villages in the upper mountain areas. Although the farmers and animal herders that are most of the indigenous population may work in the mountains, the vast amount of mountainous terrain remains unpopulated.

3-89. Mountainous terrain and weather conditions can be both an advantage and a disadvantage to friendly or enemy forces. If unprepared, the terrain can be a troop's adversary. Troop leaders understand physical characteristics of mountainous terrain and how to use terrain and weather to their advantage. Leaders prepare tactically and logistically to conduct missions in the mountains by planning, and conducting precombat check and precombat inspection (PCI) such as:

- Determine trafficablility of routes
- Adjustments to weather changes such as recent rain or snow
- Maintenance inspections of wheels and recovery assets.
- Leader checks on vehicle load plans and supplies on hand.

Offensive Tasks in Mountainous Terrain

3-90. Determining where the enemy is located or suspected to be is a key factor when conducting offensive tasks in mountainous terrain. It is extremely difficult to target the enemy in rugged mountainous terrain with physical characteristics such as caves, rock formations, depressions, rifts, and wooded areas. These offer excellent cover and concealment from enemy forces within a dispersed area. The second factor is determining an appropriate method to fix or place the enemy where they can be attacked without escaping.

3-91. Leaders plan offensive engagements on favorable terms to the attacking force. As with all offensive tasks, the initiative is with the attacker. The attacker chooses the time, place, and method of attack, while the defender considers all possible methods of attack and avenues of attack. Units can execute effective attacks in the mountains with careful planning and preparation. Understanding the enemy and how they use mountainous terrain and weather to their advantage is crucial to developing a scheme of maneuver. Reconnaissance will be limited in gaining timely information because the terrain offers cover and concealment from visual contact and limits signal signatures for both forces. The weapons troops supports Infantry and Cavalry units by establishing overwatch positions utilizing their optics and range of the weapon systems. Movement between these units is conducted through a series sequential bounds. Leaders who understand enemy mountain tactics are able to use the same mountain characteristics to their advantage. (Refer to ATTP 3-21.50 for more information.)

DESERT ENVIRONMENT

3-92. Successful desert operations require adaptation to the environment and to the terrain and climate limitations. Equipment and tactics must be modified and adapted to a dusty and rugged landscape with extremes in temperature and where visibility may change from 30 miles to 30 feet in a matter of minutes. (Refer to FM 90-3 for more information.) Stryker units often lack the range advantage with MTOE weapon systems to engage targets identified with their sensors. They rely on artillery, Army aviation, joint aircraft, ATGM and MGS to mitigate. The Stryker vehicle is vulnerable in open desert usually when moving and relies on the terrain for protection by utilizing covered positions in restricted terrain. Bounding overwatch should be the predominant movement technique when the enemy force has armored forces or Armor defeating weapon systems with long ranges. Flank attack is the preferred method of engaging the enemy armored force for the SBCT weapons troop in the desert environment.

JUNGLE ENVIRONMENT

3-93. Successful offensive tasks in a jungle environment combine dispersion and concentration. For example, ATGM and MGS will be used to isolate along fire breaks or road crossings while Infantry deploy in dispersed formation so that they can find and engage the enemy. Once contact is made forces close on the enemy from all directions. Operations are enemy-oriented, not terrain-oriented. Wherever the enemy is found, that is where he should be destroyed. If the enemy is allowed to escape, they will only have to be found again, with all the risks involved. (Refer to FM 90-5 for more information.)

3-94. TOW missiles and MGS main gun rounds are limited in range and are not reliable or accurate due to thickness of jungle brush. MGS canister rounds are the only exception. At close range the canister rounds reduce vegetation and enemy elements.

SUBSURFACE AREAS

3-95. A subsurface area is a condition that can be found on all four of the environments. Subsurface areas are areas below ground level that may consist of underground facilities, passages, subway lines, utility tunnels, sewers, and storm drains, caves, or other subterranean spaces. These areas can be used for cover and concealment, troop movement, command and control functions, and engagements, but their use requires intimate knowledge of the area. Knowledge of the nature and location of these subsurface areas is of great value to both friendly and enemy forces. To exploit the advantages of subsurface areas, a thorough reconnaissance is required. Maximizing the use of these areas could prove to be a decisive factor while conducting offensive operations. The SBCT weapons troop should be augmented with Infantry and is best employed to secure entry and exit points to subsurface areas.

SECTION II – MOVEMENT TO CONTACT

3-96. *Movement to contact* is an offensive task designed to develop the situation and establish or regain contact (ADRP 3-90). When necessary, the SBCT weapons troop can conduct this task regardless of which decisive action element is currently predominate—offense, defense, or stability. Units plan and conduct movement to contact to gain or regain contact with the enemy. It ends when they make enemy contact. The troop conducts a movement to contact with SBCT Infantry battalion, attached to SBCT Cavalry squadron or independently as a company team augmented with Infantry platoons or scout platoons. Movement to contact includes search and attack and cordon and search. Techniques to establish contact for the weapons troop can include surveillance, reconnaissance by fire, patrolling, traffic control points, and various forms of maneuver.

3-97. Purposeful and aggressive movement, decentralized control, and the hasty deployment of formations from the march to conduct offensive, defensive, or stability tasks characterize a movement to contact. The fundamentals of a movement to contact are as follows:

- Focus all efforts on finding the enemy.
- Make initial contact with small, mobile, self-contained forces to avoid decisive engagement of the main body on ground chosen by the enemy. This allows the commander maximum flexibility to develop the situation.
- Task-organize the force and use movement formations to deploy and attack rapidly in any direction.

- Keep subordinate forces within supporting distances to facilitate a flexible response.
- Maintain contact regardless of the COA adopted once contact is gained.

ORGANIZATION OF FORCES

3-98. The SBCT weapons troop is organized to support a movement to contact as part of the forward security force of the main body. It participates with either the SBCT Cavalry squadron or Infantry battalion. Based on the mission variables of METT-TC, the task force commander may task organize elements of the weapons troop or attach Scout or Infantry platoons.

SECURITY FORCE

3-99. A security force is comprised of four elements; covering force, advance guard, flank guard, and rear guard. For the SBCT weapons troop and its subordinate platoons may be part of all four. When the weapons troop is performing a movement to contact as a company team one of the MGS platoons (organic) or Scout platoons is designated as the advance guard.

Covering Force

3-100. The SBCT weapons will serve as a covering force providing early warning allowing the following advance guard to fix the enemy force when it makes contact. The weapons troop can expect to operate as part of the covering force and transition to the advance guard as conditions or fragmentary orders occur in the operation.

3-101. The primary advantage to having a covering force is the early and accurate reporting about the enemy and terrain. This force must be prepared to fight for information against an enemy. Depth is essential to providing early warning and reaction time for leaders at the platoon, troop, and squadron levels. It enables leaders to conduct actions on contact that preserve the parent unit's freedom of movement and maneuver. This security element is normally the unit's initial main effort.

Advance Guard

3-102. The purpose of the SBCT weapons troop, when it is serving as the advance guard of a larger force, is to protect the main body from surprise attack, develop the situation to protect the deployment of the main body, and fix the enemy's main body. (See figure 3-18, page 3-34.) The advance guard's responsibilities include the following:

- Provide security and early warning for the main body and facilitate its uninterrupted advance.
- Conduct reconnaissance to locate enemy forces along the battalion's axis of advance.
- Conduct actions on contact to retain freedom of maneuver for the battalion.
- Call for indirect fires to impede or harass the enemy.
- Destroy enemy reconnaissance elements.
- Find, fix, or contain enemy main body to retain freedom of maneuver for the battalion.
- Bypass and report obstacles. Follow on mission maybe to suppress enemy during breaching operations.

3-103. The composition of the advance guard depends on METT-TC factors. In open terrain the guard may move mounted. In restricted, close, complex, or the urban environment the guard may move in a series of mounted and dismounted movements. In severely restrictive terrain Infantry maneuver with vehicles in the overwatch.

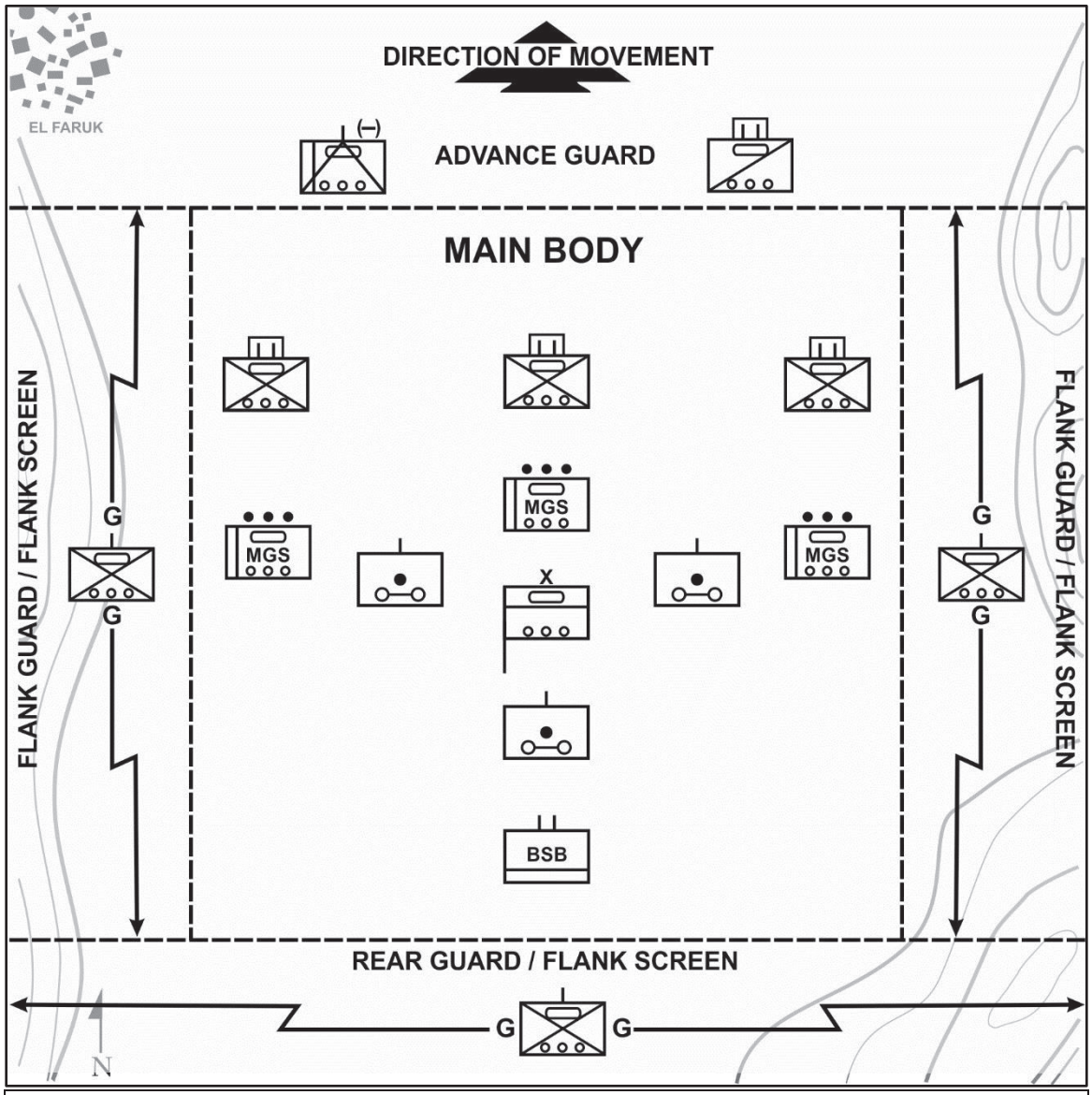
3-104. The advance guard is the task force commander's main effort until the main body is committed; then priority of fires shifts to the main body. Each decision point should be based on the actions of the advance guard in some circumstances.

Flank and Rear Guard

3-105. Platoon-size elements from the SBCT weapons troop serve as the flank guard for task force and company team size elements. This is done through formation selection. Normally, this element conducts a moving flank screen using alternating or successive bounds with sections. These elements remain at a

distance from the main body. Flank security elements operate far enough out to prevent the enemy from surprising the main body with direct fires.

3-106. The troop provides its own rear security, assisted by rapid forward movement, which gives the enemy less opportunity to react or reposition forces to attack the battalion. Units plan indirect fires on major flank and approaches to enhance security. Upon switching from a movement to contact to an attack, this platoon will normally conduct follow and support of the main body.



Legend: BSB = brigade support battalion, MGS = mobile gun system

Figure 3-18. Movement to contact

MAIN BODY

3-107. The combat elements of the main body are prepared to deploy and maneuver rapidly to a decision point in the AO to destroy the enemy. The main body keys its movement to the advance guard. It maintains information of the advance guard's activities via FM crosstalk or digital communication, primarily JCR/BFT. The main body, remaining attuned to the advance guard's situation, provides responsive support when the advance guard is committed.

3-108. Tasks the troop can perform within the main body include the following:

- Find, fix, defeat, destroy, or contain the enemy's main body, followed by an assault on the enemy force or initiate exploitation.
- Execute a course of action to defeat or destroy designated enemy main body elements.

3-109. The use of standard formations and battle drills allows the task force commander, using the information available to him through the Army Mission Command System, to shift combat power rapidly in the AO. The troop employ the appropriate movement techniques within the task force formation. Company commanders, based on their knowledge of the commander's intent and their own SA, anticipate the task force commander's decisions for commitment of the main body and plan accordingly.

CONTROL MEASURES

3-110. The task usually starts from a line of departure (LD) at the time specified in the OPORD. The commander controls the movement to contact by using phase lines, contact points, target reference points (TRPs), and checkpoints as required. Soldiers should be mindful of surface danger zones of their weapon systems to prevent friendly fire or collateral damage. The commander controls the depth of the movement to contact by using a limit of advance or a forward boundary. The commander could designate one or more objectives to limit the extent of the movement to contact and orient the force. However, these are often terrain-oriented and used only to guide movement. Although a movement to contact may result in taking a terrain objective, the primary focus should be on the enemy force. The commander should plan some other type of offensive action if he has enough information and intelligence to locate significant enemy forces.

3-111. Commanders use positive control over maneuver units, coupled with battle drills and formation discipline. The commander can designate a series of phase lines that can successively become the new rear boundary of the forward security elements as that force advances. Each rear boundary becomes the forward boundary of the main body and shifts as the security force moves forward. The rear boundary of the main body designates the rear security element's limit of responsibility. This line shifts as the main body moves forward.

PLANNING A MOVEMENT TO CONTACT

3-112. Planning a movement to contact allows for flexibility and promotes subordinate initiative. Developing the concept of the operation needs to have an emphasis on ultimate control of the objective, and conducting a reverse planning sequence from the objective to the LD. This is accomplished by issuing a clear commander's intent, developing a simple concept of operations, and developing a series of decision points to execute maneuver options. Units place increased emphasis on developing an aggressive and flexible information collection effort that is linked to the commander's PIR focusing on locating and identifying the enemy's strength, disposition, and activities.

3-113. The commander conducts information collection tasks to determine the enemy's location and intent while conducting security operations to protect the main body. This includes the use of available air assets, manned and unmanned. This enables the main body to focus on planning and preparation, to include rehearsals of: hasty attacks, bypass maneuvers, and hasty defenses. The plan addresses actions anticipated by the commander based on available information and intelligence and the conduct of meeting engagements and other anticipated battle drills.

PREPARING FOR A MOVEMENT TO CONTACT

3-114. The preparations for a movement to contact are the same as those for an attack. To avoid redundancy see the appropriate paragraph of section IV of this chapter for more information on this subject.

EXECUTING A MOVEMENT TO CONTACT

3-115. Each element of the force synchronizes its actions with adjacent and supporting units, maintaining contact and coordination as prescribed in orders and unit SOP. This section discusses executing a movement to contact using the sequence of the offense previously discussed in this section II.

GAIN AND MAINTAIN ENEMY CONTACT

3-116. The commander conducts reconnaissance by using all available information collection assets to find the enemy's location and dispositions. Sensors alone cannot confirm the exact disposition and location of all enemy forces. The SBCT weapons troop should increase its likelihood of contact as they approach the last known point of enemy detection or suspected position. This will also affect unit formations and movement techniques. This ensures that the commander can commit friendly forces under optimal conditions. The commander uses all available sources of combat information and intelligence reports to find the enemy's location and disposition. To protect his force he leads with Infantry or Cavalry formations with MGS vehicles following.

DISRUPT THE ENEMY

3-117. Once contact is made, the Infantry or Cavalry formation brings overwhelming fires from elements of the weapons troop onto the enemy. The security force maneuvers as quickly as possible to find gaps in the enemy's defenses. The commander gathers as much information as possible about the enemy's dispositions, strengths, capabilities, and intentions. As more information and intelligence becomes available, the main body attacks to destroy or disrupt enemy command and control centers, fire control nodes, and communication nets.

FIX THE ENEMY

3-118. The commander initiates maneuver at a tempo the enemy cannot match since success in a meeting engagement depends on effective actions on contact. The techniques the commander employs to fix the enemy when both forces are moving are different than those employed when the enemy force is stationary during the meeting engagement. The SBCT weapons troop should mix the use of ATGM and MGS fires to fix the enemy. This mix of munitions from weapons systems is precise, sustained, with a high degree firepower. This mix also mutually supports each element. The MGS can fire more rapidly with their main gun and machine guns, but the ATGM provides longer range and is more effective against heavier armored targets.

MANEUVER

3-119. The commander quickly maneuvers his main body to a position of advantage to conduct a penetration or envelopment if the security force cannot overrun the enemy with a frontal attack. He uses his mission command systems to deploy and direct elements of the weapons troop before the enemy can react effectively or reinforce. The commander attempts to defeat the enemy in detail while still maintaining the momentum of his advance. The main body commander resumes the movement to contact after a successful attack. If he did not defeat the enemy, he has three main options—bypass, transition to a more deliberate attack, or conduct a defense.

3-120. The troop commander maneuvers his main body elements rapidly to the vicinity of the contact. The intent is to deliver the assault before the enemy can deploy or reinforce his engaged forces. The commander masses effects of organic and augmented assets on the enemy to maneuver forces on attacking the enemy's flanks and rear before the enemy can counter these actions. He avoids piecemeal commitment of platoons until he can seize the initiative and maintain it throughout the attack. The commander uses the security force to fix the enemy while the main body maneuvers to look for an assailable flank or he uses the main body to fix the enemy while the security force finds the assailable flank.

FOLLOW THROUGH

3-121. The unit transition back into a movement to contact and continues to advance if the enemy is defeated. The movement to contact terminates when the unit reaches the final objective or limit of advance or it transitions to a more deliberate attack, defense, or retrograde.

SEARCH AND ATTACK

3-122. Search and attack is a decentralized movement to contact, requiring multiple, and coordinated reconnaissance patrols to locate and destroy the enemy. It is most often used when operating within noncontiguous areas of operation during a small scale contingency. The SBCT Infantry battalion conducts this form of the movement to contact to destroy enemy forces, deny the enemy certain areas, to protect the force, or for information collection. Execution of the search-and-attack will typically be by company-sized elements in battalion-sized AOs. This is based on their speed with the mobility of the Stryker vehicle and flexibility of their organic task organization primarily in the SBCT Infantry rifle companies. The SBCT may augment the SBCT Infantry rifle company with MGS and ATGM platoons to support the mission by—

- Locate and eliminate enemy strong points.
- Destroy enemy armored forces within its capability.
- Fix or block the enemy until reinforcements arrive.
- Maintain surveillance of a larger enemy force through stealth until reinforcements arrive.

CORDON AND SEARCH

3-123. A common tactical mission during operations focused on stability tasks is a cordon and search. The purpose of cordon and search is to obtain weapon caches, materiel or information, a specific high-value target, or persons of interest. Biometric identity data collection enables cordon and search mission by identifying the persons of interest. A cordon and search involves two processes—limiting freedom of movement and searching dwellings. These two actions have the potential to produce negative consequences; therefore, organizing cordon and search elements requires extensive mission tailoring and commanders must prepare for civil disturbances. (Refer to ATP 3-06.20 for more information.)

3-124. Cordon and search involve isolating the target area and searching suspected buildings to capture or destroy possible insurgents or contraband. It involves the emplacement of a cordon, or security perimeter, to prevent traffic in and out of the area. The cordon permits the search element to operate unimpeded within the secured area. The ATGM and MGS Stryker variants provide a means of isolating objectives. Positions that are away from structures but allow fields of fire that converge into choke points are ideal for ATGM. Narrow corridors with long fields of fire are ideal for MGS. ATGMs and MGS normally establishing traffic control points by using its size to block high speed avenues of approach. When paired with another Stryker vehicle at a control point it can provide coverage on both inner and outer cordon security. Ideally, ATGM and MGS are paired with ICVs who can use their remote weapon system and air guard hatches to provide security from attacks in buildings. The vehicles themselves are vulnerable to dismounted attacks in close proximity and benefit greatly when protected by Infantry.

SECTION III – ATTACK

3-125. An *attack* is an offensive task that destroys or defeats enemy forces, seizes and secures terrain, or both (ADRP 3-90). An attack is a primary offensive task that destroys or defeats enemy forces, seizes and secures terrain, or both. (Refer to FM 3-90-1 for more information.)

3-126. The primary difference between a deliberate and a hasty attack is the extent of planning and preparation that the attacking force conducts. At one end of the continuum, the SBCT weapons troop executes hasty attacks with the Cavalry Squadron upon identification of a high pay off target by providing direct fire with its ATGM and MGS vehicles and quickly disengaging. At the other end of the continuum, the SBCT weapons troop conducts a deliberate attack with a SBCT task force with detailed knowledge of the enemy, a task organization designed specifically for the attack, and a fully rehearsed plan. Most attacks fall somewhere between the two ends of the continuum.

3-127. The commander conducts a deliberate attack against a strong enemy position. As the troop prepares for the attack, the enemy continues to strengthen his position. A deliberate attack is a fully synchronized mission that employs every available asset against the enemy defense. It is characterized by a high volume of planned fires, use of major supporting attacks, forward positioning of resources needed to maintain momentum, and operations throughout the depth of enemy positions. Deliberate attacks follow a preparatory

period that includes planning, reconnaissance, coordination, positioning of follow-on forces and reserves, preparation of troops and equipment, rehearsals, and operational refinement.

3-128. The commander conducts a hasty attack during reconnaissance and security tasks, movement to contact, part of a defense, or when he determines that the enemy is in a vulnerable position and can be quickly defeated. The SBCT weapons troop usually conducts a hasty attack immediately, with available resources. This type of attack may cause the attacking force to lose a degree of synchronization. To minimize this risk, the commander maximizes use of standard formations and well-rehearsed, thoroughly understood battle drills and SOPs. A hasty attack often is the preferred option during continuous operations. It enables the commander to maintain the momentum while denying the enemy the time needed to prepare his defenses.

ORGANIZATION OF FORCES

3-129. Once the commander determines the scheme of maneuver, the commander task-organizes the force to ensure he has enough combat power to accomplish its mission. The commander organizes into a security force, a main body, and a reserve, all of which are supported by some type of sustainment organization. The commander should complete any changes in task organization in time to allow units to conduct rehearsals with their attached and supporting elements. The weapons troop works in close coordination with Infantry and Cavalry to conduct attacks. Its platoons can part of any of the forces that comprise an attack.

SECURITY FORCES

3-130. Under normal circumstances, the commander resources dedicated security forces during an attack only if the attack will uncover one or more flanks or the rear of the attacking force as it advances. In this case, the commander designates a flank or rear security force and assigns it a guard or screen mission, depending on the mission variables and factors of METT-TC. The security force can be comprised of a platoon or section.

MAIN BODY

3-131. The commander organizes the main body according to METT-TC. He determines his formations, movement techniques, their shifts according to the enemy situation. His order of battle is determined by the enemy element that the commander will most likely engage at the time and location of his choosing considering the likely contingencies that may affect the plan. The commander organizes the main body of the SBCT weapons troop to be flexible in its execution of likely contingencies yet capable to achieve to intent of the attack. The maneuver scheme identifies the decisive operation. All of the force's available resources operate in concert to assure the success of the decisive operation. The subordinate unit or units designated to conduct the decisive operation can change during the course of the attack.

3-132. The commander designates an assault, breach, and support force if the commander expects to conduct a breach during the attack. The assault force is primarily made of Infantry. The breach force can be a combination of Infantry, combat engineers (when augmented), ATGM or MGS depending on the obstacle. The support force is usually comprised of ATGM, MGS, the mortar section, and ICV's using crew served weapons. Infantry can be used to provide local security for the Stryker vehicles in the support force.

3-133. If it is impractical to determine when or where the echelon's decisive operation will be, such as during a hasty attack, the commander retains flexibility by arranging forces in depth, holding out strong reserves. When operating as a weapons troop the commander places MGS platoons to the front and flanks of the formation and keeping the ATGMs to the center and rear. If the weapons troops platoons are attached to Infantry or Cavalry units the ATGM and MGS are best placed to the rear and center to react to confirmed enemy. If Infantry and Cavalry units are in front or adjacent to the weapons troop the commander organizes his forces to benefit from the security those units provide by their movement. As soon as the tactical situation develops to allow the commander to designate the decisive operation, the commander focuses available resources to support that decisive operation. Enemy actions, minor changes in the situation, or the lack of success by other elements cannot be allowed to divert either forces or their effects from the decisive operation (FM 3-90-1).

RESERVE

3-134. The commander uses the reserve to exploit success, defeat enemy counterattacks, or restore momentum to a stalled attack. For a company mission, this would usually be a squad-size force. For a battalion mission, it usually is a platoon size element. Once committed, the reserve's actions normally become or reinforce the echelon's decisive operation, and the commander makes every effort to reconstitute another reserve from units made available by the revised situation. Often the commander's most difficult and important decision concerns the time, place, and circumstances for committing the reserve. The reserve is not a committed force; it is not used as a follow and support force, or as a follow and assume force. The commander decides what type of reserve force is best suited according to METT-TC when using SBCT units. The reserve can be comprised of MGS, Infantry squads or combination of.

3-135. In the attack, the combat power allocated to the reserve depends primarily on the level of uncertainty about the enemy, especially the strength of any expected enemy counterattacks. The commander only needs to resource a small reserve to respond to unanticipated enemy reactions when detailed information and intelligence about the enemy exists. When the situation is relatively clear and enemy capabilities are limited, the reserve may consist of a small fraction of the command. When the situation is vague, the reserve may initially contain most of the commander's combat power (FM 3-90-1).

SUSTAINMENT ORGANIZATION

3-136. The commander resources his sustainment assets to support the attacking force. The commander organizes the supporting sustainment and other logistics assets into combat and field trains and they are overseen by the 1SG.

CONTROL MEASURES FOR AN ATTACK

3-137. Units conducting offensive tasks are assigned an AO within which to operate. Within the AO the commander designates the following control measures regardless of whether the attack takes place in a contiguous environment or a noncontiguous environment:

- AOs for all pertinent battalion level and below subordinate, adjacent, host-nation, or allied forces within the operating area.
- Phase line as the LD, which also may be the line of contact.
- Time to initiate the mission.
- Objective.

3-138. The commander can use any other control measures necessary to control the attack. Short of the LD and line of contact, the commander may designate assembly areas and attack positions where the unit prepares for offensive tasks or waits for the establishment of the required conditions to initiate the attack. Beyond the LD and line of contact, the commander may designate checkpoints, phase lines, probable line of deployment (PLD), assault positions, direct fire control measures, and fire support coordination measures. A final coordination line, assault positions, SBF, and attack by fire positions, and time of assault to further control the final stage of the attack can be used between the PLD and the objective. Beyond the objective the commander can impose a limit of advance if the commander does not want the unit to conduct exploitation or a pursuit (FM 3-90-1).

PLANNING AN ATTACK

3-139. Friendly forces seek to place the enemy in a position where the enemy can easily be defeated or destroyed in an attack. The commander seeks to keep the enemy off-balance while continually reducing the enemy's options. In an attack the commander focuses movement and maneuver effects, supported by the other warfighting functions on those enemy forces that seek to prevent the unit from accomplishing its mission. Planning helps the commander synchronize the effects of combat power through TLPs. (Refer to ADP 5-0 for more information).

3-140. The weapons troop attack displays the fundamentals of the offense: surprise, concentration, audacity, and tempo. The most effective attacks have disciplined tactical patience to allow enemy to enter an EA, distinct trigger lines, and synchronized effects such as obscuration smoke fired by artillery and mortars with simultaneous volley fire from multiple elements from different positions on multiple targets. The ATGM and

MGS vehicles quickly displace, reposition and reengage before the enemy recovers from the effects of the volley fire.

MISSION COMMAND

3-141. The commander states the desired effect of fires on the enemy weapons systems, such as suppression or destruction, as part of his planning process. The commander assigns subordinate units their missions and imposes the control measures needed to synchronize and maintain control over the operation. He plans redundant forms of communication to his subordinate units to facilitate quick and timely responses to adjustments to the plan. These forms of communication will often change between voice, digital, and visual signals as phases of the operation are completed.

3-142. The commander determines the probable line of contact and enemy trigger lines using the enemy situational and weapons templates previously developed. As the commander arrays subordinate elements to shape the AO, friendly weapons systems are matched against the enemy's to determine the probable line of deployment. Once the commander determines the probable line of deployment, he establishes how long it takes subordinates to move from the line of departure to the probable line of deployment and any SBF positions the attack requires. The commander establishes when and where the force maneuvers into enemy direct-fire range.

3-143. Every attack plan contains provisions for exploiting success or any advantages that may arise to accomplish the mission. The commander exploits success by aggressively executing the plan, promoting subordinate leader initiative, and using units that can rapidly execute battle drills. For the SBCT weapons troop and its elements it may include repositioning the support by fire position to the likely enemy exfiltration route as the assault element occupies the objective.

MOVEMENT AND MANEUVER

3-144. In the plan of attack, the commander seeks to surprise the enemy by choosing an unexpected direction, time, type, or strength for the attack and by exploiting the success of military deception operations. Surprise delays enemy reactions, overloads and confuses enemy mission command, induces psychological shock in the enemy, and reduces the coherence of the enemy defense. The commander achieves tactical surprise by attacking in bad weather and over seemingly impassible terrain, conducting feints and demonstrations, maintaining a high tempo, destroying enemy forces, and employing sound operations security (OPSEC). This can be done by successively and rapidly attacking multiple units or objectives simultaneously, and breaking contact. The inflicted casualties slow the enemy pace, disrupted their mission command, and the breaking contact reduces the enemy's ability to counterattack.

3-145. The commander plans different attack times for the decisive and shaping operations to mislead the enemy and allow the shifting of supporting fires to successive attacking echelons. However, simultaneous attacks provide a means to maximize the effects of mass in the initial assault. They prevent the enemy from concentrating defensive fires against successive attacks. This is beneficial for supporting Infantry assaults on objectives.

3-146. When planning an attack, the commander and subordinate leaders of the SBCT weapon troop focus on the routes, formations, navigational aids, and combat information provided higher echelon and adjacent units. This information is key for the weapons troop to achieve surprise. Some terrain locations may require the attacking unit to change its combat formation, direction of movement, or movement technique when it reaches those locations. SBCT commanders need to consider how and where they will use the ATGM and MGS platoon in the attack. Ideally, the ATGM platoons engage the front of enemy formations at maximum ranges while the MGS elements engage the middle simultaneously. Preferably, the platoons engage the sides or rear enemy targets. The two echelons alternate fires between their vehicle sections providing constant direct fire on the enemy force to inflict maximum casualties without being compromised. The attack ceases when the enemy is destroyed or disrupted, and the ATGM and MGS elements can break contact or continue the mission.

INTELLIGENCE

3-147. The weapons troop commander needs to have detailed knowledge of the enemy's organization, equipment, and tactics to employ his forces. He must understand the enemy's strengths and weaknesses. The

weapons troop commander coordinates with associated intelligence sections to support his decisions. The commander cannot conduct a deliberate attack if he does not have accurate and predictive intelligence and, therefore, does not know where most of the enemy's units and systems are located.

FIRES

3-148. The planning process synchronizes the unit's maneuver with the provision of fire support. It identifies critical times and places where the commander needs the maximum effects from fire-support assets and direct fire assets. The commander combines maneuver with indirect fires to mass effects, achieve surprise, destroy enemy forces, and obtain decisive results.

3-149. The weapons troop vehicle commanders will often find themselves as the observer (and executor) of fires. They will rely on the higher and adjacent echelon fire support assets to execute indirect fires. Understanding how the higher and adjacent echelons intend to place and orient its fires is critical to the synchronization of the indirect fire plan with the weapons troop maneuver plan. The purpose of echeloning fires is to maintain constant fires on a target while using the optimum delivery system to the point of its risk-estimate distance in combat operations or minimum safe distance in training. Echeloning fires provides protection to friendly forces as they maneuver and engage targets on the objective or in the engagement area, allowing them freedom of maneuver with minimal casualties. This suppression prevents the enemy from observing and engaging the friendly elements allowing the friendly force to continue the attack unimpeded.

SUSTAINMENT

3-150. *Sustainment* is the provision of the logistics, personnel services, and health service support necessary to maintain operations until successful mission completion (ADRP 4-0). The commander plans, along with the XO and 1SG, to provide sustainment to ensure freedom of action, extend operational reach, and prolong endurance. The sustainment plan includes CASEVAC, vehicle recovery, and resupply during the execution and consolidation and reorganization phase of the attack. Often the SBCT weapons troop and its subordinate platoons will face multiple task organization changes; as such sustainment considerations much be considered with these changes. The SBCT weapons troop commander and its subordinate leadership must coordinate with its gaining units to ensure they have the capability to sustain their operations.

3-151. This plan must synchronize with the movement and maneuver so that actions taken in the event of a casualty, loss of vehicle, or critical item do not compromise the mission or retask combat power. SBCT Weapons troop platoons lack ability to CASEVAC independently. The weapons troop CASEVAC plan needs to be as close as possible to front units if the area behind the weapons troop is contested or unsecured. If the area behind the troop is generally secure, position the trains further away and bring them forward upon contact. Coordination with other units for CASEVAC, medical evacuation (MEDEVAC), and vehicle recovery reduces redundancy across the operating area and often provides a more timely response and outcome for both units involved.

PROTECTION

3-152. Protection facilitates the commander's ability to maintain the force's integrity and combat power. It determines the degree to which potential threats can disrupt operations and counters or mitigates those threats. Emphasis on protection increases during preparation and continues throughout execution. Protection is a continuing activity; it integrates all protection capabilities to safeguard bases, secure routes, and protect forces.

PREPARING AN ATTACK

3-153. Attacks are best organized and coordinated in assembly areas. If the commander decides that rapid action is essential to retain a tactical advantage, he may opt not to use an assembly area. Detailed advance planning, combined with effective communications, SOP, and battle drills, reduces negative impacts of such a decision.

3-154. The attacking unit will occupy an assembly area during the preparation phase. The unit moves with as much secrecy as possible, normally at night, and along routes that prevent or degrade the enemy's capabilities to visually observe or otherwise detect the movement. It avoids congesting its assembly area and

occupies it for the shortest length of time possible. Each unit is responsible for its own security activities, such as local ground security, while in the assembly area.

3-155. The attacking unit should continue its TLPs and priorities of work to the extent the situation and mission allow before moving to attack positions. These preparations include, but are not necessarily limited to—

- Protecting the force.
- Conducting task organization.
- Performing reconnaissance.
- Refining the plan and updating mission data into mission command systems.
- Briefing the troops.
- Conducting rehearsals, to include test firing of weapons.
- Moving sustainment and medical support forward.
- Promoting adequate rest for both leaders, and Soldiers.
- Positioning the force for subsequent action.

3-156. Leaders at all levels should conduct a reconnaissance of the actual terrain when it will not compromise operational security or result in excessive risk to the unit leadership as part of TLPs. Modern information systems and reconnaissance assets enable leaders to conduct a virtual reconnaissance when a physical reconnaissance is not practical. If a limited-visibility attack is planned, they should reconnoiter the terrain at night (FM 3-90-1).

REHEARSALS

3-157. The commander exercises and refines the maneuver, fire, and sustainment plans during rehearsals, which are an important part of ensuring the plan's coordination and synchronization. As part of the rehearsal process, the commander reviews his decision points and the anticipated battle sequence with subordinate leaders, ensuring all units understand the plan, the relationship between fire and movement, and the synchronization of critical events. These critical events include—

- Actions on the objective.
- Reconnaissance handover.
- Moving from the assembly area to the LD.
- Maneuvering from the LD to the PLD, to include dismount points.
- Occupying support-by-fire positions.
- Conducting the breach or gap crossing if applicable.
- Consolidating on the objective.
- Exploiting success or pursuing a withdrawing enemy.
- Actions of echelon reserves.
- Resupply operations.
- Contingency plans, branches and sequels to execution matrix or decision points.

3-158. The unit should conduct rehearsals under as many types of adverse conditions as possible, with time and other restraints, to identify and prepare the unit to cope with problems. At lower tactical echelons, the rehearsal includes battle drills, such as creating lanes through minefields, react to contact, loss of communications, CASEVAC, and so forth.

EXECUTING AN ATTACK

3-159. A series of advances and assaults by attacking units until they secure the final objective characterizes the attack. Commanders at all levels use their initiative to shift their main effort between units to take advantage of opportunities and momentum that ensure the enemy's rapid destruction. Attacking units move as quickly as possible following reconnaissance elements or successful probes through gaps in the enemy's defenses. They shift their strength to reinforce success and carry the operation deep into the enemy's rear.

3-160. The SBCT weapons troop conducts attacks after analyzing information about the enemy through reconnaissance, maneuvering to a tactical point of advantage, and initiating contact with enemy forces. The

troop sustains its attack by alternating fires within its sections and platoons, advances or repositions in contact using bounding overwatch until the enemy is neutralized, destroyed, or defeated. If the troop is unable to achieve success in the attack it should break contact or transition to a hasty defense.

3-161. The commander does not delay the attack to preserve the alignment of subordinate units or to adhere closely to the preconceived plan of attack. He avoids becoming so committed to the initial plan that opportunities are neglected. He is mentally prepared to abandon failed attacks and to exploit any unanticipated successes or enemy errors by designating another unit to conduct the decisive operation in response to the changing situation (FM 3-90-1).

GAIN AND MAINTAIN ENEMY CONTACT

3-162. Gaining and maintaining contact with the enemy when he is determined to break that contact is vital to the success of offensive tasks. A defending enemy establishes a security area around his forces to make early contact with the attacking forces to determine their capabilities, intent, and chosen COA and to delay their approach. The enemy commander wants to use his security area to strip away friendly reconnaissance forces and hide his dispositions, capabilities, and intent. His goal is to compel the attacking force to conduct a movement to contact against his forces to determine the exact location of the attacking forces.

3-163. Stryker units gain and maintain contact through reconnaissance forward with sensors detecting the enemy and maneuvering to confirm or deny their presence. Information gained from reconnaissance is quickly shared through mission commands systems laterally and vertically throughout the SBCT to allow its combat units to maneuver and destroy the threat. The SBCT weapons troop's elements are no different. They rely on their Infantry and Cavalry elements to confirm sensor detection and allow those units to pull them into engagements with the enemy.

DISRUPT THE ENEMY

3-164. Disrupting one or more parts of the enemy weakens his entire force and allows the friendly commander to attack the remaining enemy force in piecemeal. The assessment and decisions regarding what to disrupt, when to disrupt, and to what end are critical.

3-165. Once any type of contact is made with the enemy, the commander wants to use the element of surprise to conduct shaping operations that strike at the enemy and disrupt both the enemy's combined arms team and his ability to plan and control his forces. Once this disruption begins, it continues throughout the attack.

FIX THE ENEMY

3-166. A primary purpose in fixing the enemy is to isolate the objective of the force conducting the echelons decisive operation to prevent the enemy from maneuvering to reinforce the unit targeted for destruction. The commander limits the options available to his opponent. Fixing an enemy into a given position or a COA and controlling his movements limit his options and reduce the amount of uncertainty in the AO.

3-167. Fixing the enemy is done with the minimum amount of forces. The commander allocates the bulk of his combat power to the force conducting his decisive operation, so fixing is, by necessity, shaping operations that illustrate economy of force as a principle of war. Therefore, the commander carefully considers which enemy elements to fix and target only those that can significantly affect the outcome of the fight. The ATGMs in the SBCT weapons troop are the primary means to fix for an attack due to their long range capability and lethality of their weapon systems. They are best employed as intermixed with MGS and ATGM working together to provide sustained rate of fires on enemy positions.

MANEUVER

3-168. The commander maneuvers his forces to gain positional advantage so he can seize, retain, and exploit the initiative. He avoids the enemy's defensive strength. He employs tactics that defeat the enemy by attacking through a point of relative weakness, such as a flank or the rear. The key to success is to strike hard and fast, overwhelm a portion of the enemy force, then quickly transition to the next objective or phase, thus maintaining the momentum of the attack without reducing the pressure. The commander considers the following to conduct maneuvers—

- Movement from the line of departure to the probable line of deployment.

- Actions at the probable line of deployment, assault position, or final coordination line.
- Breaching.
- Actions on the objective.
- Follow through.

Movement from the Line of Departure to the Probable Line of Deployment

3-169. The unit transitions from troop movement to maneuver once it crosses the LD. It moves aggressively and as quickly as the terrain and enemy situation allow. It moves forward using appropriate movement techniques assisted by the fires of supporting units. Fire and movement are closely integrated and coordinated. Effective suppressive fires facilitate friendly movement, and friendly movement facilitates more effective fires. Whenever possible, the attacking unit uses avenues of approach that avoid strong enemy defensive positions, takes advantage of all available cover and concealment, and places the unit on the flanks and rear of the defending enemy. The unit uses obscurants to conceal its movement when cover and concealment are not available.

Actions at the Probable Line of Deployment, Assault Position, or Final Coordination Line

3-170. The attacking unit maintains the pace of its advance as it approaches its PLD. The attacking unit splits into one or more assault and support forces once it reaches the PLD, if not previously completed. The weapons troop supports the assault force from their support-by-fire positions before the assault force crosses the PLD. The combined arms task force or company team commander synchronizes the occupation of these support-by-fire positions with the maneuver of the supported attacking unit to limit the vulnerability of the forces occupying these positions. This commander uses unit tactical SOPs, battle drills, prearranged signals, EAs, and TRPs to control the direct fires from these supporting positions. The commander employs restricted fire lines between converging forces.

Breaching

3-171. Once the support force sets the conditions, the breach force reduces, clears, and marks the required number of lanes through the enemy's tactical obstacles to support the maneuver of the assault force. The commander identifies the conditions that allow the breach force to proceed to avoid confusion. From the PLD, the assault force maneuvers against or around the enemy to take advantage of the support force's efforts to suppress the targeted enemy positions. Successful obstacle reduction depends on effectively applying the breaching fundamentals of suppress, obscure, secure, reduce, and assault (SOSRA). MGS and ATGM will most likely suppress, but also have limited capability to reduce some obstacles. (See chapter 7 this publication for more information about breaching).

Actions on the Objective

3-172. The effects of the overwhelming and simultaneous application of fire, movement, and shock action characterize the final assault. This violent assault destroys or defeats and drives the enemy from the objective area. Small units conduct the final assault while operating under the control of the appropriate echelon CP.

3-173. The commander employs all fire support means to destroy and suppress the enemy and sustain the momentum of the attack. The commander improves the likelihood of success by carefully synchronizing the effects of indirect-fire systems and available CAS. Fires are planned in series or groups to support maneuver against enemy forces on or near the geographical objective. The assault element moves rapidly across the objective as the commander shifts artillery fires and obscurants from the objective to other targets. The support element does not allow its suppressive fires to lapse. These fires isolate the objective and prevent the enemy from reinforcing or counterattacking. They destroy escaping enemy forces and systems (FM 3-90-1).

3-174. Elements of the SBCT weapons troop are designed as the support element for Infantry assaults on the objectives. They are capable of assaulting the objective with the MGS platoons. ATGM platoons are best utilized to destroy enemy on the objective through attack by fire.

Follow Through

3-175. The commander has two alternatives after seizing the objective—exploit success and continue the attack or terminate the offensive task. The most likely on-order mission is to continue the attack after seizing

the objective. The commander continues troop leading procedures in preparation for any on-order missions assigned by a higher headquarters during consolidation.

3-176. Upon termination of the attack, the commander consolidates and reorganizes. He establishes a hasty defense on the limit of advance off the objective area with the assaulting force. The supporting elements of the attack follow the assaulting elements path to link up with the remainder of the troop. Once consolidated, the commander searches the objective for any enemy forces, captured equipment, prisoners, or anything that may provide valuable intelligence, if the tactical situation allows. Simultaneously, the troop conducts accountability of personnel, recovery of equipment, and cross levels ammunition. Resupply and maintenance are follow-on tasks established in the priorities of work determined by the commander and based on METT-TC.

SPECIAL-PURPOSE ATTACKS

3-177. Special purpose attacks are ambush, counterattack, demonstration, feint, raid, and spoiling attack (FM 3-90-1). The commander's intent and the mission variables of METT-TC determine which special purpose attack(s) to employ. Each attack can be conducted as either a hasty or deliberate attack. The commander's intent and METT-TC mission variables and factors determine the specific attack form. As subordinate attack tasks, they share many of the planning, preparation, and execution considerations of the attack. Demonstrations and feints, while forms of attack, are associated with military deception operations (FM 3-13).

AMBUSH

3-178. An *ambush* is an attack by fire, or other destructive means, from concealed positions on a moving or temporarily halted enemy (ADRP 3-90). An ambush stops, denies, or destroys enemy forces by maximizing the element of surprise. Ambushes can employ direct fire systems and other destructive means, such as command-detonated mines, indirect fires, and supporting nonlethal effects. They include an assault to close with and destroy enemy forces. In an ambush, ground objectives do not have to be seized and held.

3-179. The three types of ambush are—point ambush, area ambush, and antiarmor ambush. In a point ambush, a unit deploys to attack a single kill zone. In an area ambush, a unit deploys into two or more related point ambushes. Units smaller than a platoon do not usually conduct an area ambush. The SBCT weapons troop can perform all forms of ambush but are best allocated for antiarmor ambushes.

3-180. A typical ambush consists of three elements—assault, support, and security. The assault element fires into the kill and clears zone. Its goal is to destroy the enemy force. It may be assigned additional tasks, such as—

- Searching for items of intelligence value.
- Capturing prisoners.
- Photographing new types of equipment.
- When unable to take enemy equipment, completing the destruction of said equipment to avoid its immediate reuse.

3-181. The support element supports the assault element by firing into and around the kill zone, and provides the ambush's primary killing power. The support element attempts to destroy most of the enemy combat power before the assault element moves into the objective or kill zone. The security element isolates the kill zone, provides early warning of the arrival of any enemy relief force, and provides security for the assault and support elements. It secures the objective rally point and blocks enemy avenues of approach into and out of the ambush site, which prevents the enemy from entering or leaving.

COUNTERATTACK

3-182. A counterattack is an attack by part or all of a defending force against an enemy attacking force. Units conduct counterattacks to seize the initiative from the enemy through offensive action (for example, regaining lost ground, or cutting off or destroying enemy advance units). The objective of counterattack is to deny the enemy his goal when attacking. The commander usually directs a counterattack from a defensive posture—to defeat or destroy enemy forces, exploit an enemy weakness, such as an exposed flank, or to regain control of terrain and facilities after an enemy success. A counterattacking force maneuvers to isolate

and destroy a designated enemy force. It can attack by fire into an EA to defeat or destroy an enemy force, restore the original position, or block an enemy penetration. Once launched, the counterattack becomes a decisive operation for the commander conducting the counterattack.

3-183. To be decisive, the counterattack occurs when the enemy is overextended, dispersed, and disorganized during his attack. All counterattacks should be rehearsed under the same conditions in which they will actually be conducted. Careful consideration is given to the event that will trigger the counterattack. Once committed, the counterattack force conducts the decisive operation.

3-184. SBCT's conduct counterattacks assisted with the use of mission command systems and maneuver to a point of tactical advantage to initiate the attack with the enemy forces. They take advantage of the speed and protection of their vehicles to deploy and initiate their attacks.

DEMONSTRATIONS

3-185. A demonstration is a form of attack designed to deceive the enemy as to the location or time of the decisive operation by a display of force. Forces conducting a demonstration do not seek contact with the enemy as intended. The ATGM and MGS make use of their direct fire weapons systems on long range or unoccupied targets to display their accuracy or lethal capability during a demonstration.

FEINTS

3-186. A feint is a limited attack used to deceive the enemy as to the location or time of the actual decisive operation. Forces conducting a feint seek direct fire contact with the enemy, but avoid decisive engagement. As in the demonstration, the commander uses feints in conjunction with other military deception activities.

RAID

3-187. A raid is a limited-objective, deliberate attack that entails swift penetration of hostile terrain. It is not intended to hold territory and has to have a planned withdrawal. A raid requires detailed intelligence, preparation, and planning. The elements of the SBCT weapons troop support raids as part of a larger force. They will likely target the enemies most destructive weapon system or highest value target to support the initiation of the raid. Raids are designed to accomplish a number of missions such as—

- Capture prisoners, installations, or enemy materiel.
- Capture or destroy specific enemy command and control locations.
- Destroy enemy materiel or installations.
- Obtain information concerning enemy locations, dispositions, strength, intentions, or methods of operation.
- Confuse the enemy or disrupt his plans.
- Liberate friendly personnel.

SPOILING ATTACK

3-188. A *spoiling attack* is a tactical maneuver employed to seriously impair a hostile attack while the enemy is forming or assembling for an attack. A spoiling attack usually employs armored, attack helicopter, or fire support elements to attack on enemy assembly positions in front of a main line of resistance or battle position (FM 3-90-1).

3-189. The objective of a spoiling attack is to disrupt the enemy's offensive capabilities and timelines while destroying targeted enemy personnel and equipment, not to secure terrain and other physical objectives. Conditions when conducting spoiling attack are:

- The spoiling attack's objective needs to be obtainable. The enemy should be unable to respond to the attack in a synchronized and coordinated manner.
- The commander prevents the force conducting the spoiling attack from becoming over extended.

SECTION IV – TRANSITIONS

3-190. The commander halts an offensive task when it results in complete victory and ends hostilities, reaches a culminating point, or the commander receives a change in mission from a higher commander.

CONSOLIDATION

3-191. Consolidation is organizing and strengthening a newly captured position so that it can be defended. The attacking unit tries to exploit its success regardless of the assault type. In some situations, however, the unit may have to consolidate its gains. Consolidation may vary from a rapid repositioning of forces and security elements on the objective, to a reorganization of the attacking force, to the organization and detailed improvement of the position for defense.

3-192. Consolidation comprises actions taken to secure the objective and defend against an enemy counterattack. Consideration should be given that the enemy that occupied the objective may have planned indirect fire targets to assist in their counterattack. The commander ensures that the SBCT weapons troop is ready to conduct the following actions that usually are part of consolidation:

- Eliminate enemy resistance on the objective.
- Establish security beyond the objective by securing areas that may be the source of enemy direct fires or enemy artillery observation.
- Establish additional security measures such as OPs and patrols.
- Prepare for and assist the passage of follow-on forces (if required).
- Continue to improve security by conducting defensive actions. These defensive actions include EA development, direct fire planning, and battle position preparation.
- Adjust final protective fire (FPF), register indirect fire weapons systems, and assign targets along likely mounted and dismounted avenues of approach.
- Protect the obstacle reduction effort.
- Secure EPWs and detainees.
- Prepare for the enemy counterattack.

REORGANIZATION

3-193. Reorganization is usually conducted concurrently with consolidation. It comprises actions taken to prepare the SBCT weapons troop for follow-on missions. As with consolidation, the SBCT weapons troop commander plans and prepares for reorganization as he conducts his TLPs. He ensures that the SBCT weapons troop takes the following actions:

- Provide appropriate first aid, TC3, and evacuate casualties as needed.
- Process EPW's and detainees.
- Treat and evacuate wounded EPWs and detainees, and process the remainder of EPWs and detainees.
- Cross-level personnel and adjust task organization when necessary to support the next phase or mission. Link-up with or acquire attachments or detachments.
- Conducts resupply operations, to include rearming and refueling.
- Redistribute ammunition.
- Conduct required maintenance.
- Continue improvement of defensive positions, as needed.

CONTINUING OPERATIONS

3-194. For all attacks, the SBCT weapons troop should plan to exploit success. However, at the conclusion of an engagement, the commander may be forced to defend or be relieved by follow on forces to continue operations. Units make use of the terrain to enhance their survivability for short defensive tasks. If a longer defense is envisioned, engineer assets immediately should shift the priority of their efforts to provide survivability support (fighting positions and similar activities). Engineer assets should do this even as they sustain mobility and integrate countermobility into the planned defense. The SBCT weapons troop

commander considers the higher commander's concept of operations, friendly capabilities, and the enemy situation when making the decision to defend or continue offensive tasks.

TRANSITION TO DEFENSIVE TASKS

3-195. As offensive tasks approach a culmination, the commander orders a transition to a defense. The commander uses two basic techniques when he transitions to the defense. The first technique requires the leading elements to commit forces and move forward to claim enough ground to establish a security area anchored on defensible terrain. The second technique is to establish a security area along the unit's final positions, moving the main body rearward to defensible terrain.

3-196. The commander anticipating the termination of unit offensive actions prepares orders that include the time or circumstances under which the offense transitions to a defensive-focused mission, the missions and locations of subordinate units, and mission command measures. The commander takes the following actions as the unit transitions from an offensive to a defensive task:

- Maintains contact and information collection on the enemy using a combination of reconnaissance units and surveillance assets to develop the situation and facilitate planning of future operations.
- Establishes a security area and local security measures (to include biometric identity data collection).
- Redeploys indirect fire assets to ensure the support of security forces.
- Redeploys forces based on probable future employment.
- Maintains or regains contact with adjacent units in a contiguous AO and ensures that units remain capable of mutual support in a noncontiguous AO.
- Transitions the engineer effort by shifting the emphasis from mobility to countermobility and survivability.
- Consolidates and reorganizes.

TRANSITION TO STABILITY TASKS

3-197. Upon order from higher headquarters, the commander orders a transition to operations focused on stability tasks. These tasks establish a safe, secure environment that facilitates reconciliation between local or regional threats. Stability tasks aim to establish conditions that support the transition to legitimate host nation (HN) governance, a functioning civil society, and a viable market economy.

3-198. The SBCT weapons troop commander ensures that contingencies are planned for to transition quickly from offensive to stability tasks and vice versa. For example, it may be wise for commanders to plan a defensive contingency with an on-order offensive mission for stability tasks that could deteriorate.

3-199. Subordinate leaders need to be fully trained to recognize activities that would initiate this transition. Actions in one unit's AO can affect a change in whatever type task an adjacent unit is conducting. (For example, an offensive action may cause noncombatants to be displaced to another section of the city creating a need to support operation for the unit in that AO.)

CONCLUSION

3-200. The SBCT weapons troop and its platoons best support offensive operations when they enable a flexible plan. Establishing command support relationships and spacing between units provide the operational flexibility supporting the plan. This allows the weapons troop commander to commit to contact with the enemy as the result of a deliberate decision. Transitioning them constantly to the main effort maintains the momentum and initiative for the SBCT.

Chapter 4
Defense

A *defensive task* is a task conducted to defeat an enemy attack, gain time, economize forces, and develop conditions favorable for offensive or stability tasks (ADRP 3-0). The SBCT weapons troop uses the defense to mass the effects of direct fires from enemy approaches to defeat a numerically superior force in depth. The commander combines natural and man-made obstacles to canalize the attacking force into engagement areas. This chapter discusses the basics of the defense, defensive tasks, and forms of the defense, engagement area development, and transitions.

SECTION I – BASICS OF THE DEFENSE

4-1. As part of the higher echelon's defensive tasks, the SBCT weapons troop may defend, delay, withdraw, or counterattack. The SBCT weapons troop may defend as part of the higher headquarters' main battle area, or it may conduct autonomous defensive or stability tasks within a small scale contingency. The SBCTs weapons troop and its higher headquarters conduct operations to create conditions for success as enemy forces enter into the main battle area and by weakening the enemy prior to the commencement to close combat.

4-2. The SBCT weapons troop usually defends in the main battle area against the most likely enemy armored threat. It may do this as the SBCT's main effort oversaw by an SBCT Infantry battalion or task force element. It can also transition from the SBCT cavalry squadron in the security area en route to SBCT task forces in the main battle area. The SBCT weapons troop can conduct the defense to achieve one or more of the following actions:

- Gain time.
- Retain key terrain.
- Support other missions.
- Delay or fix the enemy in one area while friendly forces attack him in another.
- Attrite enemy forces in depth.
- Reinforce a friendly unit
- React to an enemy penetration.

CHARACTERISTICS OF DEFENSE

4-3. Successful defenses employ the characteristics of disruption, flexibility, maneuver, mass and concentration, operations in depth, preparation, and security (refer to FM 3-90-1 for more information).

DISRUPTION

4-4. Defenders subvert an attacker's tempo, formations and synchronization by countering his initiative and preventing him from massing overwhelming combat power. Disruption attacks the enemy's will to fight and his means of effective command and control. Deep precision fires, long-range precision sniper fires, electronic countermeasures (jamming), scatterable mine, unexpected defensive positions, local counterattacks at all levels, and attacks delivered by a reserve force, combine to disrupt the enemy's attack and break his will to continue offensive operations. Repositioning forces, implement aggressive protection measures, the employment of roadblocks, ambushes, checkpoints, and information operations combine to disrupt the threat of asymmetrical attack. These tasks disrupt enemy efforts to fight as a combined-arms team.

FLEXIBILITY

4-5. The defender gains flexibility by sound preparation and task organization, disposition in depth, retention of reserves, repositioning, and effective mission command. The SBCT defense often displays rapid, simultaneous, and collaborative planning with flexible execution. Contingency planning permits flexibility. Flexibility also requires that the commander see the battlefield to detect the enemy's scheme of maneuver early. The intelligence preparation of the battlefield (IPB) process determines likely enemy actions; while security elements confirm or deny those actions.

MANEUVER

4-6. Maneuver allows the commander to take full advantage of the AO and mass and concentrate fires when desirable. Maneuver through movement in combination with fire, allows the commander to achieve a position of advantage over the enemy to accomplish the mission. It encompasses defensive actions such as defense support of civil authorities.

MASS AND CONCENTRATION

4-7. The SBCT weapons troop helps shape the battle by massing the effects of overwhelming combat power. Effects are synchronized in time and space and should be rapid and unexpected so that they break the enemy's offensive tempo and disrupt his attack. The commander arrays his combat power based on his assessment of the intelligence provided and the latest information from reconnaissance in a manner that overwhelms the enemy and provides the greatest impact on their forces while negating the risks to his own units. This can occur at a single decisive point or through multiple incursions in depth to achieve disruptive, destructive, and decisive effects upon the enemy's attack.

OPERATIONS IN DEPTH

4-8. Simultaneous application of all combat power throughout the area of operation improves the chances for success while minimizing friendly casualties. Quick, violent, and simultaneous action throughout the depth of the troops' area of operations can attrite, confuse, and even degrade an enemy force when they are most exposed and vulnerable. This often happens when an enemy extends the lines of their attack and leaves an open flank vulnerable to counter attack. Such actions weaken the enemies' morale and do not allow any early successes to build their confidence. Operations in depth prevent the enemy from gaining momentum in the attack. Synchronization of actions in decisive, shaping and sustaining efforts facilitate mission success.

4-9. Alternate and supplementary positions, combat outposts, and mutually supporting strongpoint's forward of the perimeter extend the depth. Fires are planned throughout the defensive area up to the maximum range of available weapons and reconnaissance assets. Fires move and reposition to maintain contact with enemy forces and observe NAIs in depth as the battle develops. During periods of reduced visibility, emplace obstacles around critical locations within the perimeter to disrupt the enemy's plan, and add depth to the defense.

PREPARATION

4-10. The troop commander determines likely enemy avenues of approach, likely enemy schemes of maneuver, where to kill the enemy, integration of obstacles, unit positioning, and integration of indirect fires, and he assigns missions accordingly. Defensive preparations include the following:

- Conduct rehearsals to ensure synchronization. These include employment of the reserve and counterattack forces.
- Position forces in depth.
- Reinforce terrain with obstacles that support the scheme of maneuver.
- Improve routes between positions in depth.
- Coordinate with assets forward in the battalion's security area to gain combat information or early warning.
- Designate a reserve.

- Enact survivability measures that involve action against conventional threats (preparation of the engagement area, digging-in mission command nodes and caches, and similar actions) as well as asymmetric threats (placing sensors near likely friendly fighting positions to prevent IEDs).

SECURITY

4-11. Security operations are measures normally taken by the SBCT Cavalry squadron and Infantry battalion or higher echelons to protect itself against all acts designed to impair its effectiveness, and prevent the enemy from gaining an unexpected advantage. Because the SBCT weapons troop defends against the most likely enemy armored threat whose weapon systems have equal or great ranges than their own commanders must integrate Infantry and Cavalry elements working together to help identify the enemy. These elements must protect the ATGM and MGS variants allowing them to maneuver against the armored threat. The squadron and battalion ensures security by employing reconnaissance elements throughout the entirety of its assigned AO. The squadron and battalion may employ a counterreconnaissance force, combat outposts, or a force conducting a screen to provide security. ATGM and MGS platoons can augment those company level units to support the security tasks (see chapter 2 of this publication).

DEFENSIVE TASKS

4-12. There are three basic defensive tasks—area defense, mobile defense, and retrograde. Each of these tasks contains elements of the others, and usually contains both static and dynamic aspects. The SBCT weapons troop provides firepower to support the SBCT in all three defensive tasks. They can defend AOs or positions, support security tasks or constitute the reserve as part of the SBCTs coordinated defense. They can also transition between these roles throughout the defensive operation.

4-13. As part of defensive tasks, the SBCT weapons troop can defend, delay, withdraw, counterattack, and perform security tasks. The SBCT weapons troop supports the defense as outlined by the SBCT commanders intent normally aligned to defeat or destroy the enemy armored threat or to provide firepower at the decisive point of the operation. The SBCT weapons troop can conduct the defense to achieve one or more of the following actions:

- Gain time.
- Retain key terrain.
- Support other missions.
- Delay or fix the enemy in one area while friendly forces attack him in another.
- Attrite enemy forces at a rapid rate while reinforcing friendly actions.

AREA DEFENSE

4-14. The *area defense* is a defensive task that denies enemy forces access to designated terrain for a specific time rather than destroying the enemy outright (ADRP 3-90). The emphasis is on retaining terrain where the bulk of the defending force positions itself in mutually supporting positions and controlling the terrain between positions. The defeat mechanism is fires into EAs, which reserve units can supplement. The commander uses his reserve force to reinforce fires, add depth, block penetrations, restore positions, or counterattack to destroy enemy forces and seize the initiative.

Forms of Defensive Maneuver

4-15. There are two forms of defensive maneuver within an area defense—defense in depth and forward defense. While the SBCT task force commander selects the type of area defense to use, the SBCT weapons troop commander often defines the general defensive scheme for his elements. The specific mission may impose constraints such as time, security, and retention of certain areas that are significant factors in determining how the troop will defend.

Defense in Depth

4-16. A defense in depth reduces the risk of the attacking enemy force penetrating the defense quickly. The enemy is unable to exploit a penetration because of additional defensive positions employed in depth. The in-depth defense provides more space and time to defeat the enemy attack.

4-17. The SBCT weapons troop uses a defense in depth when—

- The mission allows the SBCT weapons troop to fight the depth of the AO.
- The terrain does not favor a defense well forward, and there is better defensible terrain deeper in the AO.
- The terrain favors multiple positions of tactical advantage to engage enemy forces and displace without becoming fixed or compromised.
- Sufficient depth is available in the AO.
- Weapons of mass destruction may be used.

Forward Defense

4-18. The intent of a forward defense is to prevent enemy penetration of the defense. A forward defense is the least preferred due to its lack of depth. The SBCT task force commander will deploy majority of the weapons troop combat power into forward defensive positions near the forward edge of the battle area (FEBA). The ATGM and MGS positions should be protected by Infantry units in defensive positions that mutually support one another. The prepared positions of the ATGM and MGS must allow for fields of fire out of the SDZs of their weapon systems. The Infantry positions should optimally be forward of the ATGM and MGS hidden from enemy advancement and capable of engaging with their weapon systems. These elements should mass their fires on the enemy simultaneously to achieve the greatest lethal effects. While the SBCT task force may lack overall depth, the weapons troop and its platoons build depth into the defense at their levels. The commander fights to retain its forward position, and may conduct counterattacks against enemy penetrations, or destroy enemy forces in forward EAs. Often, counterattacks are planned forward of the FEBA to defeat the enemy.

4-19. The SBCT weapons troop uses a forward defense when—

- Terrain forward in the AO favors fields of fire, weapons range standoff, and good cover and concealment.
- Strong natural or man-made obstacles, such as a linear obstacle (river or a rail line), are located forward in the AO.
- The assigned AO lacks depth due to the location of the area or facility to be protected. Cover and concealment in the rear portion of the AO is limited.
- Directed by higher headquarters to retain or initially control forward terrain.

MOBILE DEFENSE

4-20. The *mobile defense* is a defensive task that concentrates on the destruction or defeat of the enemy through a decisive attack by a striking force (ADRP 3-90). The mobile defense focuses on defeating or destroying the enemy by allowing enemy forces to advance to a point where they are exposed to a decisive counterattack by the striking force. The commander uses the fixing force to hold attacking enemy forces in position, to help channel attacking enemy forces into ambush areas, and to retain areas from which to launch the striking force. A mobile defense requires an AO of considerable depth.

4-21. The SBCT weapons troop as a pure force in a mobile defense is either part of a fixing force or a striking force, but not both. It may have its subordinate elements task organized to support the fixing or striking force. As part of the fixing force, the SBCT weapons defends within its assigned AO. As part of the striking force, the SBCT weapons troop plans, rehearses, and executes offensive tasks.

Note. Units smaller than a division do not usually conduct a mobile defense because of their inability to fight multiple engagements throughout the width, depth, and height of their AO, while simultaneously resourcing the striking, fixing, and reserve forces. Typically, the striking force in a mobile defense consists of one-half to two-thirds of the defender's combat power.

4-22. The striking force is a committed force and has the resources to conduct a decisive counterattack as a part of the mobile defense. The striking force decisively engages the enemy as he becomes exposed in his attempts to overcome the fixing force. The striking force normally attacks a moving enemy force, and is usually comprised of armored formations.

RETROGRADE

4-23. The *retrograde* is a type of defense task that involves organized movement away from the enemy (ADRP 3-90). The enemy may force these actions or the commander may execute them voluntarily. In either case, the higher commander of the force executing the operation approves the retrograde. The intent of a retrograde is to improve a tactical situation or to prevent a worse situation from developing. Company size units execute retrogrades as part of a larger force, but may conduct independent retrogrades when necessary.

4-24. Retrograde can accomplish the following:

- Resist, exhaust, and defeat enemy forces.
- Draw the enemy into an unfavorable situation.
- Avoid contact in undesirable conditions.
- Gain time.
- Secure more favorable terrain
- Reposition forces, shorten lines of communication, or conform to movements of other friendly units.
- Disengage a force from an ongoing mission for use elsewhere in other missions.

4-25. *Disengage* is a tactical mission task where the commander has the unit break contact with the enemy to allow the conduct of another mission or to avoid decisive engagement (FM 3-90-1). It involves moving to a location where the enemy cannot engage the friendly force with either direct fires or observed indirect fires. Disengaging from the enemy while displacing from one position to the next is a difficult procedure. A disengagement plan includes the following:

- The maneuver concept of operations for tactical elements after disengagement, along with the movement routes for each subordinate unit.
- Fires to suppress the enemy and cover the unit's movement.
- Screening smoke to conceal the unit's movement, as part of a deception operation, or to cover passage points.
- Contact and passage points if moving through friendly lines.
- The time disengagement starts.
- The earliest time that functional and multifunctional support and sustainment elements move.

4-26. There are three types of retrograde—

- Delay.
- Withdrawal.
- Retirement.

Delay

4-27. Delay is a task that allows the unit to trade space for time, avoiding decisive engagement and safeguarding its elements. Delays gain time to—

- Allow other friendly forces to establish a defense.
- Cover a withdrawing force.
- Protect a friendly force's flank.
- Allow other forces to counterattack.

4-28. The SBCT weapons troop conducts delays by initiating and breaking contact with enemy forces with their ATGM and MGS fires to prevent from being decisively engaged. This technique forces the enemy to deploy, and then reorganize to continue operations forcing them to use time to accomplish these tasks. The ATGM and MGS fire and displace with at least two separate elements engaging a target and mutually supporting each other's maneuver. Indirect fires and Air support can further support the task as well as engineers establishing counter mobility obstacles.

Withdrawal

4-29. Withdrawal is a task that the commander uses to break enemy contact, especially when he needs to free the unit for a new mission. There are two types of withdrawals, assisted, and unassisted. The commander's intent and METT-TC determine which type of withdrawal the unit uses.

Assisted Withdrawal

4-30. The assisting force occupies positions to the rear of the withdrawing unit and prepares to accept control of the situation. It can assist the withdrawing unit with route reconnaissance, route maintenance, direct and indirect fire support, and sustainment. Both forces closely coordinate the withdrawal.

Unassisted Withdrawal

4-31. The withdrawing unit establishes routes and develops plans for the withdrawal, then establishes security force as the rear guard while the main body withdraws. Sustainment and protection elements usually withdraw first, followed by combat forces. The detachment left in contact (DLIC) disengages from the enemy and follows the main body to its final destination as the unit withdraws.

Retirement

4-32. Retirement is a task that moves a force that is not in contact away from the enemy. A retiring unit organizes for combat but does not anticipate interference by enemy ground forces. Typically, another unit's security force covers the movement of one formation as the unit conducts a retirement. However, mobile enemy forces, unconventional forces, air strikes, air assaults, or long-range fires may attempt to interdict the retiring unit. The commander plans for enemy actions and organizes the unit to fight in self-defense. The commander usually conducts a retirement to reposition his forces for future actions or to accommodate the concept of the operation. Units conduct retirements as tactical road marches where security and speed are the most important considerations.

FORMS OF THE DEFENSE

4-33. The three forms of the defense (defense of a linear obstacle, perimeter defense, and reverse-slope defense) have special purposes and require special planning and execution. The three forms of the defense provide distinct advantages for the defender and its subordinate units. (Refer to FM 3-90-1 for additional information.)

DEFENSE OF A LINEAR OBSTACLE

4-34. A defense of a linear obstacle generally favors the use of a forward defense. Maintaining the integrity of the linear obstacle is the key to this type of defense. The defending unit constructs obstacles to stop the enemy forces and channel them into planned engagement areas. When attacked, the defending force isolates the enemy, conducts counterattacks, and delivers fires onto the concentrated force to defeat attempts to breach or cross the linear obstacle.

4-35. Defense of a linear obstacle is often part of an economy of force measure. Forces that can counterattack and destroy the enemy may not be available immediately; therefore, defending forces must be able to—

- Detect enemy penetrations early enough so that local counterattacks can defeat them.
- Defend after being isolated.
- Use reconnaissance elements, sniper teams, and other elements to detect enemy forces and request indirect fire support.
- Bring the fight to the enemy side of the obstacle to destroy its forces and disrupt enemy preparations.
- Use fires to their maximum effect.
- Use its mobility to concentrate combat power.

PERIMETER DEFENSE

4-36. A perimeter defense is a defense oriented in all directions. The SBCT weapons troop often use a perimeter defense when conducting operations in noncontiguous areas of operations. The perimeter defense presents no assailable flanks to the enemy and allows the defender to reinforce a threatened area rapidly.

Some disadvantages of a perimeter defense include its isolation and the vulnerability of its concentrated units to enemy fires.

4-37. The commander establishes a perimeter defense when the unit must hold critical terrain, such as a strong point, or when it must defend itself in areas where the defense is not tied in with adjacent units. Units can organize a perimeter defense to accomplish a specific mission, such as protecting a base or providing immediate self-protection, such as during resupply operations when all-around security is required. During a perimeter defense, leaders at all levels ensure that—

- Units physically tie into each other.
- Direct fire weapons use flanking fire to protect the perimeter.
- Field artillery and mortars are protected.
- Primary, alternate, contingency, and emergency communications systems are secure and redundant.
- Obstacles are employed.
- Final protective fires are established.

Reverse-Slope Defense

4-38. An alternative to defending on the forward slope of a hill is to defend on a reverse slope. The reverse-slope defense allows units to concentrate their direct fires into a relatively small area while being protected from the enemy's direct observation and supporting fires. The defender can destroy the enemy's isolated forward units through surprise and concentrated fires. The control of the forward slope is essential for success. Gaining control of the forward slope can be done by using dominating terrain behind the defenders or with the use of stay behind forces, such as reconnaissance and sniper teams, that can observe and call in fires on the attackers.

COMMON DEFENSIVE PLANNING CONSIDERATIONS

4-39. Planning a defense is a complex effort requiring detailed planning and extensive coordination. The most complex for the SBCT weapons troop is transition to the defense after supporting the Cavalry Squadron screen or guard. Key to the transition is the coordinating passage of lines, resupply, security, and acknowledgement between the losing element (Cavalry squadron), gaining element (Infantry battalion), and the weapons troop. As a mission evolves, the commander knows he may need to shift his decisive and shaping operations to press the fight and keep the enemy off balance. The synchronization and coordination of activities within each warfighting function and between the various warfighting functions are critical to the success of the SBCT weapons troop.

Mission Command

4-40. The SBCT battalion commander and the SBCT commander usually define where and how they will defeat or destroy the enemy. The weapons troop commander refines where he will integrate the other warfighting functions into a coherent whole to mass the effects of combat power at the decisive place and time. (Refer to ADRP 6-0 for more information on mission command.) He contacts the anticipated units about the possible coordination points, linkups, handover's and passage lanes through main defensive areas. The weapons troop commander defines how he envisions the SBCT weapons troop will execute its portion of the brigade fight based off the commander's intent one and two levels up with associated taskforces.

Movement and Maneuver

4-41. Effective movement and maneuver is critical to the SBCT troop success in the defense. The weapons troop has the most firepower with its direct fire weapons systems in the SBCT. For the SBCT to capitalize the weapons troop will have to move to the position of advantage against the armored threat who is the enemy's main effort. This force will seek to remain hidden to exploit a disadvantage in the of the SBCTs defensive operation. The SBCT weapons troop uses movement and maneuver in conjunction with mission command to arrive at the decisive point of the defense or attrits the enemy by piecemeal in depth.

INTELLIGENCE

4-42. The weapons troop commander describes the anticipated enemy actions throughout the SBCT AO beginning with the security area. He should request timely intelligence briefs from the task force intelligence sections, such as the COIST, MICO, or S-2, to answer PIR that are integrated into specific NAIs. This allows the SBCT weapons troop commander to decide where to place his forces and what units to coordinate with or monitor to get the latest combat information. (Refer to ATP 2-01.3 for more information.)

4-43. As with all tactical planning, intelligence preparation of the battlefield (IPB) is a critical part of defensive planning. IPB is the systematic process of analyzing the mission variables of enemy, terrain, weather, and civil considerations in an area of interest to determine their effect on operations. IPG helps the commander define where to concentrate combat power, where to accept prudent risk, and where to plan potential decisive operations. The IPB presents all feasible enemy COAs to aid in the development of a flexible defensive plan. Accessing those intelligence products and comparing them give the weapons troop commander a better understanding of how the enemy will fight, and the enemy's plan for the operation. The essential areas of analysis for IPB are—

- Analyze terrain and weather.
- Determine enemy force size and likely COAs with associated decision points. Specifically choke points and areas the enemy stages before an assault.
- Determine enemy vulnerabilities and high-value targets.
- Impact of civilian population on the defense.

4-44. The commander makes his determination of how and where to defeat the enemy on where he believes the enemy will go, the terrain, and the forces available. The SBCT task force commander may define a defeat mechanism that includes the use of single or multiple counterattacks to achieve success. The weapons troop commander analyzes his unit's role in the supported SBCT task force fight to determine how to achieve success.

FIRES

4-45. For the fire support plan to be effective in the defense, the SBCT weapons troop plans and executes fires in a manner that achieves the intended task and purpose of each target. Indirect fires serve a variety of purposes in the defense, to include the following:

- Slow and disrupt enemy movement.
- Prevent the enemy from breaching.
- Destroy or delay enemy forces at obstacles using massed fires or precision-guided munitions.
- Disrupt enemy support-by-fire elements.
- Defeat attacks along dismounted avenues of approach with the use of FPF.
- Disrupt the enemy to enable friendly elements to disengage or conduct counterattacks.
- Obscure enemy observation or screen friendly movement during disengagement and counterattacks.
- Provide smoke screens to separate enemy echelons or to silhouette enemy formations to facilitate direct fire engagement.
- Provide illumination, as needed.
- Execute suppression of enemy air defenses missions to support aviation missions.

4-46. The FSV attached to the weapons troop also can serve a variety of roles in the defense. It can serve as the primary observer for the weapons troop, it can co-locate with the weapons troop commander for security and mission command functions, or it can serve as an alternate means of mission command placed at a different location of the defensive scheme of maneuver.

4-47. The SBCT weapons troop commander evaluates the air integration plan with indirect fire systems available to provide support when developing the fire plan. Considerations, when developing the plan, include tactical capabilities, weapon's ranges, available munitions, time on station, communication and control, airspace management, and marking of enemy and friendly units. These factors help the SBCT weapons troop commander and FSO determine the best method for achieving the task and purpose of each

target in the fire plan. The ATGM and MGS platoons contribute significantly to fire support. Effective positioning is critical to optimize the use of their optics. They may engage targets using their optics and range finders and laser designators for indirect fires ensuring the vehicles do not give away their positions. They adjust indirect fires onto the targets, synchronize effects, assist to clear airspace and guide aircraft onto targets.

SUSTAINMENT

4-48. Besides the sustainment functions required for all missions, the SBCT weapons troop commanders' planning process includes supply trains that are coordinated for their current position and are also flexible enough to support contingency operations where the SBCT weapons troop may have to reposition, or change task organization during the operation. For defensive plans that involve depth and multiple decision points, an area support scheme in coordination with FSC commanders and task force XO's is best suited to support the weapons troop. Class I, III, V and IX supply point coordination as well as vehicle recovery and maintenance, and CASEVAC procedures have been rehearsed.

4-49. The commander's mission analysis may reveal that the troop's ammunition requirements during an upcoming mission exceed its basic load. This requires the troop to preposition ammunition caches. The troop usually positions ammunition caches at alternate or subsequent positions. The troop may construct survivability positions to house these caches and guard them to prevent their capture or destruction by the enemy.

4-50. The SBCT weapons troop relies on the supporting task force trains to provide immediate recovery and medical support. Clear assignments of which task force each element of the weapons troop is assigned to and the scheme of support are crucial for the weapons troop. To mitigate confusion and provide the most alternatives, the SBCT weapons troop commander ensures all of his elements know the casualty evacuation procedures and the locations of their nearest task force combat and field trains CCPs and battalion aid station. The weapons troop commander analysis determines the most effective measures for every mission, which includes the decision to evacuate or recover forward and consolidate based on the tactical situation.

PROTECTION

4-51. Air and missile defense support to the SBCT may be limited. The SBCT weapons troop protects itself primarily by passive measures. The SBCT weapons troop should use concealment to protect from enemy air threats such as rotary-wing, fixed-wing, or class III UAS and use their organic weapons systems for self-defense against smaller enemy air threats such as class II and below UAS or lighter than air aircraft. Techniques include good concealment, tactical movement, active pace and changing location and task organization in the operating area.

4-52. The SBCT weapons troop may use digging assets for ammunition caches. It is not recommended to emplace survivability positions for ATGM and MGS vehicles because they must displace in order to prevent themselves from being located or fixed.

ADDITIONAL PLANNING CONSIDERATIONS

4-53. Additional defensive task planning considerations include missions in urban environment, mountain, desert, and jungle terrain.

URBAN ENVIRONMENT

4-54. Weapons troop elements defend urban areas to defeat an attack, gain time, economize forces, protect infrastructure, protect a populace, and shape conditions for offensive or stability tasks. Usually two or more of these tasks apply to the urban defense.

4-55. Success depends on synchronizing the following simultaneous operations as one action:

- Decisive operation may not be effective if the tasks mentioned previously are not integrated into the overall mission plan.
- Shaping operations vary greatly depending on the type of defense and create the conditions for decisive operations.

- Sustaining operations ensure freedom of action, secure lines of communications, and establish movement control.

4-56. The weapons troop commander considers restrictions to the attacker's ability to maneuver and observe. The Stryker vehicles can establish blocking positions at intersections, streets, alleyways, and entrances to structures. By using the terrain and fighting from well-prepared and mutually supporting positions, a defending force can delay, block, fix, or destroy a much larger attacking force. The defense of a built-up area is organized around key terrain features, buildings, and areas that preserve the integrity of the defense and provide the defender with ease of movement to include above ground and subterranean areas. The defender organizes and plans his defense by observation and fields of fire, avenues of approach, key terrain, obstacles, cover and concealment (OAKOC). (Refer to ATTP 3-06.11 for more information.) (See figure 4-1.)

4-57. In a built-up area, the defender takes advantage of the cover and concealment afforded by the urban environment. The SBCT weapons troop maximizes the use of their weapon systems by placing them in areas with long engagement ranges and narrow fields of fire. Optimally, these locations are points where the enemy mounted forces have to slow down or stop, providing the perfect time to engage the target. Further enhance the advantages of the urban defense by constantly displacing to secondary and alternate positions. Infantry and Cavalry should support the weapons troop by providing local security.

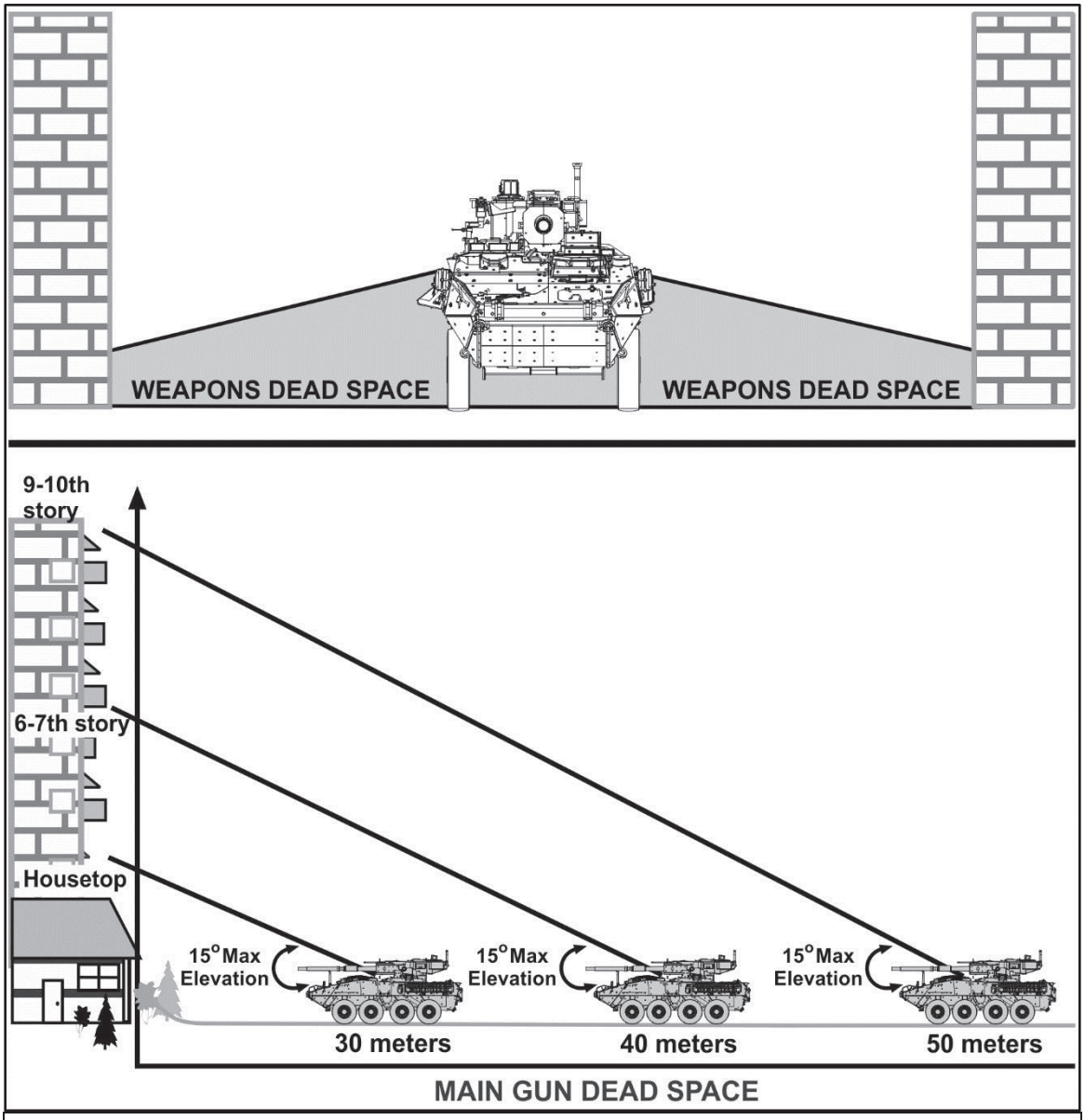
4-58. The ATGM require more TOW 2A and TOW 2B missiles if the enemy is armored or is vehicular equipped force. Gunners should prepare to fire the TOW 2B using line-of-sight mode when their vehicles are emplaced inside buildings. Use the TOW BB when attackers have occupied buildings or fortifications.

4-59. The SBCT weapons troop must be aware of sewers and underground tunnels. The ATGM and MGS vehicles may be too large to use those features but enemy forces may use them to bypass their position. Consider the use of obstacles and dismounted observation posts to control access to these features.

4-60. Before occupation of buildings is included in the defensive plan, the buildings must be inspected to make sure they are acceptable. This requires a review of the floor to ensure it can hold the weight of the ATGM and MGS vehicle, the ceiling is tall enough to allow the vehicle to enter and exit the building, and the backblast area is sufficient that the structure will not crumble. Factories, civic buildings, and other heavy structures, which provide adequate cover and are more suitable for defending, may be found deeper in the town and will offer more limited fields of fire on the likely avenues of approach.

4-61. When elements of the SBCT weapons troop are attached, gaining commanders should employ them to take advantage of their long-range fires and mobility. Some built up areas may restrict the mobility of these vehicles and make them vulnerable to the enemy. Mutually supporting Infantry should be positioned to provide security against close enemy direct fires and to identify targets. ATGM and MGS elements should be assigned EAs in support of the defensive scheme of maneuver. The Infantry unit's antiarmor weapons should supplement the TOW and MGS main gun. Antiarmor weapon systems may—

- Be positioned on the edge of the city in mutually supporting positions.
- Be positioned on key terrain on the flanks of towns and villages.
- Be used to cover barricades and obstacles by fire.
- Be part of the reserve.
- Use thermal sights to detect enemy activity through darkness and most smoke.
- Monitor large areas of a city while making their presence known to the local populace (when acting as part of a mounted patrol).
- Add security to resupply convoys with their mobile firepower.
- Resupply units quicker and with more ammunition than a resupply by foot.



Legend: °= degree, max = maximum

Figure 4-1. Elevation and depression graphic for engaging in urban environment

DEFENSIVE TASKS IN MOUNTAINOUS TERRAIN

4-62. Defensive tasks in a mountainous terrain are conducted to resist, defeat, or destroy an enemy attack to support subsequent offensive actions. Commanders use defensive tasks to withstand an enemy attack while preparing to seize the initiative and develop conditions favorable for transitioning to the offense. During a defense, friendly forces withstand enemy attacks and hold the enemy while preparing to seize the initiative and transition to an attack or to conduct stability tasks. A thorough understanding of the commander's intent is especially critical in the defense, which demands precise integration of all assets to include maneuver and sustainment.

4-63. Stryker units operating in mountainous terrain environments often possess weapons and equipment more advanced in technology than the enemy. Knowing this, enemy offensive tactics commonly involve

short violent engagements followed by a hasty withdrawal through preplanned routes. The enemy often strikes quickly and fights only as long as the advantage of the initial surprise is in their favor. Attacks may include direct fires, indirect fires, or mines and may be against stationary or moving forces. (Refer to ATTP 3-21.50 for more information.) In the defense of mountainous terrain, the Stryker vehicles uses their mobility to maneuver to places of advantage, while the infantry secure severely restricted and key terrain. ATGM and MGS use the range and firepower of their weapon systems to neutralize enemy that shoot from built up positions, defilade, cave openings and other terrain.

DESERT TERRAIN

4-64. In the desert terrain, the SBCT weapons troop orients on primary enemy approaches in their assigned area of operation, units prepare for attack from any direction. It is neither possible nor necessary to have maximum firepower in all directions, move weapons to threatened areas before the enemy reaches them. Air cover or an air defense umbrella is necessary for a successful defense. (Refer to FM 90-3 for more information.) In general, some considerations for defensive tasks in a desert environment include, obstacles to site a defense are limited, and strong points to defend choke points and other key terrain, and mobility and sustainment are key factors. The SBCT weapons troop should take advantage of reverse slope defenses, and counter attacks from the enemy flanks whenever possible in desert environments to negate weapon ranges standoff. They should also deploy and engage from low ground such as depressions or whaddis and move to subsequent low ground positions to prevent from being detected. While moving into and staying in low ground elements of the weapons troop should be mindful of local security and early warning.

JUNGLE TERRAIN

4-65. Jungle defensive operations are based on the same defense fundamentals used in other operations. Some of the fundamentals, however, may acquire a special significance in the jungle. (Refer to FM 90-5 for more information.) Considerations for defensive operations in a jungle environment are limited visibility and fields of fire, limited and restricted maneuver. ATGM vehicles are isolated to clear areas with open fields of fire. This includes most road ways and over passes. The MGS can take advantage of its canister rounds at close range in semi restricted terrain to engage enemy in undergrowth.

COMMON DEFENSIVE CONTROL MEASURES

4-66. The commander uses control measures to control the defense and provide flexibility to respond to changes in the situation. Control measures allow the defending commander to rapidly concentrate combat power at the decisive point and shift locations as the enemy reacts. Defensive control measures within the commander's AO include designating the security area, the battle handover line (BHL), the main battle area (MBA) with its associated FEBA, and the echelon support area.

4-67. The commander can use battle positions and additional direct fire control and fire support coordination measures (FSCMs) to further synchronize the employment of combat power. The commander designates disengagement lines to trigger the displacement of subordinate forces. He may also use passage lanes for forces that may have to pass through unit's engagements areas such as scouts or other elements of the SBCT weapons troop. (Refer to ADRP 3-90 for more information.)

BATTLE HANDOVER LINE

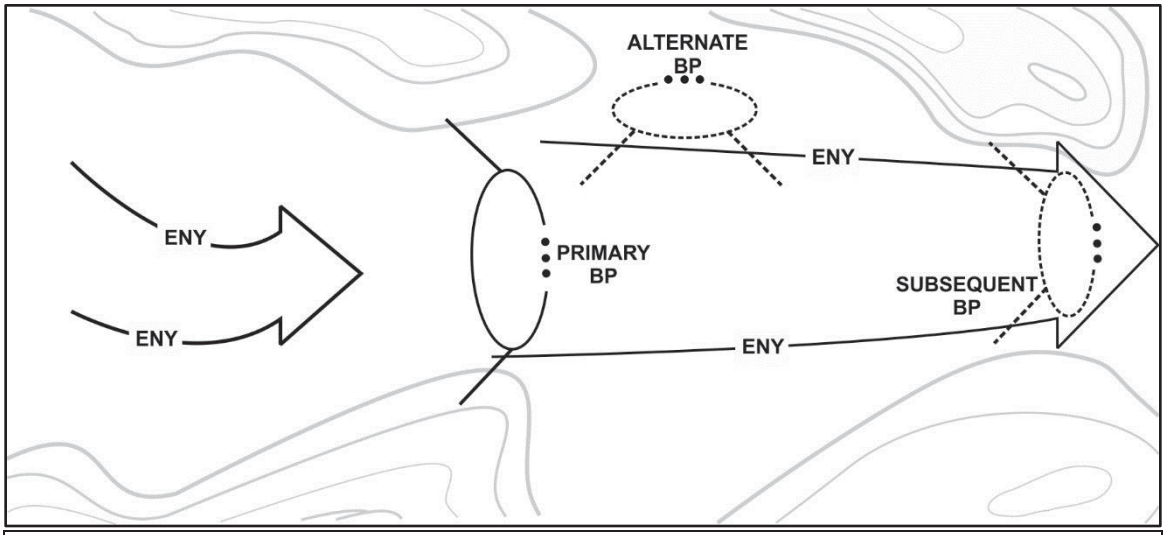
4-68. The BHL is a designated phase line on the ground where responsibility transitions from the stationary force to the moving force and vice versa.

BATTLE POSITIONS

4-69. A BP is a defensive location oriented on a likely enemy avenue of approach. Units as large as battalion task forces and as small as squads or sections use BPs. They may occupy the topographical crest of a hill, a forward slope, a reverse slope, or a combination of these areas. The commander selects his positions based on terrain, enemy capabilities, and friendly capabilities. A commander can assign all or some subordinates BPs within the AO. Leaders within the weapons troop should manage integration of forces to maximize the firepower. Infantry should be in close proximity of their Stryker vehicles but far enough away from their weapons secondary effects, especially with the ATGM and MGS vehicles.

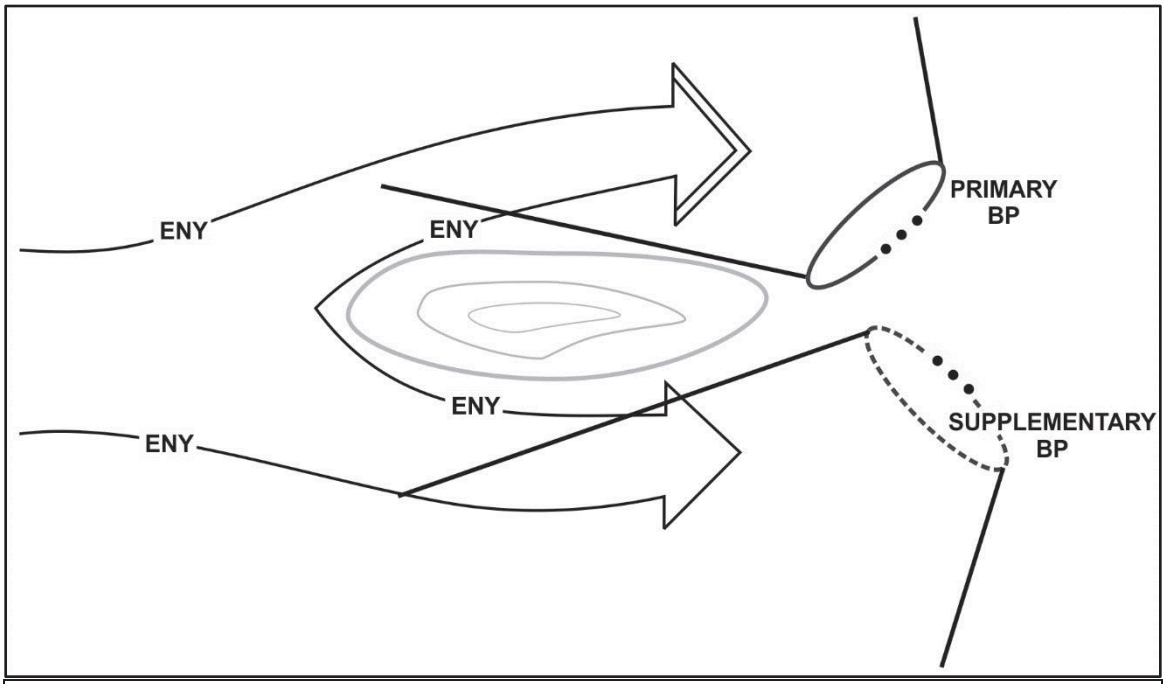
4-70. There are five types of BPs. They are as follows:

- Primary positions cover the area where the commander intends to contain or destroy an enemy force (engagement area). (See figure 4-2 on page 4-14.)
- Alternate positions are those assigned when the primary position becomes untenable or unsuitable for carrying out the assigned task. These positions allow the defender to carry out his original task. The following considerations apply for an alternate BP:
  - It covers the same avenue of approach or sector of fire as the primary BP.
  - It is located slightly to the front, flank, or rear of the primary BP.
  - It may be positioned forward of the primary BP during limited visibility.
  - It is employed to supplement or support positions with weapons of limited range.
- Subsequent positions are those to which the unit expects to move during the course of the battle. A defending unit may have a series of subsequent positions. Subsequent positions can have primary, alternate, and supplementary positions associated with them.
- Supplementary position is a defensive position located within a unit's assigned AO that provides sectors of fire and defensible terrain along an avenue of approach that is not the enemy's expected avenue of attack. (See figure 4-3 on page 4-14.) For example, an avenue of approach into a company's AO from one of its flanks could require the weapons troop to direct its platoons to establish supplementary positions to allow the platoons to engage enemy forces traveling along that avenue. The platoon leader formally assigns supplementary positions when the platoon covers more than one avenue of approach.
- Strong point is a heavily fortified BP tied to a natural or reinforcing obstacle to create an anchor for the defense or to deny the enemy decisive or key terrain. The mission to create and defend a strong point implies retention of terrain to stop or redirect enemy formations. Strong points require extensive time, engineer support, and class IV resources to construct. A strong point is also used to—
  - Canalize enemy forces. Canalize is a tactical mission task in which the commander restricts enemy movement to a narrow zone by exploiting terrain coupled with the use of obstacles, fires, or friendly maneuver.
  - Contain enemy forces. Contain is a tactical mission task that requires the commander to stop, hold, or surround enemy forces or to cause them to center their activity on a given front and prevent them from withdrawing any part of their forces for use elsewhere.



Legend: BP = battle position, ENY = enemy

Figure 4-2. Primary, alternate, and subsequent battle positions



Legend: BP = battle position, ENY = enemy

Figure 4-3. Supplementary battle position

FORWARD EDGE OF THE BATTLE AREA

4-71. The FEBA is the foremost limits of a series of areas in which ground combat units are deployed. Excluded areas are those in which the covering or screening forces are operating, designated to coordinate fire support, the positioning of forces, or the maneuver of units. These units normally require no fire areas (NFAs) placed over their position to prevent fratricide.

4-72. A *passage lane* is a lane through an enemy or friendly obstacle that provides a safe passage for a passing force (FM 3-90-2). The elements of the SBCT weapons troop use a passage lane when transitioning from the FEBA to the main battle area. This occurs after the screen or guard line collapses and a handover of the SBCT weapons troop is underway. The SBCT weapons troop moves through a passage lane normally towards its rear of another taskforce to support the defense. This is normally within the SBCT commander's scheme of defensive maneuver to preserve combat power for the main effort.

MAIN BATTLE AREA

4-73. The MBA is the area where the commander intends to deploy the bulk of the unit's combat power and conduct decisive operations to defeat an attacking enemy. The defending commander's major advantage is the ability to select the ground on which the battle takes place. The defender positions subordinate forces in mutually supporting positions in depth to absorb enemy penetrations or canalize them into prepared EAs, defeating the enemy's attack by concentrating the effects of overwhelming combat power. The natural defensive strength of the position determines the distribution of forces in relation to both frontage and depth. Defending units typically employ field fortifications and obstacles to improve the terrain's natural defensive strength. The MBA includes the area where the defending force creates an opportunity to deliver a decisive counterattack to defeat or destroy the enemy.

SECTION II – AREA DEFENSE

4-74. There are two forms of defensive maneuver within an area defense—defense in depth and forward defense. The SBCT weapons troop can do both. The SBCT weapons troop commander is given the type of area defense to use, and develops the general defensive scheme for the troop. He selects terrain to defend from based on the weapons capabilities of the enemy and considers his own. If he has an advantage with range and standoff for example the terrain selected would offer fields of fire allowing engaging of targets at long distances such as areas with linear obstacles. If the enemy has the advantage of range then the commander may select covered terrain, reverse slopes, and urban areas that allow the ATGM and MGS to mass fires, attrite enemy in depth, or reposition after engagements. The specific mission may impose constraints such as time, security, and retention of certain areas that are significant factors in determining how it will defend.

AREA DEFENSE IN DEPTH

4-75. A defense in depth reduces the risk of the attacking enemy force penetrating the defense quickly. The enemy is unable to exploit a penetration because of additional defensive positions employed in depth. The in-depth defense provides more space and time to defeat the enemy attack.

4-76. The SBCT weapons troop uses a defense in depth when—

- The mission allows the SBCT weapons troop to fight throughout the depth of the AO.
- The terrain does not favor a defense well forward, and there is better defensible terrain deeper in the AO.
- Sufficient depth is available in the AO.
- Cover and concealment forward in the AO is limited.
- Weapons of mass destruction may be used.

AREA FORWARD DEFENSE

4-77. The intent of a forward defense is to prevent enemy penetration of the defense. A forward defense is the least preferred due to its lack of depth. The SBCT weapons troop deploys most of its combat power into forward defensive positions near the FEBA. The commander fights to retain its forward position, and may

conduct counterattacks against enemy penetrations, or to destroy enemy forces in forward engagement areas. Often, counterattacks are planned forward of the FEBA to defeat the enemy.

4-78. The SBCT weapons troop uses a forward defense when—

- Terrain forward in the area of operation favors the defense.
- Strong natural or man-made obstacles, such as a river or a rail line, are located forward in the area of operation.
- The assigned area of operation lacks depth due to the location of the area or facility to be protected. Cover and concealment in the rear portion of the area of operation is limited.
- Directed by higher headquarters to retain or initially control forward terrain.

ORGANIZATION OF FORCES

4-79. The task force commander organizes his forces for an area defense into security force, main body, reserve and sustainment. Elements of the SBCT weapons troop can be found in all four.

SECURITY FORCES

4-80. The Task force conducts reconnaissance and security by orienting sensors forward covering enemy likely avenues of approach as well as areas not directly covered by a ground element to detect the enemy. All detection must be confirmed or denied of enemy presence. The task force establishes security by placing platoon size units forward to screen. If a guard is required the task force may attach platoons from the weapons troop to a company size unit.

MAIN BODY

4-81. In the defense Stryker units often place the Infantry defensive positions forward of the Stryker vehicle. Their Infantry position is less likely to be identified than the Stryker vehicle. With Infantry forward and Stryker vehicles towards their rear, and with MGS and ATGM vehicles further back; allows for concentrated direct fires to be massed all at once in an engagement area. Surface danger zones have to be carefully calculated to prevent fratricide considering TOW missiles and 105mm main gun direct fires. Adding the indirect fires from assets within range such as field artillery, battalion mortar platoon, and company mortar section further enhance concentration of effects.

RESERVE

4-82. The task force reserve force is normally one of its Infantry rifle platoons. METT-TC determines its exact composition. The reserve force could consist of an entire Infantry rifle company, a mix of MGS and Infantry, an MGS platoon or an attached armored element if augmented. The reserve force should be mobile and capable of reinforcing a point of possible enemy penetration, used as the counter attacking force, conducting a spoiling attack, or as the task force commander designates.

SUSTAINMENT

4-83. The sustainment element consists of the battalion trains and FSC. They are normally one terrain feature from the main body or co-located with the SBCT support area (see chapter 7 of this publication for more information). As with the tasks organization changes the SBCT weapons troop undergoes so must the maintainers and specific classes V and IX of supply for the ATGM and MGS variants.

PLANNING AN AREA DEFENSE

4-84. A successful area defense integrates and synchronizes all assets on terrain preferable to the defender to provide fires against an enemy force at a point that they are vulnerable. The SBCT weapons troop commander decides where to concentrate the fires in his assigned area to defend, where to take risks, and adjusts as information on the attacking enemy force is gained. The keys to a successful area defense includes the—

- Capability to concentrate effects.
- Integration with Infantry elements.
- Depth of the defensive area.

- Reconnaissance and security.
- Ability to take full advantage of the terrain (such as intervisibility lines, restricted terrain, natural obstacles).
- Flexibility of defensive tasks.
- Timely resumption of offensive actions.

MISSION COMMAND

4-85. During the troop leading procedures the SBCT weapons troop IPB determines how the commander envisions how the enemy will fight, and the enemy's plan for the operation. The SBCT weapons troop commander determines where and how they will defeat or destroy the enemy aligned with the supported task forces commander's guidance. This guidance synchronizes maneuver and fires schemes to mass the effects of combat power at the decisive place and time throughout the depth of the entire SBCT's area defense. This occurs for the weapons troop even if the SBCT is fighting a forward defense.

4-86. Coordination, decision points, with executable guidance from the SBCT and task force commanders are all analyzed by the weapons troop commander. He may assign subordinate leadership from his platoon leaders to coordinate directly with units based on the defensive scheme of maneuver to speed the transitions and passage of lines between various task force areas of operations. Key to the transitions and being in place to support the defensive scheme of maneuver is the linkup with friendly forces and having those elements guide them to their positions.

INTELLIGENCE

4-87. The SBCT weapons troop commander assisted by his COIST if formed must obtain or develop intelligence products utilizing information obtained through IPB and conducting continuous analysis, processing, exploitation, and dissemination of intelligence throughout the mission. The COIST should leverage the intelligence enterprise while working closely with task force information collection assets to answer PIR that are integrated into specific NAIs. This allows the weapons troop commander to adjust his defensive preparation effort.

4-88. IPB is a critical part of defensive planning. It helps the commander define where to concentrate combat power, where to accept prudent risk, and where to plan potential decisive operations. The IPB must present all feasible enemy courses of action to aid in the development of a flexible defensive plan. The essential areas are—

- Analyze terrain and weather.
- Determine enemy force size and likely course of action with associated decision points.
- Determine enemy vulnerabilities and high value targets.
- Impact of civilian population on the defense.

4-89. The commander makes his determination of how and where to defeat the enemy on where he believes the enemy will go, the terrain, and the forces available. The task force may define a defeat mechanism that includes single or multiple counterattacks to achieve success. The weapons troop commander analyzes his unit's role in the SBCT or task force defensive scheme of maneuver to determine how to achieve success.

4-90. SBCT commanders must be aware that the enemy considers the ATGM and MGS high value targets because of the firepower their main weapon systems possess. Therefore the SBCT weapons troop commander must be aware of their locations, repositioning, and synchronization of fires to maintain lethality on battlefield. Information regarding compromise of the ATGM and MGS positions should be considered essential element of friendly information in the defense. An essential element of friendly information is a critical aspect of a friendly operation that, if known by the enemy, would subsequently compromise, lead to failure, or limit success of the operation and therefore should be protected from enemy detection. The enemy is likely to designate ATGM and MGS as high-priority targets to gain the advantage of freedom of maneuver against the SBCT defending units.

4-91. The unit's defensive plans address how the preparations and the conduct of area defense impacts the civilian population in the AO, and the commander's legal obligations to the civilian population are met. Ideally, the HN government has the capability to conduct the five primary stability tasks. If they are unable

to conduct the minimum essential stability tasks, the defending unit attempts to make up the shortfall. (Refer to chapter 5 of this publication for more information.)

MOVEMENT AND MANEUVER

4-92. Once the SBCT commander has assigned AOs to his maneuver units, he must determine any potential gaps between units. The task force echelon should plan to cover these gaps with reconnaissance assets, aggressive patrolling from the company and local observation posts. The task force must plan local counterattacks to isolate and destroy any enemy that manages to penetrate through a gap in the AO. The task force commander should also plan to reposition units not in contact to mass the effects of combat power against an attacking enemy.

4-93. The need for flexibility through the mobility of forces requires graphic control measures to assist in maneuver during local counterattacks and repositioning of forces. Specified routes, phase lines, attack- and support-by-fire positions, BPs, EAs, TRPs, and other fire control measures are required to synchronize maneuver effectively.

4-94. In noncontiguous operations, the elements of the SBCT weapons troop have the dilemma to defend either on a broad front, or in an AO so large that it would be unrealistic to employ units in mutually supporting positions. This requires a judicious effort by the SBCT commander and his staff in determining the positioning of maneuver forces as well a strong effort placed on reconnaissance and security. During the terrain analysis, the commander and staff must look closely for choke points, intervisibility lines, and reverse-slope opportunities to take full advantage of the capabilities to mass firepower while providing protection for the Infantry. The SBCT commander may keep the SBCT weapons troop consolidated, task organize and distribute platoons to SBCT Infantry battalions, place them with the SBCT Cavalry squadron and transition to other units as the situation develops or combination of to defend his area.

Depth of the Defensive Area

4-95. Depth for the SBCT and the SBCT task force is established by creating a security area, main battle area, and a support area. Task force and company elements create further depth within the areas by positioning their forces usually two thirds of their combat power forward and one third to the rear of the formation in their defensive positions. The SBCT unit plans branches and sequels into their defensive plan allowing criteria for each of the subordinate elements to reposition, reinforce, or counter attack. The SBCT weapons troop and its subordinate elements can participate at any other area within the defense, assigned to any other headquarters, or augmented with other forces.

Ability to Take Full Advantage of the Terrain

4-96. SBCT units take full advantage of terrain in the defense due to the limited digging capability. MGS and ATGM should take advantage of intervisibility lines that allow maximum protection for the hull while limiting the exposure of the vehicle. Frequent fire and repositioning from preplanned alternate and supplementary positions further limit exposure.

Flexibility of Defensive Tasks

4-97. SBCT units provide flexibility in the area defense through task organization, fighting as a combined arms team, mobility, information sharing, and initiative of subordinate elements in their area of operation. The SBCT weapons troop will likely have to reposition upon identification of the enemy armored threat. They will move to a position of advantage in the area defense and engage, attriting the enemy throughout the depth of the defense. For the weapons troop depth is possible even in a forward defense by transitioning backwards from taskforce to task force from the security area to the main battle area.

Timely Resumption of Offensive Actions

4-98. The SBCT weapons troop may quickly transitions to offensive actions upon identified combat information that triggers the transition. Active reconnaissance and information collection efforts quickly identify opportunities to regain the initiative and begin offensive operations. This information is quickly shared through mission command systems. The key to resume the offense will be logistics with resupply of class I, III, and V for the SBCT weapons troop.

FIRES

4-99. For the fire support plan to be effective in the defense, the SBCT weapons troop plans and executes fires in a manner that achieves the intended task and purpose of each target. Indirect fires serve a variety of purposes in the defense, to include the following:

- Slow and disrupt enemy movement.
- Prevent the enemy from breaching.
- Destroy or delay enemy forces at obstacles using massed fires or precision-guided munitions.
- Disrupt enemy support-by-fire elements.
- Defeat attacks along dismounted avenues of approach with final protective fire.
- Disrupt the enemy to enable friendly elements to disengage or conduct counterattacks.
- Obscure enemy observation or screen friendly movement during disengagement and counterattacks.
- Provide smoke screens to separate enemy echelons or to silhouette enemy formations to facilitate direct fire engagement.
- Provide illumination using infrared (IR) or traditional methods.
- Execute suppression of enemy air defense missions to support aviation missions.

4-100. The weapons troop commander and his FSO must consider echelon of fires from their available direct and indirect fire systems. When attached to a task force they may call for fire support from mortars, field artillery, CAS, and attack aviation. These factors help the SBCT weapons troop commander and FSO determine the best method for achieving the desired effects on each target in the fire plan and which asset engages which target. Characteristics of defensive fire plans include—

- Ensuring fires assets are in positions to support maneuver forces within time constraints.
- Targets are confirmed or denied by information collection efforts.
- Targets are destroyed in the main battle area (Support area or MBA).
- Establish and rehearse sensor-to-shooter communication links.
- Integrate CAS or rotary-wing attack aviation to destroy enemy units, artillery assets, and command and control nodes.
- Integrate suppression of enemy air-defense effort.
- Suppression and obscuration fire plan to support breaking contact with the enemy.
- Prepositioned ammunition backed by prepackaged munitions stocks capable of rapid delivery.
- Integration of primary and alternate observers to engage targets.
- Fire support coordination used to disrupt, delay, or destroy enemy forces.
- Air space graphic control measures are planned for expedient clearance of airspace. (See chapter 7 for more information.)

SUSTAINMENT

4-101. The SBCT weapons troop XO, 1SG, and supply sergeant coordinates with task force XO, S-4, and FSC XO for sustainment support. If a field trains command post is established in the BSB a representative from the SBCT weapons troop is placed there to ensure LOGPACs are configured correctly and transported to the correct locations. The following sustainment considerations apply to defensive planning:

- Preposition ammunition, petroleum, oil, and lubricants, and barrier materiel in a centrally located position.
- Make plans to destroy those stocks, if necessary.
- Resupply during limited visibility to reduce the chance of enemy interference.
- Plan to reorganize to reconstitute lost sustainment capability.
- Use maintenance support teams in the maintenance collection point to reduce the need for recovering equipment in the brigade support area.
- Consider and plan for the additional transportation requirements for movement of class IV barrier materiel, mines, and prepositioned ammunition; plus the sustainment requirements of additional engineer units assigned for preparation of the defense.

- Plan for prepositioning and controlling ammunition on occupied and prepared defensive positions.
- MEDEVAC LZ's are positioned far enough behind friendly forces to not compromise the location of their position, out of range of enemy direct fire weapon systems, and out of observation of enemy units. They must be close enough (such that the response time for the air MEDEVAC is not greater than the time for a ground MEDEVAC) to provide timely response and to get the casualty to the appropriate role of medical care.
- Role 1 and 2 medical treatment facilities are positioned to respond as soon as tactically feasible and possible. Ambulance exchange points are coordinated with higher echelons of planning, with Role 1 and Role 2 AHS support elements

4-102. The SBCT weapons troop commander's mission analysis may reveal that the troop's ammunition requirements during an upcoming mission exceed its basic load. This requires the task force to approve for pre-position ammunition caches between the FSC and the weapons troop for the emplacing the cache. The FSC usually positions ammunition caches at alternate or subsequent positions.

PROTECTION

4-103. Survivability includes the construction of fighting positions, protective positions, and hardening facilities. These are prepared to protect vehicles, personnel, and weapons systems. All leaders must understand the survivability plan and priorities.

4-104. The survivability effort for the defense must enable units to concentrate firepower from fixed positions. To avoid detection and destruction by the enemy, units move frequently and establish survivability positions quickly. To provide flexibility SBCT units should concentrate on counter mobility and mobility for engineer support. Survivability emplacement negates the Stryker's greatest strength; the ability to displace and maneuver quickly even in the defense.

4-105. The SBCT has limited engineer capacity. The maneuver commander determines the priority of effort between countermobility, mobility, and survivability. Countermobility construction and survivability activities must begin as soon as possible and often occur concurrently with the planning process. The progress requires detailed status updates and synchronization. Planning at the task force level to ensure subordinate engineers have adequate time for TLPs. The assistant brigade engineer, with guidance from the brigade engineer and brigade engineer battalion staff, plans for the brigade defense. During planning, defensive positions and mobile reserves are identified as well as gaining a thorough understanding of the tactical-obstacle effort of subordinate units. The brigade engineer battalion staff, in conjunction with the assistant brigade engineer, ensures that task force defensive plans are mutually supporting. The brigade engineer battalion staff and assistant brigade engineer track preparation by monitoring subordinate unit status reports and specific progress on obstacle emplacement and mobility improvements timelines, anticipating and resolving problems that may occur. The following planning considerations apply to engineer support:

- Position site obstacles early and link them to natural and other manmade obstacles.
- Plan situational obstacles based on time or event triggers and synchronize them with a decision support template.
- Plan multiple obstacle locations to support depth and flexibility in the defense. Ensure adequate security for obstacle emplacement systems. Integrate triggers for the execution of situational and reserve obstacles in the decision support template.
- Focus the countermobility effort to encourage the enemy to maneuver into positions of vulnerability where the task force and weapons troop intends to kill them.
- Ensure adequate mobility support for withdrawing security forces, the reserve, the counterattack force, and the repositioning of MBA forces.
- Ensure the integration of survivability priorities for critical systems and units through the development and implementation of an execution matrix and timeline.
- The mobility effort for the defense must enable units to concentrate firepower by repositioning constantly throughout the fight. To provide flexibility, units may need sequential, alternate, and supplementary hasty positions and improved paths to get there.

PREPARING AN AREA DEFENSE

4-106. The SBCT weapons troop uses the preparation time available to provide security and collect information for other forces to their rear by conducting security tasks, build the strongest defensive position possible, or refine counterattack plans.

ESTABLISH SECURITY

4-107. The SBCT or SBCT task force commander may direct the establishment of a forward security area. The size of the security force is based on METT-TC and increases in its composition as the enemy situation is less certain. It must be able to destroy enemy reconnaissance forces, disrupt its advance guard and displace upon identification of the main body. This element must have clear displacement criteria to prevent it from becoming fixed or destroyed. The SBCT Cavalry squadron with the weapons troop is will execute the guard, if required, for the SBCT. A guard in support of a task force may require a company team mix of Cavalry, elements of the SBCT weapons troop, and SBCT Infantry. Screen security tasks require less combat power but the same elements.

4-108. All units must maintain a high level of local security. Employment of patrols, establishment of observation posts, skillful use of UAS and sensors, and effective use of the terrain to conceal dispositions are essential for effective security.

4-109. The SBCT weapons troop commander also considers the potential threat to the defense that noncombatants with access to communication and recording devices may present. Security measures such as shutting down telephone exchanges and cell phone towers, and preventing unauthorized personnel from moving in the defensive area, may be required. The SBCT weapons troop should request guidance from higher headquarters before implementing any defensive measures that could affect the civil population.

Deception and Operational Security

4-110. As part of the defense, higher headquarters may have created a military deception operation and associated story to protect the force, cause early committal of the enemy, and mislead the enemy as to the true intentions, composition, and disposition of friendly forces. The SBCT weapons troop aids in the execution of a military deception plan to—

- Exploit enemy prebattle force allocation and sustainment decisions.
- Exploit the potential for favorable outcomes of protracted minor engagements and battles.
- Lure the enemy into friendly territory exposing their flanks and rear to attacks.
- Conceal the size operational forces committed to the defense and the supporting elements building the engagement area.

4-111. Defensive tasks contain branches and sequels that provide the commander decision points to exploit the situation. It is around these branches and sequels that military deception potentials exist. Specific deceptive actions the SBCT weapons troop commander can take to hasten exhaustion of the enemy offensive include, but are not limited to—

- Deceiving the enemy of the defensive scheme of maneuver. This is often done by transitions the SBCT weapons troop from the security area to the main battle area during the collapse of a screen or guard. The enemy often mistakes it as the friendly force trying to break contact.
- Luring the enemy into a decisive battle, the outcome of which facilitates branching or sequencing to the offense.
- Employing camouflage, decoys, false radio traffic, and movement of forces.

Main Battle Area Preparation

4-112. The command group monitors preparatory actions and tracks the higher and adjacent unit situations and the enemy situation. The status of engineer equipment and progress is tracked to ensure synchronization with overall defensive plan. The SBCT weapons troop takes full advantage regarding preparation and adjustments of positions by using the line of site function on their mission command systems. This provides a quick means to develop an overlay that shows initial fields of fire.

4-113. Plans are refined based upon status of friendly force preparations, additional combat information provided by the security force and intelligence updates. The SBCT task force staffs assure that defending elements maintain a highly accurate view of the enemy, environment, and significant civilian factors.

Position the Reserve

4-114. The reserve is positioned away from hostile enemy fire and observation and positioned to commit rapidly. The reserve commander should expect to receive specific planning priorities and triggers for employment on each contingency. This allows the reserve commander to conduct quality rehearsals and to anticipate his commitment as he monitors the fight. The composition of the reserve for the SBCT weapons troop supporting a task force will normally be an MGS vehicle, section or platoon that may have attached Infantry with it. For the SBCT the reserve may consists of an MGS platoon, or elements of SBCT weapons troop augmented with Infantry based on METT-TC.

4-115. During preparation of the task force defense, the reserve sometimes conducts other tasks. The commander might initially position his reserve in a forward location to deceive the enemy, obscure subordinate boundaries, or show strength in an area where he intends to accept risk. The reserve could serve in the forward security area and provide area security for the logistics sites or unoccupied areas of the AO. However, the commander must consider the impact of these types of missions on his reserve force's ability to prepare for its critical role as the reserve during the MBA engagement.

Aviation Support

4-116. In defensive operations, the speed and mobility of aviation can help maximize concentration and flexibility. During preparation for defensive operations, aviation units sometimes support the commander with aerial reconnaissance and fires.

4-117. During the defense, aviation forces can attack deep against high-payoff targets, enemy concentrations, and moving columns and they can disrupt enemy centers of gravity. The division will likely employ attack reconnaissance helicopter units to attack follow-on echelons before they can move forward to the close battle. Aviation forces might conduct screening operations, and might conduct guard operations of an open flank in conjunction with ground forces.

4-118. Attack reconnaissance helicopters routinely support security area operations and mass fires during the MBA fight. Synchronization of aviation assets into the defensive plan is important to ensure aviation assets are capable of massing fires and to prevent fratricide. Detailed air-ground operation and coordination are necessary to ensure efficient use of aviation assets.

Rehearsal

4-119. The SBCT weapons troop should rehearse its defense, if METT-TC permits. The commander can use any of the five types of rehearsals. They are confirmation brief, backbrief, combined arms rehearsal, support rehearsal, and battle drill.

4-120. The SBCT weapons troop commander ensures that the enabling forces are completely integrated into the defensive scheme of maneuver. Rehearsals provide a mechanism for ensuring this integration. Rehearsals should cover where the SBCT weapons troop commander sees where to disrupt the enemy forces, when it will be fixed, where it will be destroyed, engagement and displacement criteria and counterattack. Rehearsals should cover where the enemy force will conduct disruption points, when it will be fixed, where it will be destroyed, engagement and displacement criteria, and counterattack.

MONITORING DEFENSE PREPARATIONS

4-121. As the enemy closes on the AO, the final preparations typically include:

- Final coordination for battle handover and passage of lines.
- Positioning of situational obstacle employment systems.
- Verification of communications status.
- Evacuation of unused classes IV and V (obstacle materiel and ammunition) to prevent capture or loss to enemy action.
- Withdrawal of engineer forces from forward areas.

- Linkup of mobility, protection, and sustainment assets with reserve or other supported combat forces (if not previously accomplished).
- Final positioning or repositioning of reconnaissance assets, security forces, and observers.
- Positioning of teams to close lanes in obstacles or execute reserve obstacles.
- Execution of directed, reserve, or situational obstacles.
- Conduct mortar registration if primary observer for mortar targets.
- Periodic situation updates and issuing of final guidance to subordinates.

4-122. As units occupy positions, the SBCT weapons troop commander may have to make minor adjustments to area of operations, engagement areas, obstacles, battle positions, and other defensive coordination measures based on unanticipated METT-TC conditions. The SBCT weapons troop commander makes only critical changes to the defense plan due to the loss of time and wasted expenditure of unrecoverable Class IV barrier and obstacle material.

EXECUTING AN AREA DEFENSE

4-123. In an area defense, the SBCT weapons troop fights mainly from positions of tactical advantage to concentrate combat power effects against attempted enemy breakthroughs and flanking movements. They must constantly reposition into subsequent or alternate positions. This allows them to adjust to the enemy as they react providing constant pressure on them.

GAIN AND MAINTAIN ENEMY CONTACT

4-124. The security forces detect first with sensors forward to confirm or deny to gain and maintain contact with the enemy. Normally, this happens in the security area with a unit conducting a screen or a guard. The units in the security area are first concerned with identification of committed enemy units, their disposition, composition and strength. This information informs the task force staff, led by the S-2, to determine the enemy's intent and direction of attack.

4-125. The security force gains contact with the approaching enemy, reports their movements, avoids becoming fixed or destroyed, disrupts enemy reconnaissance, and withdraws as the enemy main body formations enter the security area. The commander can direct the security forces to disrupt, delay, or destroy lead or rear portions of enemy formations. The security forces can also be used as part of an effort to deceive the enemy as to the actual location of the MBA or conduct a rear passage of lines with the main body. The commander considers the follow-on missions of the security forces, their potential to be over-run or isolated, and the overall impact their direct combat achieves. Main battle forces monitor the reconnaissance and security force fight to remain abreast of the situation and maintain mutual support

DISRUPT THE ENEMY

4-126. Within the main battle area, the task force executes shaping operations, to include the conduct of military deception operations, to disrupt the enemy regardless of their location within the area of operation. After making contact, the task force commander seeks to disrupt the enemy's plan, their ability to control forces. Ideally, the results of the commander's shaping operations should force a disorganized enemy, whose ability to synchronize its elements has been degraded. Once the process of disrupting the attacking enemy begins, it continues throughout a defensive task. Using indirect fires, air ground integration, and other available lethal and nonlethal effects during this phase of the battle allows the SBCT to—

- Support the security force's delaying action.
- Disrupt or limit the momentum of the enemy's attack.
- Support the friendly force's decisive operation by destroying high-payoff targets.
- Divert the enemy's attack.
- Reduce the enemy's combat power.
- Separate enemy formations.

4-127. The weapons troop fights best deploying from low ground areas in the center of the formation when fighting in open terrain and augmented with or supporting Infantry formations. The Infantry should occupy higher ground preferably to the flanks of the defensive position in covered and concealed terrain. As the

weapon troop disrupts the enemy's approach with the aid of obstacles they should force they enemy closer towards the flanks where they can be engaged unknowingly at close range by the Infantry. This disruption technique leads to the enemy becoming fixed.

Execution of Planned Indirect Fires

4-128. The purpose of these obstacles is to force premature deployment of the enemy's breaching assets, slowing the enemy's advance and allowing for more effective engagement with indirect fires. These obstacles are planned against specific enemy attack options. Situational obstacles may support an essential fire support task. In this situation, an SBCT weapons troop may deploy forward to cover fire support elements with direct fires, and then withdraw to its own defensive positions within the MBA.

4-129. During the MBA engagement, the SBCT and task force shift combat power and priority of fires to defeat the enemy's attack. This may require—

- Adjusting subordinates' AOs and missions.
- Repositioning of forces.
- Shifting of the main effort.
- Committing the reserve.
- Modifying the original plan.

4-130. Forward forces, obstacles, and fires within the MBA usually break the enemy's momentum, reduce his numerical advantage, and force his troops into positions of vulnerability. The SBCT weapons troop masses fires (direct and indirect) to destroy attacking enemy forces as they enter the EAs.

Execution of Situational Obstacles

4-131. The purpose of these obstacles is to force premature enemy deployment, thus slowing the enemy's advance. This allows for more effective engagement with indirect fires and, therefore, forces early deployment of enemy breaching assets. These obstacles usually are planned and triggered about specific enemy attack options. Situational obstacles may support an essential task for fires support. In this situation, an SBCT weapons troop may be employed forward to cover fire support elements with direct fires, and then withdraw to its own defensive positions within the MBA.

FIX THE ENEMY

4-132. The commander uses shaping operations to fix the enemy and allow friendly forces to execute decisive maneuver elsewhere. This could include numerous offensive or defensive tasks such as feint, raid, ambush, or show of force. The intent is to make the enemy move into the engagement area and friendly forces to initiate with fires to achieve surprise. Fixing the enemy takes the initiative away and allows the defending force to synchronize effects against them.

Maneuver

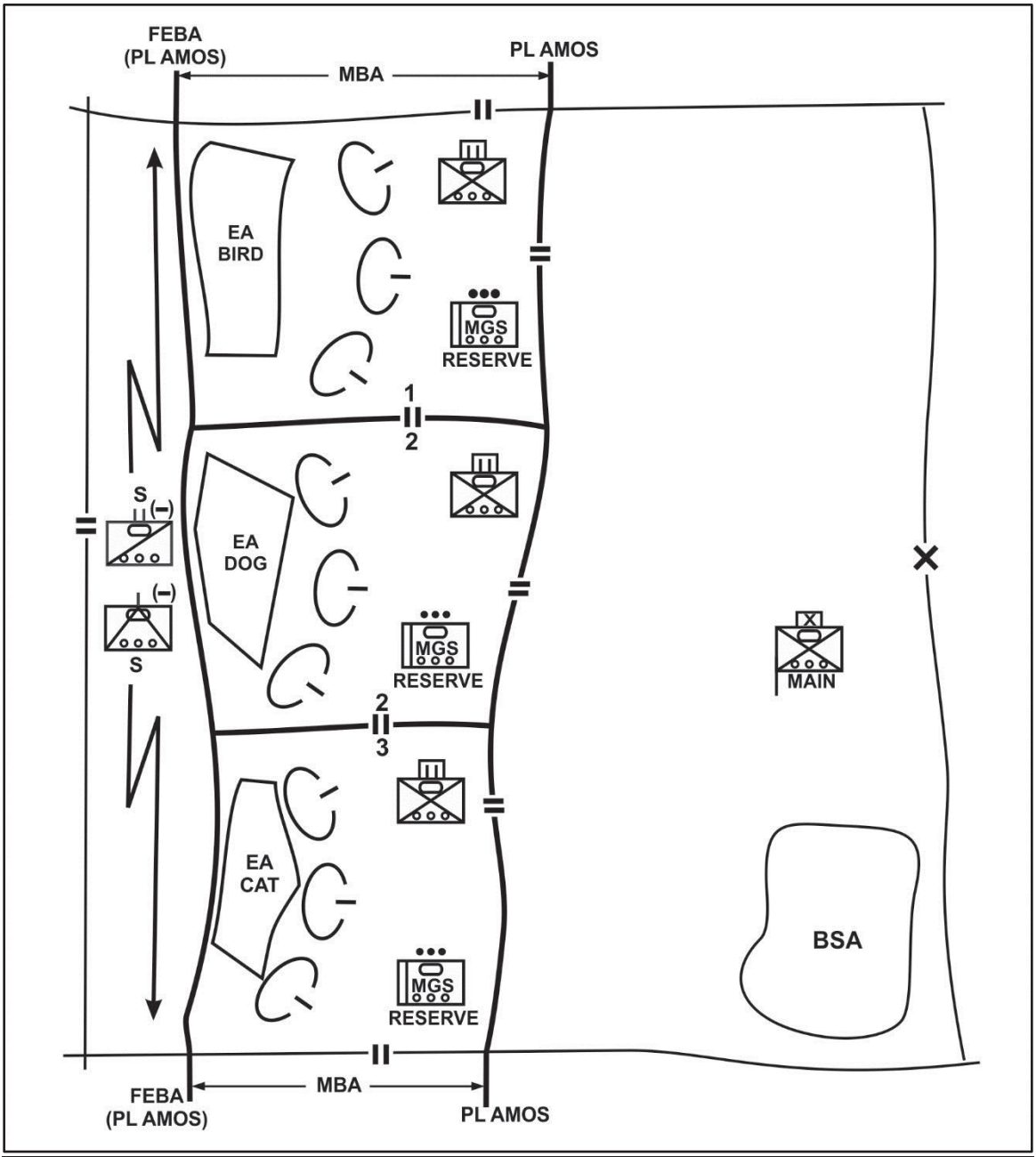
4-133. In an area defense, the decisive operation occurs in the main battle area. This is where the effects of shaping operations and sustaining operations, combine with the decisive operation to defeat the enemy. The commander's goal is to prevent the enemy's further advance with a combination of effects from fires and air ground operations from positions overwatching obstacles, and synchronized with the deployment of the mobile reserves.

4-134. Generating massed effects is especially critical for the commander conducting a defense of a large area against an enemy with a significant combat power advantage. The attacker has the ability to select the point and time of the attack, and the attacking enemy can mass forces at a specific point. The defending commander quickly determines the intent of the enemy commander and the effects of terrain. This allows the defender to maneuver to positions of tactical advantage and place a combination of effects from fires and air ground operations to restore a more favorable force ratio.

Main Battle Area Engagement

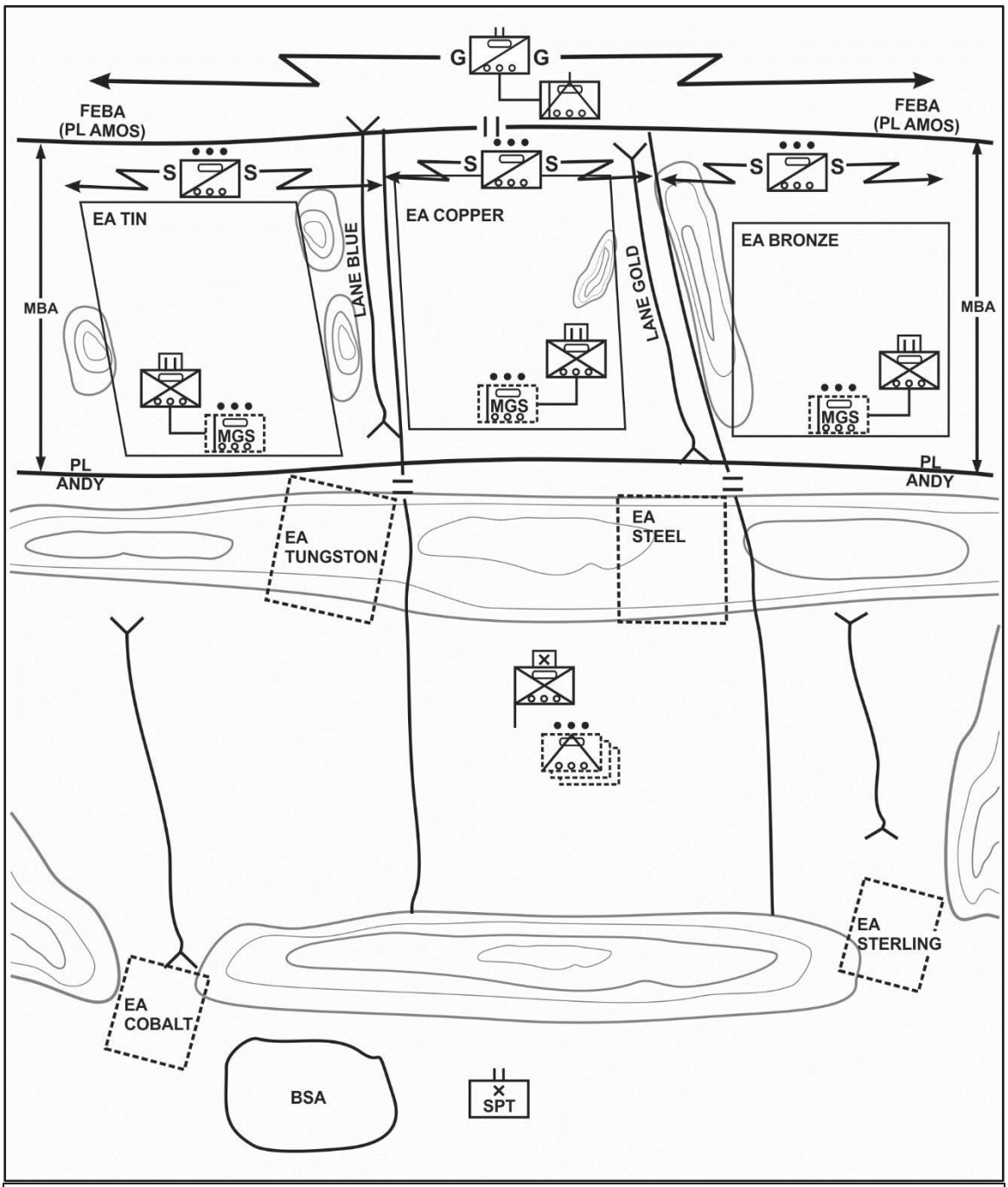
4-135. The forward forces mission within the MBA is usually breaking the enemy's momentum, reducing their numerical advantage, and forcing them into positions of vulnerability. The SBCT weapons troop does this by destroying enemy armored vehicles and concentrated forces. They may use techniques such as shift

fires, reposition forces, and maneuver the reserve or MBA forces to gain local fire superiority at critical locations. Obstacles, security forces, surveillance assets, and fires can assist covering areas where risk is accepted. Massing forces and fires is done swiftly because opportunities to gain an advantage are usually brief (see figure 4-4, page 4-26 and figure 4-5, page 4-27).



Legend: BSA = brigade support area, EA = engagement area, FEBA = forward edge of battle area, MBA = main battle area, MGS = mobile gun system, PL = phase line, S = Screen

Figure 4-4. Forward defense



Legend: BSA = brigade support area, EA = engagement area; G = guard, MBA = main battle area, MGS = mobile gun system, SPT = support, S = screen

Figure 4-5. Defense in depth

Penetrations

4-136. Each maneuver commander is responsible for controlling enemy advances within an assigned area of operation. These commanders provide the SBCT task force commander early warning and reaction time

for potential enemy penetrations. If a maneuver unit is threatened with a penetration, the SBCT task force commander may take several actions to counter the situation. In order of priority, the commander can—

- Maintain contact with the penetrating enemy force. Forward MBA forces may be able to transition into a delay to maintain contact, or the commander may redirect reconnaissance assets, security forces, and observers to locate enemy. The commander seeks to determine the enemy force's size, composition, direction of attack, and rate of movement. Forces in contact adjust indirect fires and air ground operations against the enemy to disrupt, delay, or divert their attack.
- Take immediate actions to reinforce at the point of penetration. This may require changing task organization, adjusting adjacent unit boundaries and tasks, emplacing obstacles, committing the reserve, or shifting priority of fires.
- Move threatened sustainment units. Based upon the enemy's direction of attack, sustainment units may need to move away from the penetration. These movements are controlled to ensure they do not interfere with counterattack plans or movement of combat forces.
- Determine where and how to engage the penetrating enemy force. Based upon the enemy's size, composition, and direction of attack, the commander selects the best location to engage the enemy. The reserve may counterattack into the enemy's flank, or it may establish a defensive position in depth to defeat or block them. The staff establishes control measures for the reserve's attack. The reserve can use an engagement area or objective to orient itself to a specific location to engage the enemy, or can use a BP as a position along defensible terrain. When the situation is vague or the enemy has multiple avenues of approach, the commander may establish an AO for the reserve. This requires the reserve to locate and move to intercept and engage the enemy, anywhere in the assigned AO. The commander and staff develop a concept of fires and consider required adjustments to fire support coordinating measures. They decide on the commitment of directed, reserve, or situational obstacles to support the action. Traffic control is especially critical. Sufficient routes are designated for the reserve force to use, and military police conduct traffic regulation and enforcement to ensure those routes remain clear of civilian traffic, dislocated civilians, and stragglers.
- Issue fragmentary orders that reflect adjustment decisions necessary to modify the original plan to account for the actual situation. If the operation is not well controlled, the situation could easily deteriorate into a total force failure.

COUNTERATTACK

4-137. The SBCT task force conducts counterattacks to take advantage of an attacking enemy's weakened condition by striking against the flanks or rear, or denying the enemy commander momentum and initiative. As the enemy's advance slows, weakens, or overextends, there are fewer maneuver options. As a result, the enemy could transition to a hasty defense along the forward line of own troops, or attempt to gain a foothold within the MBA from which to defend. The SBCT weapons troop or any of its elements may take part in a counter attack as part of Cavalry or Infantry company teams and troops or task force size elements.

4-138. This situation enables the SBCT weapons troop to seize the initiative from the enemy by leading the counter attack to seek decisive opportunities. Timing and intelligence is critical to a counterattack. Managing the rate of march of the counterattack force while out of contact against the enemy is critical. If committed too soon, the counterattack force might not have the desired effect, or may not be available for a more dangerous contingency. If committed too late, they might be ineffective. Once committed, counterattack forces can penetrate the enemy's flanks, attack the enemy's artillery and logistics areas, or attack from the rear. All of these are potentially decisive, creating concern for the enemy.

FOLLOW THROUGH

4-139. The purpose of defensive tasks is to retain terrain and create conditions for a counteroffensive that regains the initiative. The area defense does this by causing the enemy to sustain unacceptable losses short of their objectives. A successful area defense allows the commander to transition to an attack. An area defense could result in a stalemate with both forces left in contact with each other.

4-140. It could result in the defender being overcome by the enemy attack and needing to transition to a retrograde operation. Any decision to withdraw takes into account the current situation in adjacent defensive areas. Only the commander who ordered the defense can designate a new FEBA or authorize a retrograde operation.

SECTION III – MOBILE DEFENSE AND RETROGRADE

MOBILE DEFENSE

4-141. The SBCT weapons troop participates in a mobile defense as either part of a fixing force or striking force, but not both. As part of the fixing force, the SBCT weapons troop defends within its assigned area of operation. It can use numerous offensive and defensive tasks, such as movement to contact, raid, spoiling attack, and area defense to fix the enemy.

Note. Units smaller than a division do not usually conduct a mobile defense because of their inability to fight multiple engagements throughout the width, depth, and height of their AO, while simultaneously resourcing the striking, fixing, and reserve forces. Typically, the striking force in a mobile defense comprises one-half to two-thirds of the defender's combat power.

4-142. As part of the striking force, the SBCT weapons troop plans, rehearses, and executes offensive tasks. The striking force is a committed force and has the resources to conduct a decisive counterattack as a part of the mobile defense. The striking force decisively engages the enemy as they become exposed in attempts to overcome the fixing force. The striking force normally attacks a moving enemy force, and is usually augmented with armored forces.

RETROGRADE

4-143. The SBCT weapons troop supports delays and withdrawals by providing the firepower with their weapon systems at maximum ranges to create distance between the SBCT and the enemy unit. Through a series of limited engagements, constantly bounding towards the friendly direction of travel the weapons troop maintains contact with the enemy force but creates distance. They are most effective when inflicting some casualties on a unit but not destroying outright. This forces the engaged unit to evacuate their casualties slowing their advance or pursue with a lesser force.

4-144. The SBCT weapons troop participates in retirement as part of a larger force and normally consolidated under the Cavalry squadron. This preserves unit integrity and consolidates for logistical purposes allowing the unit to conduct a tactical road march to the retirement until it is ready for follow on operations.

DELAY

4-145. The SBCT weapons troop will support a delay as part of another force by participating in a Guard with the SBCT Cavalry squadron or task force size unit. The same plan prepare and execute considerations apply (see chapter 2 of this publication for more information). The key difference is the intent of the unit that the delay is for. In the defense the weapons troop can expect to transition to either the main defense are or remain with the Cavalry Squadron after to displace after the guard area collapses. In a delay the weapons troop may break contact and with draw, reposition and support a counter attack, or support a passage of lines and battle handover.

WITHDRAWAL

4-146. The SBCT weapons troop will participate in an unassisted withdrawal with part of a larger force. Their capability makes them the most viable option for a DLIC. The weapons troop supports an unassisted withdrawal by conducting a series of delays with limited engagements. During a withdrawal the commander of the DLIC will either choose to follow the main body of the withdrawing unit and break contact with the enemy unit after it ceases its pursuit or it may divert the enemy attack drawing the enemy pursuit to follow the DLIC instead of the main body. The conditions for this option are when the main body has enough

distance from the DLIC and the enemy reconnaissance is unable to locate the main body. Often a linear obstacle can be used to separate the DLIC from the pursuing enemy and the DLIC can linkup with the main body at a predetermined point.

SECTION IV – DEFENSE OF A LINEAR OBSTACLE

4-147. Linear obstacles such as mountain ranges or river lines favor a forward defense rather than a defense in depth. In a forward defense, the linear obstacle may force the enemy forces to slow down, stop, mass, or canalize during their attempt to cross the linear obstacle providing an opportunity for the defending force to strike the enemy force.

PLAN

4-148. Planning for a defense of a linear obstacle requires a thorough IPB analysis during the planning phase. Anticipation of how the enemy will react when it encounters the linear obstacle requires detailed analysis and understanding. Utilization of IPB information is vital to defensive planning. Since IPB integrates information analysis, information from reconnaissance and security tasks, and evaluating mission variables in order to determine the most likely enemy COA. Identifying the enemy COA allows the friendly unit to complete an effective defense of a linear obstacle and mass effective fires on the enemy force.

4-149. A defensive plan should be more flexible when there is less information available on the enemy COA. Techniques for SBCT commanders are as follows:

- Attach an MGS or ATGM vehicle to Infantry platoons to allow them greater fire power.
- Keep an MGS platoon(s) as a reserve or strike force to deploy to the decisive point to engage the enemy.
- Assign an MGS or ATGM platoon(s) an area that allows them the ability to engage with longer ranges of their weapon systems.
- Emplacing obstacles in front of the bridgehead of the linear obstacle to block enemy. Normally, attached engineers will conduct this task with a scatterable mine field.
- Emplacing obstacles behind a bridgehead to separate or disrupt enemy forces. Normally, supported field artillery will conduct this task with a family of scatterable mines (FASCAM).
- Attaching a sniper team to an Infantry squad in an OP forward of the main defensive area to provide early warning.
- Supporting or having a scout platoon operating forward of the defensive position.

PREPARE

4-150. Preparations for a linear obstacle are the same as discussed in an area defense task.

EXECUTE

4-151. Execution begins with early warning or contact with the enemy force. Warning can come from sensors, enemy contact with adjacent or higher units, or your own forces in security areas. When this occurs the Soldiers occupy their positions and increase their alert status.

GAIN AND MAINTAIN ENEMY CONTACT

4-152. Warning or contact allows the defending troop to know where at least a portion of the attacking enemy is currently positioned. When the warning of enemy is received it needs to immediately disseminate and the defense needs to begin. Organic sensors from within the weapons troop if assigned or directly supporting should orient on the direction of travel from the enemy detection according to the most likely COA.

4-153. Actions on contact develop actionable information that the troop reacts to. The weapons troop should phase their forms of contact using sensors in depth first, to units using direct fire contact to provide the most reaction time and to gather information on the likely enemy COA. UAS are the best sensors for the weapons troop to employ when defending a linear obstacle. They can detect the enemy beyond the obstacle without

commitment of a friendly unit. Ground sensors are also effective in front of the linear obstacle if the commander develops a plan to recover or assumes risk that they may be compromised.

4-154. Forces forward of the linear obstacle that gain contact with the enemy should have a rehearsed and prepared plan to cross the linear obstacle before the enemy can engage or fix them. Alternatively, they should have a plan to displace or hide if they are unable to cross the linear obstacle.

DISRUPT THE ENEMY

4-155. Key to the defense of a linear obstacle is the identification of the how the enemy intends to negotiate the obstacle. Leadership adjustments the defensive scheme of maneuver as the enemy approaches. Engineer assets are high value targets for the weapons troop. They severely disrupt the enemy's operation when that are destroyed regardless of the enemy COA such as cross the obstacle, bypass the obstacle, or destroy the obstacle.

Execution of Planned Fires

4-156. Effective fires, mass of combat forces and engagement/disengagement must be executed. The troop should try to force the enemy into its engagement areas, reinforce fires, add depth, block penetrations, restore positions, and reposition forces as needed. The fires over the linear obstacle must also be sustained throughout the engagement to prevent enemy control over or isolating areas of the obstacle.

Execution of Situational Obstacles

4-157. As with an area defense situational obstacles must be tied to decision points, planned for and rehearsed prior to execution. Scatterable mines make effective situational obstacles but have their limitations. The intent of the obstacles can include closing gaps or repair existing obstacles, reinforce existing obstacles protect the flanks, and isolate an enemy force. (See ATP 3-90.8 for more information on situational obstacles.)

FIX THE ENEMY

4-158. The weapons troop should fix the enemy with fires when it consolidates to negotiate the obstacle.

Maneuver

4-159. Similar to how the U.S. army crosses and breaches obstacles the enemy will apply SOSRA techniques. The weapons troop is effective at preventing the enemy from suppressing the friendly force by engaging from multiple locations and mixing ATGM and MGS fires from various distances. When augmented with Infantry and Cavalry and fighting as a combined arms team the force prevents the enemy conducting all the elements of SOSRA.

4-160. Should the enemy force cross the linear obstacle a counterattack or an assault is best employed at that moment to secure the crossing point? The enemy is most vulnerable at that point because they have piecemeal forces and are canalized. Destroying an enemy unit and its vehicles can block the crossing point.

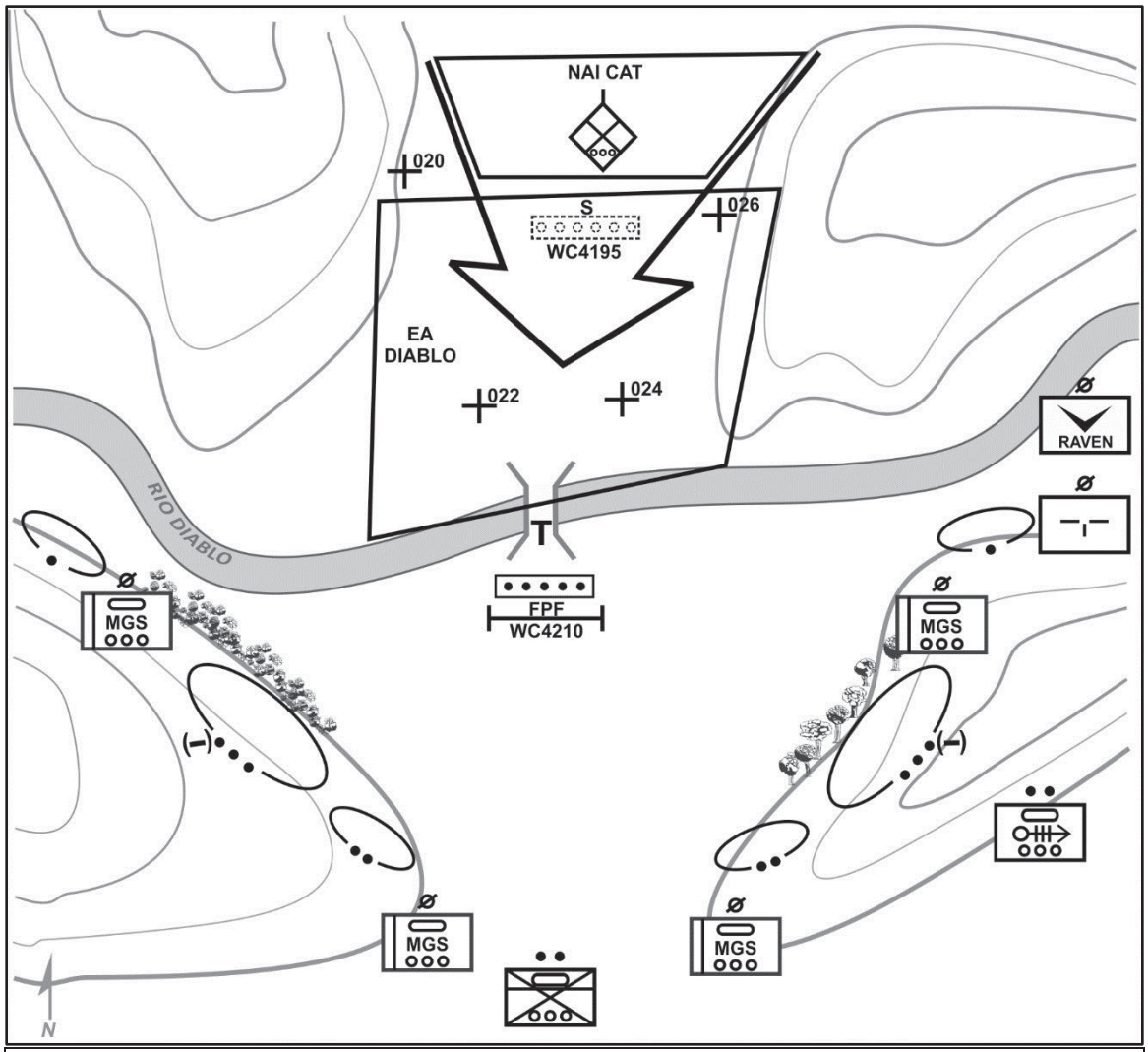
COUNTERATTACK

4-161. The counter attack in a linear obstacle is best conducted by another unit that is on the far side of the linear obstacle. This unit is not limited to the movement restrictions that the linear obstacle creates. Counter attacking over the obstacle the enemy just encountered provides the enemy with the same advantages the defending force just had. The unit must use the principals of SOSRA and cross the linear obstacle in the same manner as a gap crossing or breaching an obstacle. (See chapter 6 of this publication for more information.)

ASSESS

4-162. Assessment is continuous throughout the completion of prepare and execution phases. The SBCT weapons troop commander's assessment reveals threats to the chosen defensive scheme, suggests improvements to effectiveness, and reveals opportunities. The troop commander determines the differences (variances) between the actual situation and what the original defensive scheme forecasted the situation would be at any given time based on the commander's own observations and reports from the troop's subordinate organic units and any attachments. The commander's evaluation of these variances considers

whether the desired conditions have changed, are no longer achievable, or are not achievable if the troop continues to execute the original defensive scheme. The commander makes adjustments to that defensive scheme and issues the necessary oral orders (see figure 4-6). These adjustments may have been previously developed as part of a previously developed decision support template. They include assigning new tasks to subordinates, reprioritizing support, and significantly modifying the chosen defensive course of action.



Legend: EA = engagement area, FPF = final protective fire, MGS = mobile gun system, NAI = named area of interest

Figure 4-6. Defense of a linear obstacle

SECTION V – PERIMETER DEFENSE

4-163. A perimeter defense is a defense oriented in all directions. The SBCT weapons troop uses it to secure itself, and to protect other units located within the perimeter. The SBCT weapons troop can employ a perimeter defense in most terrain. The commander conducting a perimeter defense plans to respond to the widest possible range of enemy actions when positioning forces, weapons emplacement, direct and indirect fire integration, and reserve employment. The SBCT weapons troop may be called upon to execute the perimeter defense under a variety of conditions, including—

- When securing itself against attacks in an urban area.

- When holding critical terrain in areas where the defense is not tied in with adjacent units.
- When it has been bypassed and isolated by the enemy and must defend in place.
- When occupying an independent assembly area or reserve position.
- When beginning preparation of a strong point.
- When directed to concentrate fires on two or more adjacent avenues of approach.

4-164. The commander should consider the following while in a perimeter defense:

- Placing security as far out as possible, maximizing the use of optics and sensors to provide early warning.
- Positioning ATGM and MGS vehicles in protected positions, and concentrating their fires on armor avenues of approach and related EAs.
- Retention of key terrain.
- Maintaining a reserve. Normally an MGS section.
- Location of the reserve and criteria to deploy them.
- Mission command.
- Sustainment operations and sustainment security.

PLANNING AND PREPARING

4-165. Planning for a perimeter defense can be deliberate or a battle drill, executed on command. Estimated duration of the perimeter defense will determine the level of planning and coordination involved. The longer the duration the more built up the perimeter should be. An example of a long term perimeter defense is a combat outpost that requires barriers, structures, additional communication assets, and engineer support. Hasty perimeter defense can be established during security halts by forming a perimeter with Stryker vehicles. Preparing a perimeter defense is a continuous task that is conducted with the weapons troop commander establishing priorities of work. Perimeter defenses are prepared in this order:

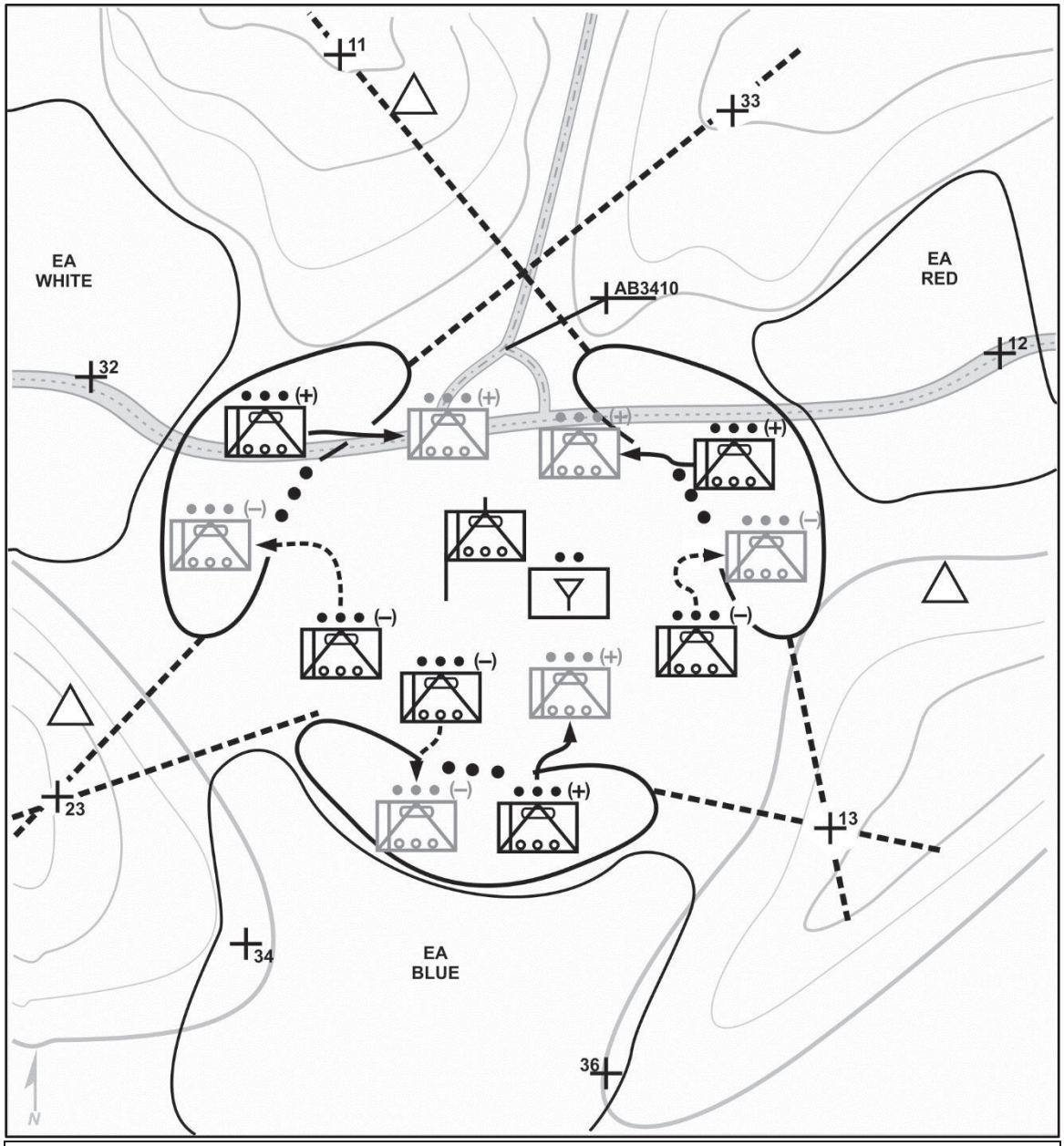
- Reconnaissance of the area to defend.
- Occupation of the area.
- Establish security.
- Begin priorities of work.

EXECUTING

4-166. The troop commander organizes his forces according to the perimeter defense plan (see figure 4-7, page 4-34). He places his most casualty producing weapon system first at the most likely enemy avenue of approach and tries the maximum effective range. The remainder of the Stryker vehicles form a perimeter in their assigned areas. Once the perimeter is formed and the commander establishes his priorities of work, he can begin to send out security patrols.

ASSESSING

4-167. Adjustments in the perimeter are constant to ensure the security. Leaders will continuously check, inspect and update the perimeter defense plan. All adjustments are communicated to the commander. He is responsible for the coordination of the perimeter.



Legend: EA = engagement area

Figure 4-7. Perimeter defense

SECTION VI – REVERSE-SLOPE DEFENSE

4-168. An alternative to defending on the forward slope of a hill or a ridge is to defend on a reverse slope. In such a defense, the SBCT weapons troop is deployed on terrain that is masked from enemy direct fire and ground observation by the crest of a hill. Although some units and weapons might be positioned on the forward slope, the crest, or the counterslope (a forward slope of a hill to the rear of a reverse slope), most forces are on the reverse slope. The key to this defense is control of the crest by direct fire.

4-169. The commander can adopt a reverse slope position when—

- Enemy fire makes the forward slope untenable.

- The weapons systems on the ATGM and MGS cannot depress enough to engage enemy.
- Lack of cover and concealment on the forward slope makes it untenable.
- The forward slope has been lost or has not yet been gained.
- The forward slope is exposed to enemy direct fire weapons fired from beyond the effective range of the defender's weapons. Moving to the reverse slope removes the attacker's standoff advantage.
- The terrain on the reverse slope provides better fields of fire than the forward slope.
- The defender avoids creating a dangerous salient or reentrant in friendly lines.
- Surprising and deceiving the enemy as to the true location of the defensive positions is essential.

4-170. When executing a reverse slope defense, the SBCT weapons troop commander places special emphasis on—

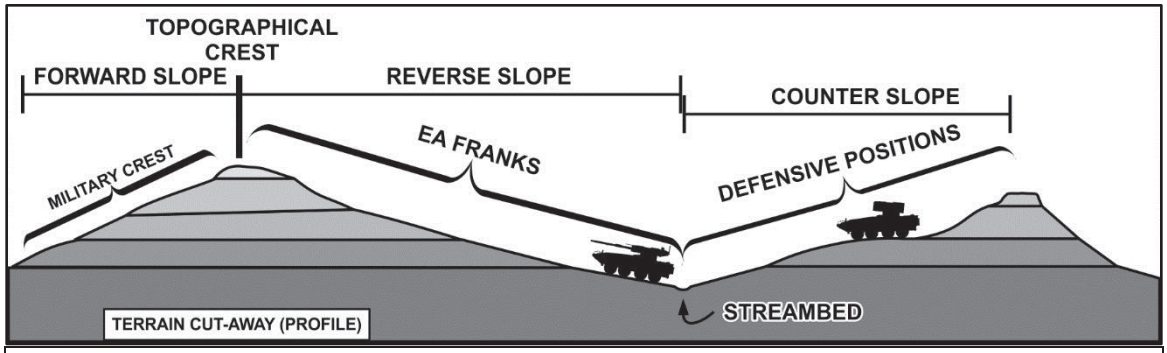
- A fire support plan to prevent the enemy's occupation and use of the crest of the hill.
- The coordination with reconnaissance elements on the forward slope to provide observation across the entire front and security to the main battle positions.
- A counterattack plan that specifies measures necessary to clear the crest or regain it from the enemy.
- Fire support to destroy, disrupt, and attrite enemy forces on the forward slope.

4-171. The forward edge of the position should be within small arms range of the crest. It should be far enough from the crest that fields of fire allow the defender time to place well-aimed fire on the enemy before he reaches friendly positions. The troop can deploy the FSV or establish FOs on or forward of the topographical crest. This allows long-range precision fires, observation, and early warning over the entire front and indirect fire coverage of forward obstacles. OPs are usually provided by the unit that owns the terrain being observed, and may vary in size from a few Soldiers to a reinforced squad.

SPECIAL CONSIDERATIONS

4-172. The following are considerations that commanders may apply when defending on a reverse slope:

- Observation of the enemy is more difficult. Soldiers in this position see forward no farther than the crest. This makes it hard to determine exactly where the enemy is as he advances, especially when visibility is poor. OPs are placed forward of the topographic crest for early warning and long-range observation.
- Displacing from the reverse slope defense is difficult because the defender must move up a hill. The defender is decisively engaged in a reverse slope defense.
- Fields of fire are usually short negating weapon range advantages. Normally, the defender has the opportunity to engage with direct fire weapon systems first.
- Obstacles on the forward slope can be covered only with indirect fire or by units on the flanks of the troop unless some weapons systems are initially placed forward.
- If the enemy gains the crest, he can assault downhill. This may give him a psychological advantage.
- If OPs are insufficient or improperly placed, the defenders might have to fight an enemy who suddenly appears in strength at close range.
- The slope degrades the enemy from being able to conduct reconnaissance and retreat if committed to an attack. The MGS vehicles can engage with direct fire with their main gun from the base of the slope providing them maximum cover and most likelihood to engage the enemy first. They should be placed in positions that angle the vehicle slightly upwards towards the hill. The position should not expose the top of the vehicle towards the enemy where the armor is more vulnerable to enemy fires. The ATGM vehicle is best placed where is can get flank shots or it can engage in slope to slope. Slope to slope engagements are negating the overhead fires restrictions of their surface danger zone (SDZ) with the use of Aero TOW missiles. (See figure 4-8, page 4-36.)



Legend : EA = engagement area

Figure 4-8. Reverse slope considerations

PLAN

4-173. Planning for a reverse slope defense will require thorough IPB analysis during the planning phase. Anticipation of how the enemy will react when it encounters the defense requires detailed analysis and understanding. Making a defensive plan will require determining where the enemy descends and can be identified with a thorough information collection plan. By identifying where the enemy descends, allows the troop commander time to mass effective fires on the enemy force.

4-174. The commander must also anticipate how to commit the enemy force to come over the hill. Often the SBCT weapons troop can engage in from the top of elevation from a primary position and transition to a reverse slope as a secondary position. This technique lures the enemy into the reverse slope engagement as the attempt to pursue the SBCT forces.

PREPARE

4-175. Preparing for the reverse slope defense begins with the assembling of the troop task organization and the completion of TLPs. Strong emphasis should be placed on concealing defensive positions, channeling the enemy into EAs, and blocking attempts to occupy dead space by emplacing obstacles and covering with indirect fires. Mobility enhancement should concentrate on improving routes that lead out of low ground along covered and concealed routes towards the rear of the defensive position up the hill or lateral routes to escape an enemy downhill assault.

EXECUTE

4-176. Execution begins with warning or contact with the enemy force. Warning can come from the adjacent, higher, or subordinate units. Ideally direct fire contact should be initiated by friendly forces, due to the close proximity of the enemy forces in a reverse slope defense (see figure 4-7, page 4-34). The commander should quickly assess his defensive plan if an enemy force initiates contact.

GAIN AND MAINTAIN ENEMY CONTACT

4-177. Contact with the enemy force is preferably established as far out as possible to provide early warning through sensors, the security forces, preferably in the security area. As the enemy approaches the defensive position their location and disposition are communicated to the SBCT weapons troop. At some point an element of the SBCT weapons troop makes contact with the enemy force somewhere forward of the reverse slope and it must be maintained until the culmination of the engagement.

DISRUPT THE ENEMY

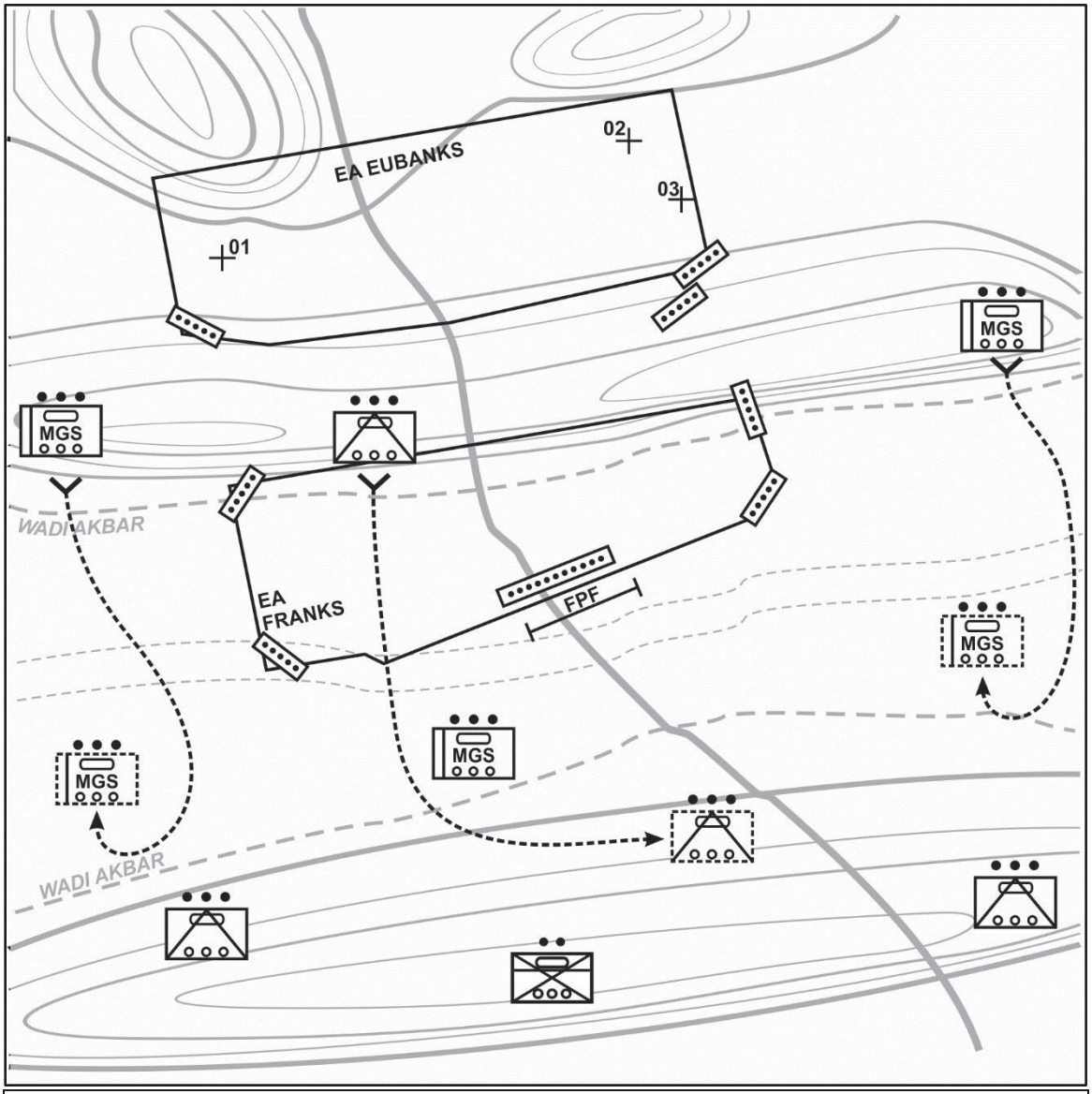
4-178. Disruption naturally occurs as the enemy force crests the elevation. The SBCT weapons troop must be flexible with his disrupting efforts. Too much disruption on the enemy force before they crest the elevation prevents from their committal to their attack and into their engagement area. Too little disruption and the enemy force is down the slope and decisively engaged in close combat. The SBCT weapons troop should build disruption obstacles within the engagement area first in their priority and then forward. They should place their forces to disrupt forward and then have them bound to the rear to assume positions in the reverse slope defense. This technique allows flexibility in the disruption plan.

FIX THE ENEMY

4-179. The enemy must be fixed on the reverse slope within the engagement area. Blocking obstacles at the base of the slope and sides assist to fix the enemy. Fires from the MGS and ATGM should be synchronized and suppress the enemy force to prevent them from returning accurate fire and continuing their movement. Indirect fires and FASCAM placed on the crest or forward slope further prevent the enemy force from withdrawing once their main body has entered then engagement area.

MAIN BATTLE AREA ENGAGEMENT

4-180. Once the enemy main body has crested the elevation and is in the MBA the SBCT weapons troop must stop their advance short of their defensive positions. The enemy will have the advantage of attacking downhill giving them momentum and speed. Blocking obstacles, direct fires, and indirect fires should be used to stop the enemy advance. ATGM and MGS vehicles have the advantage of multiple round selection against enemy targets. In the reverse slope engaging enemy with intended ammunition to maximize effects provides the best outcome in the reverse slope. (See chapter 9 of this publication for more information) (see figure 4-9, page 4-38).



Legend: EA = engagement area, FPF = final protective fire, MGS = mobile gun system

Figure 4-9. SBCT Example of a reverse slope

Note. FIGURE 4-7 SCENARIO — The troop commander places the FO team and MGS platoon, forward to engage. The forward Infantry platoon splits into sections, dismount, and secure the high ground on the flanks of the MGS platoon. They engage the enemy in EA Alpha to draw them in. On order, the forward element disengages and repositions. The Stryker Infantry rifle platoon consolidates in its secondary position. The MGS platoon moves to a reserve or striker force behind the second hill. The company engages the remaining enemy force in EAs Echo, Omega, and Zulu in a reverse slope defense. (See figure 4-10, page 4-40.)

ASSESS

4-181. Assessment is continuous throughout the completion of prepare and execution phases. Identification of CCIRs assists the assessments with the decision support templates or the commanders' orders. Assessment will force the commander to determine commitment of the reserve force, engagement/break contact, consolidate and reorganize, counterattack, resupply or recommend pursuit.

SECTION VII – ENGAGEMENT AREA DEVELOPMENT

4-182. An *engagement area* is an area where the commander intends to contain and destroy an enemy force with the massed effects of all available weapons and supporting systems (FM 3-90-1). By studying the terrain, the commander tries to determine the principal enemy and friendly heavy, light, and air avenues of approach. The commander determines the most advantageous area for the enemy's main attack, using the five military aspects of terrain OAKOC. (See ATP 3-34.80 for a detailed discussion of OAKOC.)

4-183. The success of any engagement depends on how effectively the commander can integrate the obstacle plan, the indirect fire plan, and the direct fire plan within the EA to achieve the SBCT weapons troop tactical purpose. (See chapter 9 of this publication for more information). For the SBCT weapons troop and its platoon's integrations with other forces such as Cavalry and Infantry enhance the lethality of the engagement area and the effectiveness to combat the enemy combined Arms formation.

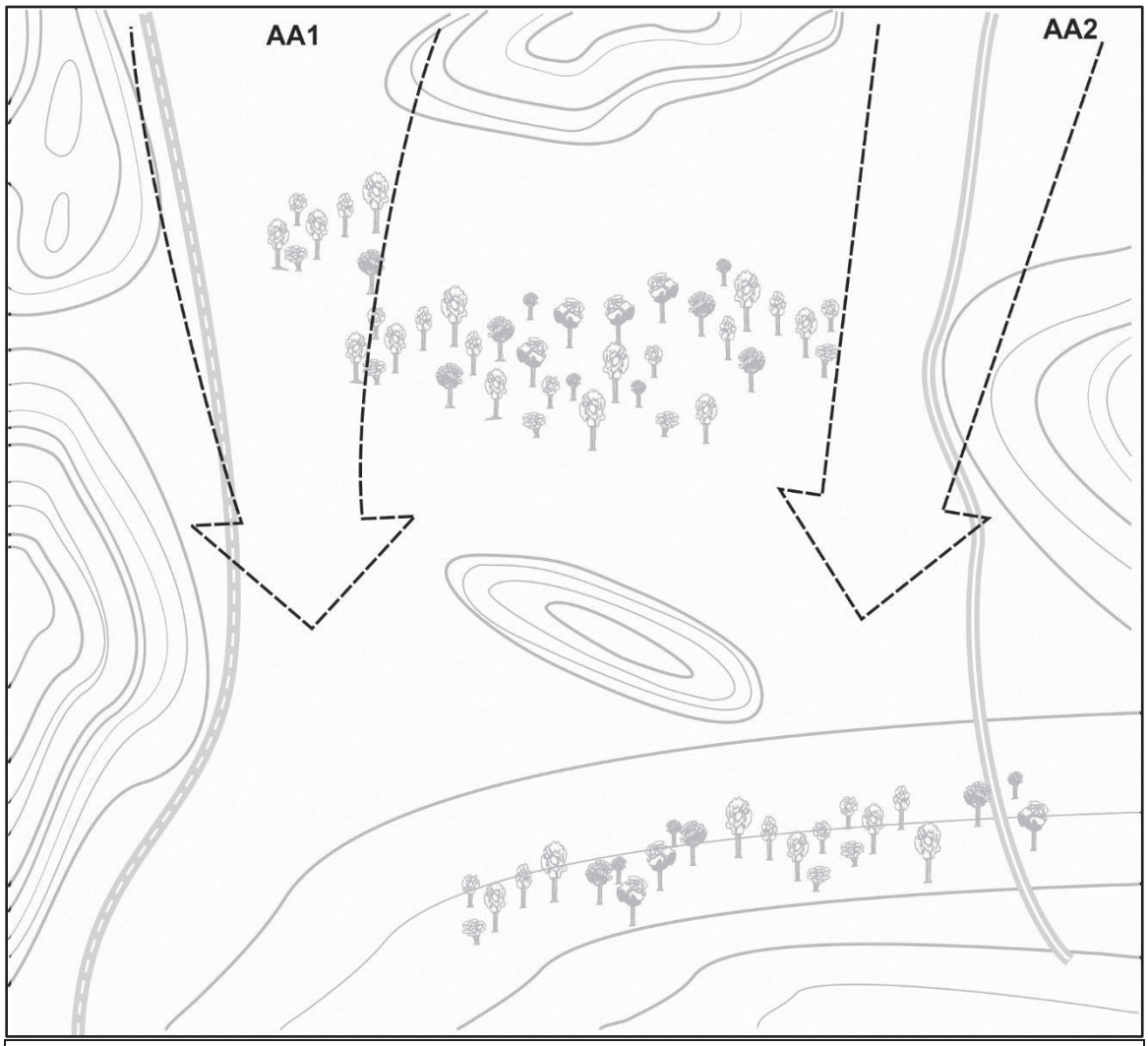
4-184. At the company level, EA development is a complex function, demanding parallel planning and preparation. Despite this complexity, EA development resembles a drill in that the commander and his subordinate leaders use an orderly, fairly standard set of procedures. The steps of EA development are not a rigid sequential process; some steps may occur simultaneously to ensure the synergy of combined arms. The development process covers these steps beginning with evaluation of METT-TC variables:

- Identify all likely enemy avenues of approach.
- Determine likely enemy schemes of maneuver.
- Determine where to kill the enemy.
- Plan and integrate obstacles.
- Emplace weapons systems.
- Plan and integrate indirect fires.
- Rehearse the execution of operations in the EA.

IDENTIFY LIKELY ENEMY AVENUES OF APPROACH

4-185. The troop commander and the COIST, if available, can use the following techniques and considerations when identifying the enemy's likely avenues of approach (see figure 4-8, page 4-36):

- Conduct initial reconnaissance of the terrain using OAKOC. If possible, do this from the enemy's perspective along each avenue of approach into the sector of fire or EA. JCR/BFT can graphically assist the troop commander by building a modified combined obstacle overlay.
- Identify key and decisive terrain. This includes locations that afford positions of advantage over the enemy, and natural obstacles and choke points that restrict forward movement.
- Determine which avenues provide cover and concealment for the enemy while allowing him to maintain his tempo. JCR/BFT can graphically assist the company commander by showing line of sight data.
- Determine which terrain the enemy is likely to use to support each avenue.
- Evaluate lateral routes adjoining each avenue of approach.



Legend: AA = avenue of approach

Figure 4-10. Likely enemy avenues of approach

DETERMINE ENEMY SCHEME OF MANEUVER

4-186. The SBCT weapons troop commander and COIST, if available, can use the following considerations when determining the enemy's scheme of maneuver (see figure 4-11):

- Determine how the enemy will structure the attack.
- Determine how the enemy will use his reconnaissance assets. Will he attempt to infiltrate friendly positions?
- Determine where and when the enemy will change formations or establish support by fire positions.
- Determine where, when, and how the enemy will conduct his assault or breaching operations.
- Determine where and when he will commit follow-on forces.
- Determine the enemy's expected rates of movement.
- Assess the effects of his combat multipliers, the anticipated locations, and areas of employment.
- Determine what reactions the enemy is likely to have in response to projected friendly actions.



Legend: AA = avenue of approach

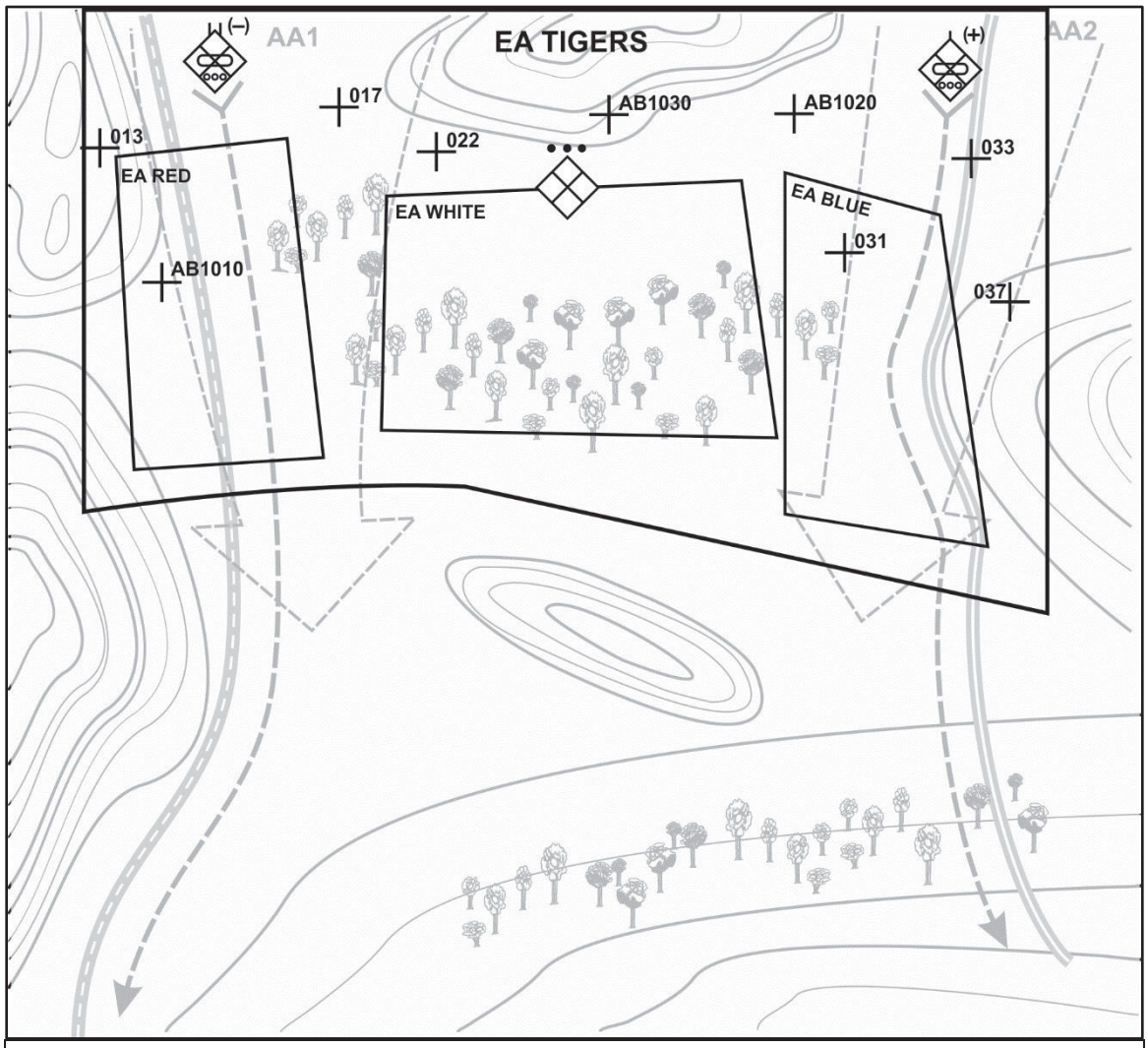
Figure 4-11. Enemy scheme of maneuver

DETERMINE WHERE TO ENGAGE THE ENEMY

4-187. The following steps identify and mark where the SBCT weapons troop will engage the enemy (see figure 4-12, page 4-42). This step the commander develops terrain based fire control measures (See chapter 9 of this publication for more information) :

- Identify TRPs that match the enemy's scheme of maneuver allowing the SBCT weapons troop to identify where it will engage enemy forces through the depth of the sector of fire.
- Identify and record the exact location, composition, and intent of each TRP. TRPs within the SBCT can be of different composition because of the use of different weapon systems to engage different types of targets. For example thermal sights are used to ensure visibility at the appropriate range under varying conditions when marking TRPs from ATGM and MGS. Placing TRPs within the EA with heat inside of metal containers provide thermal signatures for the ATGM and MGS sights.
- Determine trigger line.
- Determine how many weapons systems will engage fires on each TRP to achieve the desired end state.

- Determine engagement lines for all weapons systems.
- Determine which platoons will mass fires on each TRP.
- Establish EAs around TRPs.
- Develop the direct fire planning measures necessary to fire at each TRP.



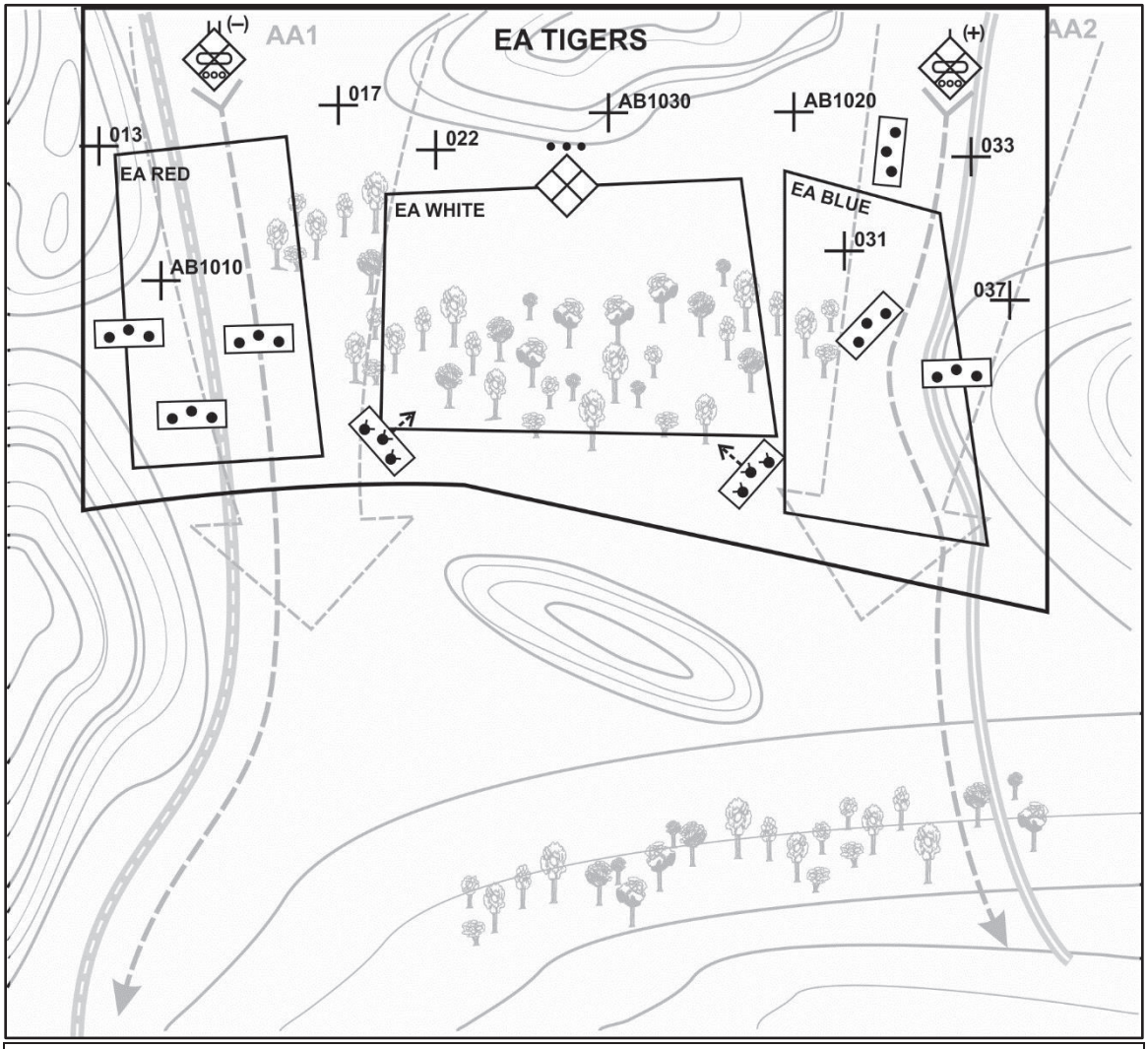
Legend: AA = avenue of approach, EA = engagement area

Figure 4-12. Where to engage the enemy

PLAN AND INTEGRATE OBSTACLES

4-188. The following steps apply in planning and integrating obstacles in the SBCT weapons troop defense (see figure 4-13):

- Determine the obstacle group's intent confirming the target, relative location, and effect. Ensure intent supports the task force scheme of maneuver.
- Identify, site, and mark the obstacles within the obstacle group.
- Integrate protective obstacle types and locations within SBCT weapons troop defense.
- Ensure coverage of all obstacles with direct fires.
- Assign responsibility for guides and lane closure, as required.
- Emplace obstacles based on analysis of the mission variables of METT-TC, secure class IV and V point, secure mine dump, or secure obstacle work sites.
- Coordinate engineer disengagement criteria, obstacle handover, actions on contact, and security requirements with the engineer platoon leader at the obstacle work site if the company is supported by an engineer platoon.



Legend: AA = avenue of approach, EA = engagement area.

Figure 4-13. Integrate obstacles

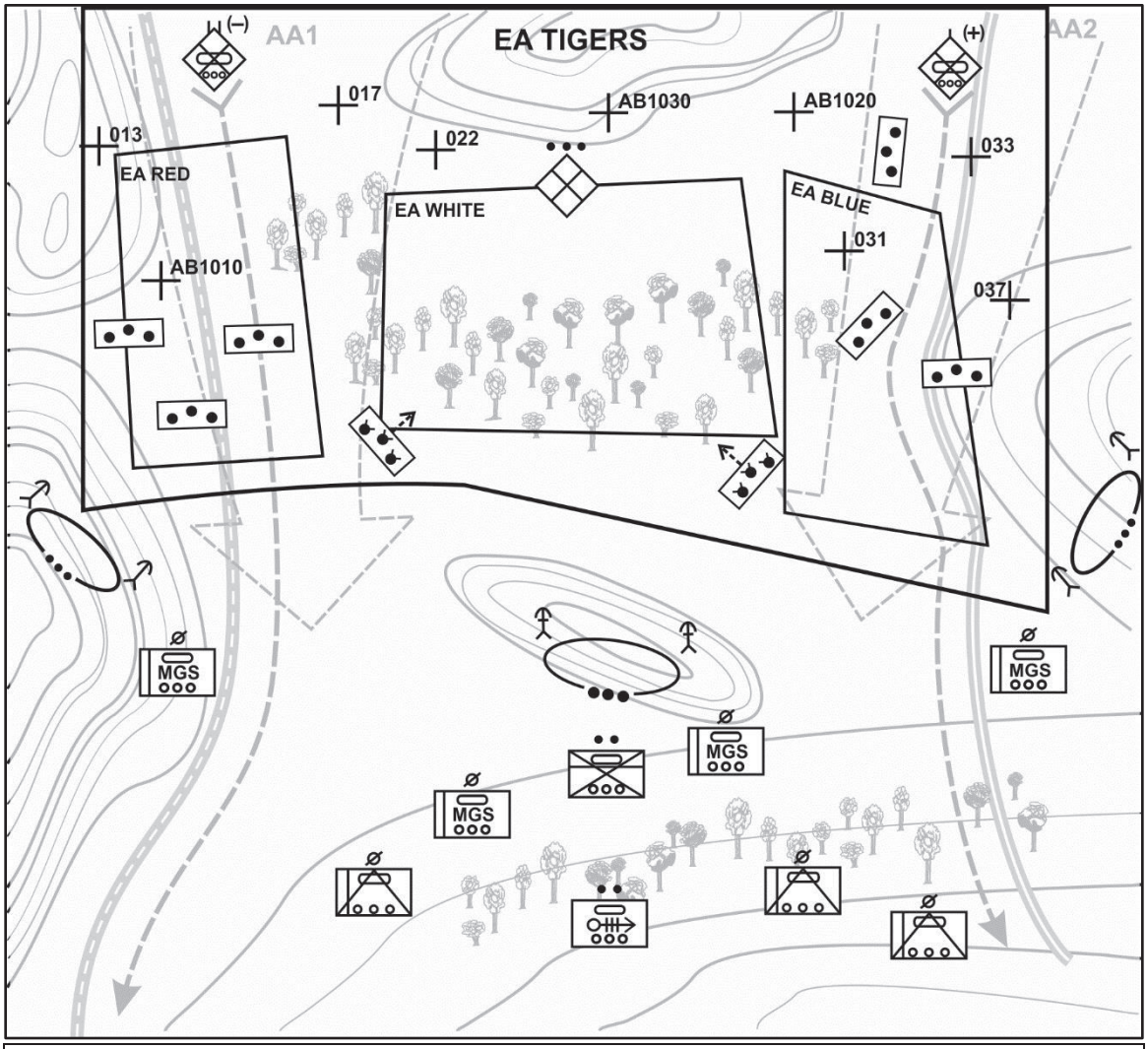
EMPLACE WEAPONS SYSTEMS

4-189. The following steps apply when selecting and improving BPs. (see figure 4-14):

- Select tentative platoon BPs.

Note. When possible, select these while moving in the EA. Using the enemy's perspective enables the commander to assess survivability of the positions.

- Conduct a leader's reconnaissance of the tentative BPs.
- Drive the EA to confirm that selected positions are tactically advantageous.
- Confirm and mark the selected BPs.
- Ensure that BPs do not conflict with those of adjacent units and that they are effectively tied in with adjacent positions.
- Select primary, alternate, and supplementary fighting positions to achieve the desired effect for each EA.
- Ensure that platoon leaders, platoon sergeants (PSGs), section leaders, or vehicle commanders position weapons systems so that each EA is effectively covered by the required number of weapons, vehicles, or platoons.
- Ensure that positions allow vehicle commanders, loaders, or gunners (as applicable for each vehicle or weapons system) to observe the EA and engage enemy forces from the hull down position.
- Stake vehicle or weapons system positions according to unit SOP so that the vehicle or weapon system positions can be hardened by the construction of fighting or survivability positions.
- Confirm all vehicle or weapons system positions.



Legend: EA = engagement area, MGS = mobile gun system

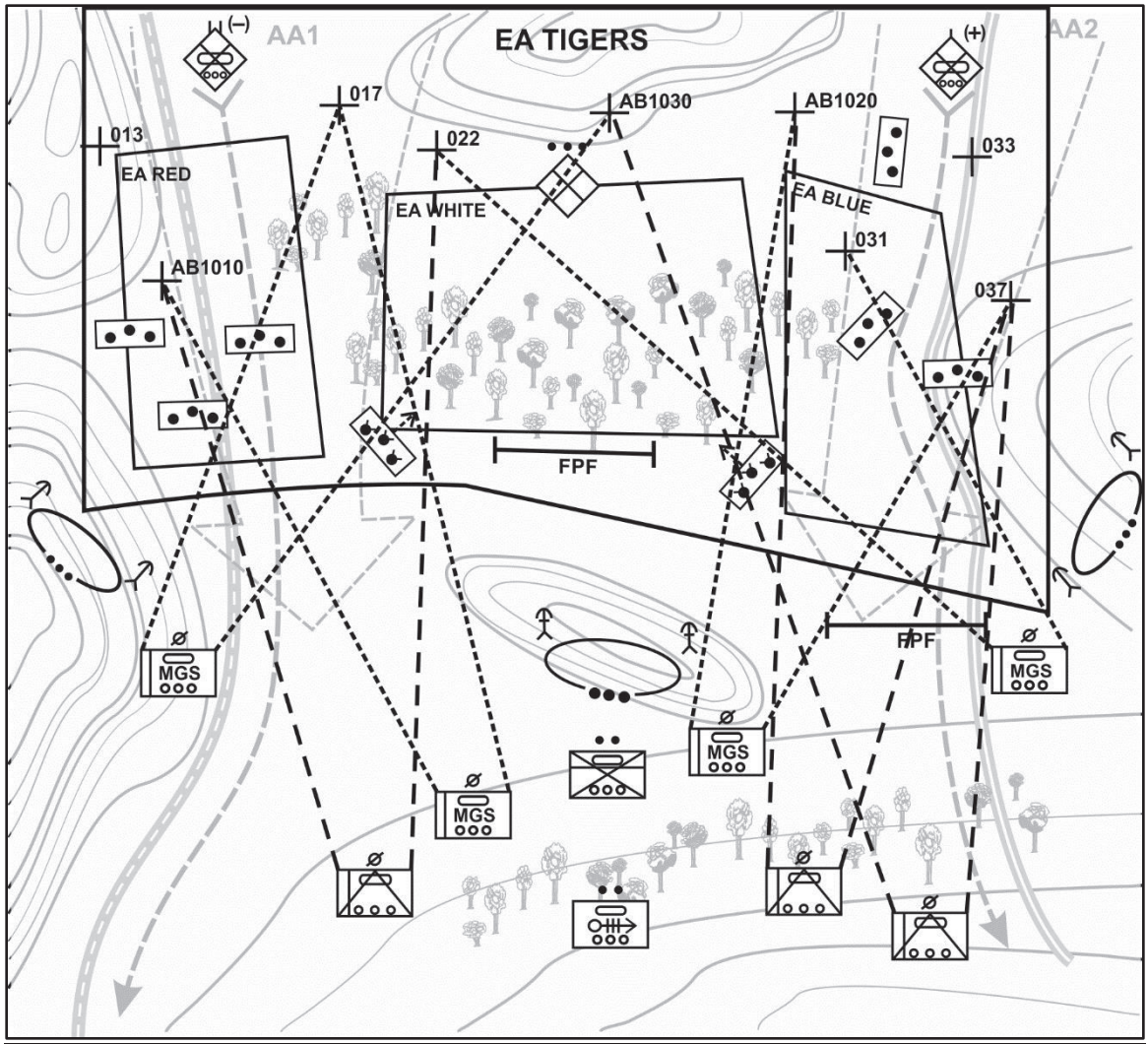
Figure 4-14. Emplace weapons systems

PLAN AND INTEGRATE INDIRECT FIRES

4-190. The following steps apply in planning and integrating indirect fires (see figure 4-15, page 4-46). This step the commander places threat based fire control measures and synchronizes them with FSCMs (see chapter 9 of this publication for more information):

- Determine the purpose of fires.
- Determine where that purpose will best be achieved.
- Establish the observation plan with redundancy for each target. Observers will include the FIST and members of maneuver elements with fire support responsibilities.
- Establish triggers based on enemy movement rates.
- Obtain accurate target locations using survey or navigational equipment.
- Refine target locations to ensure coverage of obstacles.
- Adjust artillery and mortar targets.
- Plan FPF.

- Request critical friendly zone (CFZ) for maneuver units and no fire areas (NFAs) for OPs and forward positions.



Legend: EA = engagement area, FPF = final protective fire, MGS = mobile gun system

Figure 4-15. Integrate indirect fires

ENGAGEMENT AREA REHEARSAL

4-191. The purpose of this rehearsal is to ensure that every leader and Soldier understands the plan and that elements are prepared to cover their assigned areas with direct and indirect fires. Although the SBCT weapons troop commander has several options, the most effective type is the mounted rehearsal. Time consideration is the limiting factor but should never be negate the commander to conduct some type of rehearsal. The rehearsal should cover the following actions:

- Rearward passage of security forces (as required).
- Closure of lanes (as required).
- Movement from the hide position to the BP.
- Use of fire commands, triggers, or maximum engagement lines to initiate direct and indirect fires.
- Shifting of fires to concentrate and redistribute fire effects.

- Preparation and transmission of critical reports using FM and digital systems (as applicable).
- Assessment of enemy weapons systems effects.
- Displacement to alternate, supplementary, or subsequent BPs.
- Cross-leveling or resupply of class V.
- Evacuation of casualties.

4-192. The SBCT weapons troop commander should coordinate the rehearsal with the task force to ensure that other units' rehearsals do not conflict with his own. Coordination leads to efficient use of planning and preparation time for all SBCT units. It eliminates the danger of misidentification of friendly forces in the rehearsal area, which could result in fratricide.

SECTION VIII – TRANSITIONS

4-193. During the planning for any operation, the commander discerns the follow-on missions from the higher headquarters' OPORD and begins to plan how they intend to achieve them. The SBCT weapons troop pauses to consolidate and reorganize before the next operation. If required, the commander decides the best time and location that facilitates future operations and provides security. (Refer to FM 3-90-1 for more information.)

CONSOLIDATION

4-194. The troop commander plans and prepares for this phase of the operation as part of his TLPs for the entire mission. He ensures that the troop is ready to conduct the following actions that usually are part of consolidation:

- Eliminate enemy resistance on the objective.
- Establish security beyond the objective by securing areas that may be the source of enemy direct fires or enemy artillery observation.
- Establish additional security measures such as patrols.
- Prepare for and assist the passage of follow-on forces (if required).
- Continue to improve security by conducting other necessary defensive actions. These defensive actions include EA development, direct fire planning, and BP preparation.
- Adjust FPF and assign targets along likely mounted and dismounted avenues of approach.
- Protect the obstacle reduction effort.
- Secure EPW and detainees.
- Prepare for the enemy counterattack.

REORGANIZATION

4-195. Reorganization normally occurs concurrently with consolidation. It consists of actions taken to prepare the SBCT weapons troop for follow-on operations. As with consolidation, the troop commander plans and prepares for reorganization as he conducts his TLPs. He ensures that the troop takes the following actions:

- Provide appropriate first aid, TC3, and evacuate casualties as needed.
- Process EPWs and detainees.
- Cross-level personnel and adjust task organization when necessary to support the next phase or mission.
- Conducts resupply operations, to include rearming and refueling.
- Redistribute ammunition and other supplies.
- Conduct required maintenance.
- Continue improvement of defensive positions, as needed.

CONTINUING OPERATIONS

4-196. The SBCT weapons troop may continue the defense, or if ordered, transition to focus on the conduct of offensive or stability tasks at the conclusion of an engagement. The commander considers the higher commander's concept of operations, friendly capabilities, and the enemy situation when making this decision. All missions should include plans for exploiting success or assuming a defense.

TRANSITION TO RETROGRADE

4-197. A defending commander may transition from participating in a higher echelon's area or mobile defense to the retrograde as a part of continuing operations. A retrograde usually involves a combination of delay, withdrawal, and retirement operations. These operations may occur simultaneously or sequentially. As in other operations, the commander's concept of operations and intent drive planning for retrograde operations. Each form of retrograde operation has its unique planning considerations, but considerations common to all retrograde operations are risk, the need for synchronization, and rear operations.

TRANSITION TO OFFENSE

4-198. Higher headquarters may order the SBCT weapons troop to conduct an attack, movement to contact, or participate in exploitation. In some cases, the defensive tasks might immediately transition into a pursuit.

4-199. Elements of the weapons troop may execute a counterattack to destroy exposed enemy elements and free decisively engaged friendly elements. A base of fire element suppresses or fixes the enemy force while the counterattack (maneuver) element moves on a concealed route to a subsequent battle position to engage the enemy in the flank or rear. The counterattack element maneuvers rapidly to its firing position, often fighting through enemy flank security elements, to complete the counterattack before the enemy can bring follow-on forces forward to influence the fight.

4-200. Execution of the counterattack is similar to that for an attack by fire. Planning and preparation considerations for the counterattack vary depending on the purpose and location of the operation. (For example, the counterattack may be conducted forward of friendly positions, requiring the reserve force to move around friendly elements and through their protective and tactical obstacles.) In other situations, the commander may use a counterattack by fire to block, fix, or contain a penetration. In any case, the reserve force conducts the counterattack as an enemy-oriented operation.

TRANSITION TO OPERATION FOCUSED ON STABILITY TASKS

4-201. The SBCT weapons troop commander should plan a defensive contingency with on-order offensive missions stability operation where the situation could deteriorate. Subordinate leaders need to be fully trained to recognize activities that would initiate this transition such as the disbandment of government or conventional security forces.

4-202. Commanders and leaders need to be aware that elements of the SBCT could be conducting offensive, defensive, and stability tasks simultaneously within a small radius of each other. ROE is assessed, updated, disseminated, and trained on while this transition occurs. Establishing security within the area of operation for civilian population may call for a rapid response and initiative. The SBCT weapons troop makes these transitions rapidly through dissemination of information with mission command systems, leadership that takes the initiative, and active reconnaissance.

Chapter 5
Stability

Stability components of operations leverage the coercive and constructive capabilities of the military force to establish a safe and secure environment, facilitate reconciliation between local or regional adversaries; establish political, legal, social, and economic institutions; and facilitate the transition of responsibility to a legitimate civil authority. This chapter discusses SBCT weapons troop role in support to stability tasks. It addresses SBCT weapons troop, planning and operations considerations, and transitions.

SECTION I – OVERVIEW OF STABILITY

5-1. *Stabilization* is a process in which personnel identify and mitigate underlying sources of instability to establish the conditions for long-term stability (FM 3-07). *Stability operations* various military missions, tasks, and activities conducted outside the U.S. in coordination with other instruments of national power to maintain or reestablish a safe and secure environment, provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief (JP 3-07).

STABILITY FRAMEWORK

5-2. A stability framework based on conditions within the area of operations of initial response, transformation, and fostering stability, helps the unit determine the required training and task organization of forces prior to initial deployment, and serves as a guide to actions in an operation focused on stability tasks. (Refer to ATP 3-07.5 for more information.) Stability tasks occur in three phases described in the following paragraphs. These phases facilitate identifying lead responsibilities and determining priorities and describe the conditions on the operational environment.

INITIAL RESPONSE PHASE

5-3. These actions generally reflect activity executed to stabilize a crisis state in the area of operations. Army conventional force units typically perform initial response actions during, or directly after, a conflict or disaster in which the security situation prohibits the introduction of civilian personnel. Initial response actions aim to provide a secure environment that allows relief forces to attend to the immediate humanitarian needs of the local population. They reduce the level of violence and human suffering while creating conditions that enable other actors to participate safely in relief efforts.

TRANSFORMATION PHASE

5-4. Stabilization, reconstruction, and capacity-building are transformation phase actions that are performed in a relatively secure environment. Transformation phase actions take place in either crisis or vulnerable states. There is the presence of a legitimate authority either interim or established as well as indigenous HNSF. These actions aim to build host-nation capacity across multiple sectors. Transformation phase actions are essential to the continuing stability of the environment. These actions are essential to fostering stability within the area.

FOSTERING SUSTAINABILITY PHASE

5-5. These are actions that encompass long-term efforts, which capitalize on capacity building and reconstruction activities. Successful accomplishment of these actions establishes conditions that enable sustainable development. Usually military forces perform fostering sustainability phase actions only when the security environment is stable enough to support efforts to implement the long-term programs that commit

to the viability of the institutions and economy of the HN. Often military forces conduct these long-term efforts to support broader, civilian-led efforts.

STABILITY TENETS

5-6. The SBCT applies stability tenets to conduct their operations. The SBCT weapons troop must understand the stability tenets as they inform their higher commander regarding operations they may support.

CONFLICT TRANSFORMATION

5-7. *Conflict transformation* is the process of reducing the means and motivations for violent conflict while developing viable, peaceful alternatives for the competitive pursuit of political and socioeconomic aspirations (ADRP 3-07). It aims to set the HN on a sustainable, positive trajectory in which transformational processes directly address the dynamics causing instability.

UNITY OF EFFORT

5-8. Military operations typically demand unity of command, the challenge for military and civilian leaders is to forge unity of effort or unity of purpose among the diverse array of actors involved in a stability operation. *Unity of effort* is the coordination and cooperation toward common objectives, even if the participants are not necessarily part of the same command or organization, which is the product of successful unified action (JP 1). Unity of effort is fundamental to successfully incorporating all the instruments of national power in a collaborative approach when conducting stability tasks in operations.

LEGITIMACY AND HOST-NATION OWNERSHIP

5-9. Legitimacy is a condition based upon the perception by specific audiences of the legality, morality, or rightness of a set of actions, and of the propriety of the authority of the individuals or organizations in taking them. Legitimacy enables host-nation ownership by building trust and confidence among the people. The principle of legitimacy impacts every aspect of operations from every conceivable perspective. Legitimacy of the host-nation government and mission enables successful operations characterized by stability tasks.

BUILDING PARTNER CAPACITY

5-10. Building partner capacity is the outcome of comprehensive inter-organizational activities, programs, and military-to-military engagements that enhance the ability of partners to establish security, governance, economic development, essential services, and other critical government functions. Brigades apply a comprehensive approach to sustained engagement with foreign and domestic partners to co-develop mutually beneficial capabilities and capacities to address shared global interests. Unified action is an indispensable feature of building partner capacity. In operations characterized by stability tasks, unified action to enhance the ability of partners for security, governance, economic development, essential services, and other critical government functions exemplifies building partner capacity.

STABILITY TASKS

5-11. Army forces conduct the following stability tasks: establish civil security, establish civil control, restore essential services, support to governance, support to economic and infrastructure development, and conduct security cooperation. At brigade level and below, the primary stability tasks are too broad to direct effort to execute independently. They require partnership with outside organizations because they ultimately invoke political objectives executed in partnership with civic, security, humanitarian, and military organizations. At lower tactical echelons efforts require understanding of specific aspects of the local situation to identify and mitigate sources of instability. The SBCT weapon troop considers sewage, water, electricity, academics, trash, medical, security, and other considerations; and political, military, economic, social, information, infrastructure, physical environment, and time to address the need to bring about stability in their area of operation. (Refer to ATP 3-07.5 for more information on stability techniques.)

5-12. The SBCT weapons troop makes the greatest contribution in establish civil security, conduct security cooperation, and establish civil control during the initial response and transformation phases of stability operations. Restoration of essential services, support to governance, support to economic infrastructure and development are tasks that the troop must execute or support in partnership with unified action partners.

Unity of command and an understanding with all unified action partners to include civil affairs units, HNSF, HN government forces, international aid organizations, and so forth is required for a single focused direction of progress in these efforts.

ESTABLISH CIVIL SECURITY

5-13. Establishing civil security involves providing for the safety of the HN and its population, to include security from internal and external threats; it is essential to providing a safe and secure environment. Civil security includes a diverse set of activities. These range from enforcing peace agreements to conducting disarmament, demobilization, reintegration, and includes biometric identity data collection to identify criminal elements, known and suspected terrorists, and other irregular forces.

5-14. Until a legitimate civil government can assume responsibility for the security, military forces perform the tasks associated with civil security. At the same time, they help develop HN security and police forces. Normally, the responsibility for establishing and maintaining civil security belongs to military forces from the onset of operations through transition, when HN security and police forces assume this role.

ESTABLISH CIVIL CONTROL

5-15. Establishing civil control is an initial step toward instituting stable, effective governance. Although establishing civil security may be the primary responsibility of military forces in a stability mission, this can only be accomplished by restoring civil control. Internal threats may manifest themselves as an insurgency, subversive elements within the population, organized crime, or general lawlessness.

5-16. Civil control regulates selected behavior and activities of individuals and groups. This control reduces risk to individuals or groups and promotes security. Curfews and traffic checkpoints, together with biometric identity data collection, are examples of civil control.

RESTORE ESSENTIAL SERVICES

5-17. The SBCT weapons troop is capable of providing only minimal essential services. Normally, the military force supports other government, intergovernmental, and HN agencies improving essential services. However, a plan for providing emergency services include:

- Emergency medical treatment and rescue.
- Providing food and water. The SBCT generally requires augmentation to provide food and water to the local population. However, a plan for providing food and water should be made in case the need arises.
- Providing emergency shelter. The SBCT generally needs to be augmented to provide emergency shelter to the local population. However, a plan for providing emergency shelter should be made in case the need arises. This plan should be developed with higher echelons and with HNSF.

SUPPORT TO GOVERNANCE

5-18. Stability tasks establish conditions that enable interagency and HN actions to succeed. The military force focuses on transferring control to a legitimate civil authority according to the desired end state. The SBCT weapons troop, as part of larger unit, can provide support to governance when agreements with the HN allow that could include the following:

- Support development of local governance.
- Support anticorruption initiatives.
- Regulate traffic, collect biometric identify data, and searches.
- Security for indigenous authorities.
- Properly detaining suspected criminals and properly holding criminal evidence for the HN's civil administration of justice.
- Training HNSF and police.
- Security at election sites and ballot transfers.

SUPPORT TO ECONOMIC AND INFRASTRUCTURE DEVELOPMENT

5-19. Support to economic and infrastructure development helps a HN develop capability and capacity in these areas. It may involve direct and indirect military assistance to local, regional, and national entities.

CONDUCT SECURITY COOPERATION

5-20. *Security cooperation* is all Department of Defense interactions with foreign defense establishments to build defense relationships that promote specific United States security interests, develop allied and friendly military capabilities for self-defense and multinational operations, and provide United States forces with peacetime and contingency access to a host nation (JP 3-22). Security cooperation is often coordinated by the U.S. military's security cooperation organization in a country. These interactions include all Department of Defense administered security assistance programs that build defense and security relationships promoting specific U.S. security interests. Such interests include all international armaments cooperation activities and security assistance activities to—

- Develop friendly, partner, and allied military capabilities for self-defense and multinational operations.
- Build partnership capacity and enhance or establish relationships with regional national militaries that promote bilateral and coalition interoperability, strategic access, and regional stability.

SECTION II – PLANNING CONSIDERATIONS

5-21. An SBCT weapons troop is not independently capable of achieving the desired end state of stability tasks. The SBCT weapons troop achieves success in stability through partnership at the local level by identifying and mitigating sources of instability through partnership and coordinated support from its higher headquarters in collaboration with their unified action partners. The SBCT weapons troop performs troop level missions, tasks, and activities that support its higher headquarters efforts to maintain or reestablish a safe and secure environment, provide essential governmental services, emergency infrastructure reconstruction and humanitarian relief, and foster economic development.

5-22. As combat operations clear and secure areas of hostile forces, part of the force secures critical infrastructure and populated areas. Establishing civil security and civil control and the provision of essential services are implied tasks for commanders during any mission. Commanders are legally obligated to minimize civilian suffering.

5-23. Commanders plan to minimize the effects of combat on the populace. Properly focused, effectively executed stability tasks prevent population centers from degenerating into civil unrest and becoming recruiting areas for opposition movements or insurgencies.

5-24. The commander plans for stability tasks in a manner similar to the offense and defense. The planning process is continuous, constantly adapting as the conditions of the operational environment (OE) are shaped by activities, both natural and human. The resultant plan fosters flexibility, initiative, and adaptability in the face of unforeseen events. The following warfighting functions discuss planning considerations and activities critical for mission success.

MISSION COMMAND

5-25. Stability tasks, present a unique challenge. Combat tasks typically focus on the defeat of an enemy force, stability task focus on the people. In setting the tone for planning, the commander provides the following:

- His understanding of the people, the area, and his forces.
- His intent and planning guidance.
- His concept of operations.

5-26. The commander's understanding of the OE ultimately determines the appropriate combination of stability and defeat mechanisms necessary to achieve the desired end state. The stability and defeat mechanisms are not limited to combat tasks but can rely on the perceptions that security forces make on the

local population. At times, military forces intervene in an unstable situation where the security environment is actively violent in nature. In these cases, military forces may initially use defeat mechanisms to alter the conditions sufficiently to protect the civil populace. In a relatively benign environment where military forces primarily assist or facilitate civil efforts, the stability mechanisms will dominate.

5-27. Challenges for the SBCT weapons troop are the mix of partnered, joint, and combined tasks during operations focused on stability. Mission command requires the ability to clearly communicate intent with security forces, HN government, and other nongovernment organizations for focused efforts and direction.

5-28. Soldiers derive their effectiveness from their ability to understand and work with foreign counterparts from another culture. They need to understand enough of their own culture and their counterpart's culture to accurately convey ideas, concepts, and purpose without causing counterproductive consequences. Soldiers need to be aware of aspects of the local culture and history that influence behavior in their operational environment. Soldiers need to understand the reasons and motivations underlying personal interaction and practice patience when working with their counterparts. Group norms guide individual behavior, and Soldiers need to understand how individuals in a society tend to interact as members of a group, whether a race, ethnic, or kinship group. Cultural understanding is not derived from demographic information provided to the military through country briefs prior to deployment. It is gained from studying, interacting, and understanding the people, religion, history, customs, and social and political structures within an area. For true understanding, it is necessary to live among the people, gradually understanding the subtleties and nuances of their culture. Leaders in the SBCT weapons troop ensures that Soldiers understand that the actions of one can have a positive or negative effect in the way that the entire unit is viewed by the local population. (Refer to ATP 3-07.10/MCRP 3-33.8A/NTTP 3-07.5/AFTTP 3-2.76 for more information.)

MOVEMENT AND MANEUVER

5-29. Maneuver in stability environments continue to emphasize security over wide areas and in combined, joint, and partnered maneuver. Engagement skills (negotiation, rapport building, cultural awareness, and critical language phrases) are tools that leaders use during movement and maneuver to engage the local population. The intent is to create a stable environment that allows peace to take hold while ensuring the force is protected. Movement in operations focused on stability tasks is very deliberate. Time is the limiting factor due to the slow pace that security forces take; not just for their protection but also to be seen by the local population and influence their perception. Security patrols often take longer during stability tasks to allow the security force to vary their patterns, arrive at destinations in a timely manner to account for contingencies, and have leaders engage the local population.

5-30. The SBCT weapons troop cannot provide security at all times and all places. The local population and threat forces will conduct constant observation. A blend of covert and overt operations is effective in providing area security.

INTELLIGENCE

5-31. Intelligence plays an important role in the SBCT weapons troop accomplishment of a task. The commander uses every element available to collect information that helps him accomplish his mission. Every member of the troop plays a role in gathering information to support the SBCT weapons troop. Details of information from patrols should be collected from every member that participated. In order for the commander to utilize the collected information as intelligence, the information must be processed, exploited, disseminated, and analyzed through the intelligence warfighting function. The COIST manages the information collection effort, ensures that every member of the weapons troop understands the information required and plays an active role in the collection of that information. This information is processed and disseminated through the intelligence enterprise, and analyzed by the S-2 to form intelligence. (Refer to chapter 1 of this publication for more information on the COIST).

5-32. Interaction with the civilian population provides the greatest amount of information during stability tasks. Soldiers should interact with the civilian population in accordance with the Law of Land Warfare and other relevant legal directives in order to collect relevant, timely information in an attempt to fulfil CCIRs, PIRs, and mission directives.

FIRES

5-33. Although fire support planning for operations focused on stability is the same as for the offense and the defense the use of fire support may be restricted and limited. The commander integrates fire support into his tactical plan. Special considerations include the following:

- Procedures for the rapid clearance of fires.
- Close communication and coordination with HN officials.
- Increased security for indirect firing positions.
- Restricted use of certain munitions such as dual-purpose improved conventional munitions, area denial artillery munition, or remote antiarmor mine.
- Presence of noncombatants.
- Protected structures.

5-34. The need for precision fires is greater in stability tasks. The need to destroy only the designated target with minimal collateral damage often makes our engagements challenging. The use of precision-guided munitions, assists in mitigation of the physical collateral damage. Information operations aimed at communicating to the local population that every measure was taken to engage only the threat to preserve their safety furthers the credibility of friendly forces.

SUSTAINMENT

5-35. The OE the SBCT weapons troop operates in during stability tasks may be austere, creating special sustainment considerations. These factors include, but are not limited to, the following:

- Reliance on local procurement of certain items.
- Aerial resupply of certain classes and may include airlifted rotary-wing cargo sling loads and fixed-wing air drops.
- Ensure health service support and class VIII supply and resupply operations meet unit operational support demands.
- Shortages of various critical items, to include repair parts, class IV supply materials, and lubricants.
- Special class V supply requirements (such as nonlethal munitions).
- Reliance on bottled water.
- Class IV supplies for construction of fixed OPs and checkpoints.
- Use of facilities or new construction for quarters; water, sewer, and power utilities; and reinforced hardstand areas for maintenance.
- Barriers or berms to protect ammunition and fuel.
- Biometric identity data vetting of locally employed personnel and other HN support.

5-36. An FSC in the SBCT BSB is task-organized to the task force to provide support. The weapons troop XO should be in direct contact with elements of the FSC and BSB, and the task force S-4 to coordinate logistics. The 1SG oversees the arrival, security, and distribution to the SBCT weapons troop. The troop supply sergeant consolidates, orders, and accounts for all supply requests. These requests should come from the platoon sergeants and section noncommissioned officers in charge and reviewed by the commander to ensure that they are able to continue operations.

PROTECTION

5-37. Protection of the force during stability tasks is essential for success at all levels. Frequent interaction between U.S. forces and the local population make protection planning difficult and essential. Adversaries often blend in with the local populace in stability environments and are difficult to identify, making heightened levels of awareness the norm. SBCT leaders should understand that they will be in close proximity of the local population and potential threat but will have difficulty distinguishing between them. Techniques for protection during operations focused on stability tasks vary in their application but can include attempts to identify threats through heightened awareness, cultural understanding, local engagements to gain information, personal security for leaders, searches of locals, and biometric identity data collection. This is

counter to the weapons troop training that relied on target identification and standoff for its protection during tactical operations.

5-38. The close proximity of civilians and Soldiers can also promote health issues (such as communicable disease) through close contact with local civilians, detainees, or local foods. Force health protection considerations positively support and promote the health of Soldiers in the OE. The protection of civil institutions, processes, and systems needed to reach the end state conditions can often be the most decisive factor in stability tasks because its accomplishment is essential for long-term success. Civilian areas typically contain structured and prepared routes, roadways, and avenues that can canalize traffic. This can lead to predictable friendly movement patterns that can easily be templated by the enemy. An additional planning consideration during stability tasks is to protect the force while using the minimum force consistent with the approved ROE. Additional protection considerations during stability tasks include the following:

- Reducing explosive hazard threat in the AO.
- Fratricide and friendly fire prevention and minimizing escalation of force incidents through combat, civilian, and multinational identification measures.
- Developing rapid and efficient personnel recovery techniques and drills.
- Clear OPSEC procedures that account for the close proximity of civilians, nongovernmental organizations, and contractors.
- Disciplined information management techniques to preserve access to computer networks.
- Containment of toxic chemicals and materials present in the civilian environment.
- Survivability requirements for static facilities, positions, or outposts.

5-39. Commanders implement appropriate security measures to protect the force. Establishment of checkpoints, effective base camp security procedures, and aggressive patrolling are examples of protecting the force. Protecting the force requires special consideration in stability environments. This is because threats may be different and, in some cases, opposing forces seek to kill or wound U.S. forces and allies, or destroy or damage property.

5-40. Commanders always consider the aspects of security and how they relate to the ROE. Some examples of protective measures are as follows:

- Secure the inside perimeter following the HN to secure the outside perimeter.
- Avoid predictability by changing routines.
- Include security in each plan, SOP, OPORD, and movement order.
- Develop specific security programs such as threat awareness and OPSEC.
- Restrict access of unassigned personnel (verified through biometric identify data) to the unit's location.
- Constantly maintain an image of professionalism and readiness.
- Base the degree of security established on a continuous threat assessment.

SECTION III – ADDITIONAL TASKS

5-41. During operations focused on stability tasks, military forces provide support to facilitate the execution of tasks for which the HN is normally responsible. Typically, these tasks have a security component ideally performed by military forces. However, military forces sometimes provide logistic, medical, or administrative support to enable the success of civilian agencies and organizations. Tasks that the SBCT weapons troop performs in stability tasks generally falls into one of three categories. The following represents the collective effort associated with a stability mission:

- Tasks for which military forces retain primary responsibility.
- Tasks for which civilian agencies or organizations likely retain responsibility, but military forces are prepared to execute.
- Tasks for which civilian agencies or organizations retain primary responsibility.

AREA SECURITY

5-42. Area security preserves the commander's ability to help establish political, legal, social, and economic institutions while supporting the transition to legitimate HN governance. When conducting an area security mission, the SBCT weapons troop prevents threat elements from causing instability in otherwise safe and secure environments.

5-43. The commander may direct his subordinate platoons as part of a combined arms team to employ a variety of techniques such as OPs, traffic control posts, BPs, ambushes, patrols, searches and combat outposts to accomplish this security mission. A reserve or quick reaction force enables the commander to react to unforeseen contingencies. Using the assigned UAS and the information collection capability available to the task force, the SBCT weapons troop can execute missions proactively with greater precision. (See chapter 2, section II, of this publication for more information on area security.)

SECURITY FORCE ASSISTANCE

5-44. Security force assistance is the unified action to generate, employ, and sustain local, HN, or regional security forces in support of a legitimate authority. It is integral to successful operations focused on stability and extends to all security forces. Forces are developed to operate across the range of military operations—combating internal threats such as insurgency, subversion, and lawlessness; defending against external threats; or serving as multinational partners in other areas. Security force assistance at the SBCT weapons troop may conduct the following: advice, teach/coach, mentor, and augment foreign security forces (FSF) or relevant supporting institutions. (Refer to FM 3-22 for more information.)

ADVISE

5-45. Advisors sent to elements below battalion level help foreign counterparts analyze the mission and commander's intent from higher headquarters. They assist FSF leaders restate the mission, conduct an initial risk assessment, identify a tentative decisive point, and define their own intent. They assist their foreign counterparts to analyze the mission variables. From these variables, advisors help their foreign counterparts to develop a COA that meets the higher headquarters concept of operations and commander's intent. Finally, they advise and assist in the conduct of operations and the flow of information to the FSF higher commander.

TEACH/COACH

5-46. Teaching and coaching includes training and education. Methods of teaching may include classroom lectures, seminars, hands-on training, training exercises, and simulations. The commander of the advising unit begins with a training assessment of training plans designed during predeployment and passed on from the preceding U.S. units conducted in coordination with the FSF commander. This assessment is important to evaluate the FSF and establish and enhance the working relationship between U.S. and FSF. The training assessment should cover all aspects of leadership, training, and sustainment.

5-47. Coaching relies on guiding to bring out and enhance capabilities already present. Coaching refers to the function of helping someone through a set of tasks. The coach helps them understand their established level of performance and instructs them how to reach the next level of knowledge and skill. Coaching requires identifying short- and long-term goals and devising a plan to achieve those goals. The coach and the person being coached discuss strengths, weaknesses, and a COA to sustain strengths or improve their weaknesses.

MENTOR

5-48. Mentorship is a combination of teach, coach and advise. The SBCT weapons troop demonstrates, at all times, what they have taught, coached, and advised to the FSF. Mentors should be aware of the foreign unit's experience and capabilities and carefully choose opportunities to inject or impart knowledge. Foreign units are most receptive to mentors that teach unobtrusively.

AUGMENT

5-49. Augmenting is an arrangement where FSFs and U.S. units exchange or combine with one another. Augmentation improves the interdependence and interoperability of U.S. and foreign security forces. Augmentation can occur at many levels and in many different forms. For example, a MGS section can

augment a HN Army Infantry motorized platoon for an operation. Additionally the SBCT weapons troop can be augmented with a HN platoon, or a FSF battalion can be augmented with the weapons troop. Similarly, augmentation can be of short duration for a specific mission or of a longer duration for an enduring operation.

SECTION IV – TRANSITIONS

5-50. Transitions mark a change between phases or between the ongoing set of tasks and execution of a branch or sequel. Shifting priorities between the elements of decisive action—such as from the offense to operations focused on stability tasks—involves a transition. Transitions require planning and preparation well before their execution to maintain the momentum and tempo. The force can be vulnerable during transitions, and commanders establish clear conditions for their execution. Transitions may create unexpected opportunities. They may make forces vulnerable to enemy threats.

TRANSITION TO THE OFFENSE

5-51. During an operation focused on stability tasks there may be instances where units quickly transition back to operations focused on offensive tasks against irregular forces or defensive tasks to defeat counterattacks. To facilitate the transition, commanders consider an offensive contingency while conducting operation focused on stability tasks. They consider how to generate combat power quickly to take the initiative. It can come from organic, partnered, joint and HN forces depending on the situation.

TRANSITION TO THE DEFENSE

5-52. Commanders ensure that transitions from defensive tasks to stability tasks and vice versa are planned. For example, it may be tactically wise for commanders to plan a defensive contingency if there is a significant global, national, or regional event that negatively affects the AO. Transitioning to a defense should not negate the progress made during stability tasks. It should be a temporary change made until the initiative can be regained or until the HN can assume responsibility.

5-53. The conditions for transitioning from stability to a retrograde normally occur during transformation or fostering stability phases. This is most likely when an intended political outcome is aimed at the influence of the military's and security forces presence. The SBCT weapons troop will most likely support a withdrawal or a retirement as part of a larger force. Most likely it will provide security as personnel, equipment, and property and moved out of the HN. Property accountability will require the coordination and clarification for items on various property books and supply chain issues.

TRANSFER OF AUTHORITY

5-54. Stability tasks include transitions of authority and control between military forces, civilian agencies and organizations, and the HN. Each transition involves inherent risk. Transitions are identified as decisive points on lines of effort. They typically mark a significant shift in effort and signify the gradual return to civilian oversight and control of the HN.

5-55. Often during stability missions' relief in place (RIP) or transfer of authority (TOA) occurs. Besides the normal responsibilities of a relief, commanders deal with civilians or multinational partners. During stability tasks, units generally know whether they will be relieved at the end of their tour. Planning for the TOA begins as soon as the unit occupies the AO.

5-56. Before the TOA, the departing unit develops a continuity book with the necessary information and intelligence on the AO. The book should include lessons learned, details about the populace, village, routes, and patrol reports, updated maps, and photographs; anything that helps newcomers master the SBCT weapons troop OE. SBCT units should be familiar with their incoming counterparts particularly if it is a different organization that could include Armored Infantry or other foreign or North Atlantic Treaty Organization (NATO) units. Clear articulation of unit organization skills and OE will help the incoming unit identify needs and gaps distinguishing between the different units. Commanders should ensure that these continuity books are updated during the unit's tour of duty. This extensive effort reduces casualties and increase the established and succeeding units' efficiency and knowledge of operations.

5-57. A consistent theme from recent operations is the importance of one on one transition training with incoming Soldiers during TOA. A detailed and programmed TOA allows Soldiers to learn the culture and effectively work with HN personnel during the deployment. Typical training during the relief includes the following:

- Use of AO unique equipment not available before TOA.
- Enemy TTP for IEDs.
- Personal meetings with nongovernmental organizations, contractors, interpreters, informants, and local police that operate in the unit AO.
- Negotiation techniques with local tribal, religious, and government officials.
- Operations and intelligence handover of databases, plans, products, and briefings.
- Information collection procedures, processes, and policies.

TRANSITION TO CIVILIAN/HOST NATION SECURITY FORCE CONTROL

5-58. During long-term security force assistance, conditions on the ground, not time, determine the transfer of authority from U.S. forces control or partnership, to host-nation control. The overall authority for the handoff and the subsequent transfer of authority lies with the commander ordering the change. The authority for determining the handoff process lies with the incoming commander assuming responsibility for the mission. This changeover process may affect conditions under which the mission will continue. (Refer to FM 3-07, ATP 3-07.10/MCRP 3-33.8A/NTTP 3-07.5/AFTTP 3-2.76, and FM 3-22 for more information.)

5-59. Changes in the OE such as increased attacks, significant destabilization with the infrastructure or people, culturally impacting events inside or outside the OE or development of security forces may require reshaping force packages as situations change. Internal administrative concerns might prompt or support the commander's decision to rotate units. Mission handoff is necessary and defined as the process of passing an ongoing mission from one unit to another with no discernible loss of continuity.

5-60. Commanders make specific considerations along with METT-TC when making a handoff to a multinational force. For units relieved of a function by a government agency, procedures typically entail longer handoff times and more complex coordination. Outgoing units that have past, present, or future projects planned with agencies prepare to transfer these projects to responsible agents in the incoming unit.

Chapter 6
Sustainment

Sustainment is the provision of the logistics, personnel services, and health service support necessary to maintain operations until successful mission completion (ADP 4-0). In the SBCT weapons troop, the commander has the ultimate responsibility for sustainment. The XO and the 1SG are the troop's primary sustainment operators; they work closely with the staffs from the SBCT, task force, and BSB to ensure they receive the required support for the troop's assigned operations.

SECTION I – SUSTAINMENT FUNCTIONS

6-1. The *sustainment warfighting function* is the related tasks and systems that provide support and services to ensure freedom of action, extend operational reach, and prolong endurance (ADRP 3-0). The sustainment warfighting function includes the following tasks:

- Conduct logistics.
- Provide personnel services.
- Provide health service support.

6-2. The SBCT weapons troop plans, prepares, and executes its portion of the task force sustainment plan. Concurrent with other operational planning, the troop develops its sustainment plan during the mission analysis and refines it in the war-gaming portion of the troop-leading process. Rehearsals are normally conducted at both battalion and company levels to ensure the weapons troop receives a smooth, continuous flow of materiel and services.

6-3. For the SBCT one of the primary limiting factors for task organizing the weapons troop is the feasibility of long term sustainment. Distribution of fuel, platform specific ammunition, vehicle recovery, and the number of mechanics available within the supporting forward support company present challenges to sustaining the weapons troop when dispersed for extended periods of time. These factors create an inverse relationship between the tactical flexibility achieved by dispersing without considering the ability to sustain them (see figure 6-1 on page 6-2).

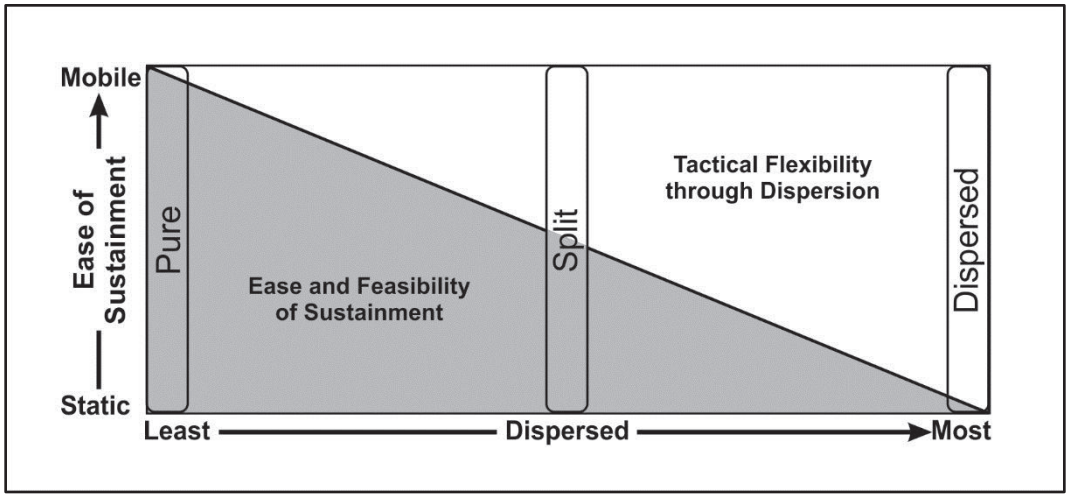


Figure 6-1. Dispersion of the weapons troop

6-4. The SBCT weapons troop basic sustainment responsibilities are to report or request support requirements through the correct channels. These channels may be difficult to determine and direct coordination must be made from the Weapons troop leadership to the supported units of the SBCT weapons troop. A forward support companies and from the BSB must be task organized to support the anticipated logistical requirements of the weapons troop operating throughout the SBCT's area of operation. The XO and 1SG manage sustainment requirement and logistical coordination with guidance and oversight provided by the commander. At the company troop, and battery level the sustainment assets include two family of medium tactical vehicles with trailers and one attached MEV with an ambulance squad from the medical platoon. They require accurate personnel and logistical reports, along with other necessary information and requests to sustain the organization.

CONDUCT LOGISTICS

6-5. *Logistics* is planning and executing the movement and support of forces (ADRP 4-0). For the SBCT weapons troop, logistics may involve aspects of supply, field services, maintenance, transportation, distribution, operational contract support, and general engineering support.

SUPPLY AND FIELD SERVICES

6-6. The general classes of resupply operations are routine, emergency, or prestock. The troop's SOP specifies cues and procedures for each method resupply. The SBCT weapons troops elements carries 72 hours of supply on hand for offense, defense, and stability tasks. The actual method selected for resupply in the field depends on METT-TC factors and is according to the need to replenish a 72 hours of supplies. This allows the subordinate units to carry enough supply to operate for extended periods of time but not inhibit offense, defense, and stability tasks.

6-7. Supplies are divided into 10 major categories, which are referred to as classes—

- Class I, Food, rations, and water.
- Class II, Clothing.
- Class III, Petroleum, oil, and lubricants.
- Class IV, Fortification and barrier materials.
- Class V, Ammunition.
- Class VI, Personal items.
- Class VII, Major end items.
- Class VIII, Medical supplies.
- Class IX, Repair parts.

- Class X, Materiel to support nonmilitary program.

Note. There are a few items that do not fit into any of the 10 supply classes, they are categorized as miscellaneous.

MAINTENANCE

6-8. The nature of the modern battlefield demands maintenance system that is flexible, responsive, and focused on returning systems to operational status quickly and as near as possible to the point of failure or damage. This requirement implies a forward thrust of maintenance into the SBCT area. Maintenance assets move as far forward as the tactical situation permits to return inoperable and damaged equipment to the battle as quickly as possible.

6-9. The 91S mechanics with specific knowledge of the ATGM and MGS may reside within the FSC's associated with other SBCT task forces due to unforeseen METT-TC conditions. This presents a problem when the SBCT weapons troop is task organized. A technique to ensure their distribution is to assign them to the headquarters section of the SBCT weapons troop. When they are task organized the SBCT weapons troop 1SG can ensure they are linked up with the proper number, equipment, and gaining element to ensure their scheme of support.

6-10. The FSC assigned to the supporting task force has a combat field maintenance section and a maintenance control section. The field maintenance sections perform repairs as far forward as possible, returning equipment to the battle quickly. During combat, they perform battle damage assessment and repair (BDAR), diagnostics, and on-system replacement of line replaceable units. If the tactical situation permits, they focus on completing jobs on site. Field maintenance sections carry limited on board combat spares to facilitate repairs forward. Examples include repair and component replacement on tactical wheeled vehicles, power generation equipment, and weapon systems.

6-11. Sustainment maintenance is off-system component repair and end item repair and return or both to the supply system or by exception to the owning unit, performed by national level maintenance providers. The intent of sustainment maintenance is to perform off-system repairs on all supported items to a standard that provides a consistent and measurable level of reliability.

TRANSPORTATION AND DISTRIBUTION

6-12. The BSB distribution company and FSCs have transportation capability and are used to distribute supplies within the SBCT. The transportation platoon within the distribution company transports supplies to the FSCs. The transportation platoon headquarters provides leadership, supervision and technical guidance to tactical truck squads performing motor transport operations to SBCT units. The transportation platoon executes missions when ordered by the company or BSB. The FSC distribution section has transportation assets to distribute supplies to the supported SBCT task force. This element must be prepared to carry the additional ammunition weight and capacity requirements when supporting units with elements of the SBCT weapons troop. (Refer to ATP 4-11 for more information.)

OPERATIONAL CONTRACT SUPPORT

6-13. Operational contract support (OCS) is the integration of commercial sector support into military operations. OCS provides for economy which is a principle of sustainment that provides sustainment resources in an efficient manner that enables the commander to employ all assets to the greatest effect possible. Economy in Stryker Troop sustainment operations may be achieved by contracting for support resources that reduce or eliminate the use of limited military resources. (See ADRP 4-0 and ATP 4-10 for more information regarding the integration of OCS.)

GENERAL ENGINEERING SUPPORT

6-14. General engineering provides support that enables logistics. Engineers units from outside the SBCT combine and apply capabilities from three engineer disciplines (combat, general, and geospatial engineering) to establish and maintain the infrastructure necessary for sustaining military operations. This involves general engineering tasks that consist of building, repairing, and maintaining roads, bridges, airfields, port facilities,

and other structures as well as reinforcing force protection measures. Other tasks also include the planning, acquisition, management, remediation and disposition of real estate, supplying mobile electric power, utilities and waste management, environmental support, diving and firefighting (see ATP 3-34.40).

PROVIDE PERSONNEL SERVICES

6-15. Personnel services are sustainment functions that man and fund the force, maintain Soldier and Family readiness, promote the moral and ethical values of the nation, and enable the fighting qualities of the Army (ADRP 4-0). It includes essential personnel services such as evaluations, leaves and passes, awards and decorations, rest and recuperation, postal, personnel accountability, casualty operations, personnel management and band support. Personnel services include the following functions and are provided by the battalion's personnel staff officer (S-1), the unit ministry team, and the SBCT's brigade legal section.

- Human resources. (Refer to FM 1-0.)
- Financial management (S-8 coordination). (Refer to FM 1-06.)
- Legal support. (Refer to FM 1-04.)
- Religious support. (Refer to FM 1-05.)

6-16. The SBCT S-8 also provides the following:

- Identify, certify, and manage funds available for immediate expenses.
- Integrate all financial management requirements into operational planning.
- Utilize staff, commanders, training calendar, fiscal triad, and analysis of total cost to develop funding requirements and submit requirements to the higher headquarters.
- Receive, develop, and disseminate financial management guidance at the brigade level.
- Monitor and report status of funding.
- Submit and monitor the status of requirements packets/spend plans to the appropriate board.
- Coordinate contracting and financial management disbursing support for field ordering officers and pay agents.
- Manage the Single Charge Card Solution.
- Serve as the coordinator for the brigade's Manager's Internal Control Program.
- Monitor execution of the SBCTs contract expenditures.

HUMAN RESOURCES SUPPORT

6-17. Human resources support all functions that affect the Soldier's status, readiness, and welfare. It includes essential personnel services such as evaluations, leaves and passes, awards and decorations, rest and recuperation, postal, personnel accountability, casualty operations, and personnel information management.

POSTAL SERVICES

6-18. The battalion mail clerk receives and distributes Soldier mail to the troop mail clerk, usually the supply sergeant, who delivers it to the 1SG, PSGs, or to the Soldier. All outgoing and returned mail is given to the supply sergeant or 1SG during resupply, and is turned over to the S-1 section when the LOGPAC returns to the field trains.

PERSONNEL MANAGEMENT/STRENGTH REPORTING

6-19. Personnel accounting is the process of recording by-name data on Soldiers when they arrive, depart, change duty location, or change duty status. Strength reporting is the numerical end product of the by-name accounting process. 1SGs are critical participants in this process. They need to be sensitive to the accuracy and timeliness of all personnel accounting reports. They should pay special attention to Soldiers who have changed status in the medical treatment process and task organization changes when they submit their reports.

CASUALTY OPERATIONS

6-20. Casualty operations include production, dissemination, coordination, validation, and synchronization of information regarding each casualty. This information includes casualty reporting, casualty notification,

casualty assistance, line-of-duty determination, status in the medical treatment process, disposition of remains, and disposition of personal effects, military burial honors, and casualty mail coordination.

Unit Reporting

6-21. As casualties occur, the nearest observer informs the company 1SG via the most expedient method available (for example free text within JCR/BFT, FM voice). The 1SG submits a personnel status report to the task force S-1 section. This report documents duty status changes on all casualties. Casualties are taken to the CCP for evacuation, and integration into the medical treatment system. The 1SG ensures completed DA Form 1156 (*Casualty Feeder Card*) is forwarded to the task force S-1.

6-22. Commanders and their 1SGs need to establish procedures to ensure that the Soldier's next of kin are notified properly and according to procedure. The potential for unofficial communications that exist with killed in action operations also exist in casualty operations. That is, the use of cell phones and computers near the AO enables many Soldiers to contact his home station regarding the casualty—such communication is unofficial and unacceptable. The next of kin for Soldiers wounded or killed in action should not receive notification through unofficial means. There is usually a communication blackout until the next of kin is notified. No internet or phone calls home are permitted.

Medical/Personnel Accounting

6-23. When a Soldier becomes a casualty, the first responder (combat lifesaver, buddy aid), combat medic or emergency care sergeant records the medical treatment the Soldier receives on the Soldier's DD Form 1380 (*Tactical Combat Casualty Care (TCCC) Card*). The battalion aid station and brigade support medical company (BSMC) read the Soldier's DD Form 1380 when they treat the Soldier. The SBCT task force S-1 should electronically receive a notification message to update the Soldier's patient tracking status. In turn, this message should be forwarded to the troop. This way, a casualty's location can be determined and Soldiers properly accounted for by the troop.

DEVELOPMENT OF THE TROOP SUSTAINMENT PLAN

6-24. Sustainment planning is fully integrated into all operational planning, with the concept of sustainment support synchronized with the concept of operations. Planning is continuous and ongoing. Key sustainment planners are the XO, the 1SG, and the supply NCO who actively need to participate in the planning process. The troop SOP should be the basis for sustainment operations, with planning conducted to determine specific requirements and to prepare for contingencies. Company orders should address specific operation support matters. Deviations from the sustainment SOP should be covered early in the planning process. In some situations, sustainment planning begins before receipt of the mission, as part of the ongoing process of refining the sustainment estimate. Sustainment planners need to understand the mission statement, commander's intent, and concept of operations to provide effective support.

6-25. The SBCT weapons troop commander develops his sustainment plan by first determining exactly what supplies he has on hand and then estimating his support requirements. This accomplished through the use of a logistics status reporting technique developed by the troop commander/XO/1SG. If equipped with JCR/BFT, the commander can review his commander's track item list and verify his supply status. He uses available information from his mission analysis and from war-gaming to aid his sustainment plan development. This process is important not only in confirming the validity of the sustainment plan but also in ensuring that the company's support requests are submitted early.

6-26. The commander can formulate his sustainment execution plan and submit support requests based on the results of his troop leading procedures. The sustainment plan should answer a variety of operational questions, such as—

- Based on the nature of the operation and specific tactical factors, what types of support will the SBCT weapons troops elements need? Who can provide oversight?
- In which quantities will this support be required and where? The discussion should answer the following questions:
  - Will emergency resupply be required during the operation?
  - Does this operation require prestock supplies?

- What are the composition, disposition, and capabilities of the expected enemy and how will this affect sustainment during the operation? The discussion should answer the following questions:
  - Where and when will the expected contact occur?
  - What ammunition will most likely be used to engage the enemy?
  - Based on the nature and location of expected contact, what are the SBCT weapon's troop expected casualties and vehicle losses?
  - What impact will the enemy's special weapons capabilities (such as anti-armor) have on the operation and on expected sustainment requirements?
  - How many EPWs/detainees are expected and where?
- How will terrain and weather affect sustainment operations during the operation? The discussion should answer the following questions:
  - What ground will provide optimum security for the trains?
  - What ground will provide optimum security for maintenance and CCPs?
  - What are the SBCT weapons troop MEDEVAC LZs and CASEVAC routes?
  - What are the "dirty" routes for evacuation of contaminated personnel, vehicles, and equipment?
- When and where will the SBCT weapons troops elements need sustainment? The discussion should answer the following questions:
  - Based on the task organization and location of weapons troop elements, which sites are the best for the maintenance collection points?
  - Based on the nature and location of expected contact, which sites are the best for the CCPs? Where will the EPWs/detainees collection points be located?
  - Which logistics release point (LRPs) will be active during the operation? When will they be active?
- What are the criteria and triggers for the movement of the troop trains?
- What are the support priorities (by element and type of support)? The discussion should answer the following questions:
  - Does each platoon have a pathfinder qualified person to establish a hasty LZ for MEDEVAC?
  - Where can I place the MEV to medically evacuate the most casualties with minimal impact on combat power?
  - Which platoon has priority for emergency class III resupply?
  - Which platoon has priority for emergency class V resupply?
  - Should the FMTV be loaded with the emergency supplies or should it be empty in case of mass casualty or EPW transportation?
- Will there be lulls in the operation that will permit support elements to conduct resupply operations in relative safety? If no lulls are expected, how can the SBCT weapons troop best minimize the danger to the sustainment vehicles?
- Based on information developed during the sustainment planning process, which resupply technique should be used?

SECTION II – SUSTAINMENT RESPONSIBILITIES AND SUPPORTING UNITS

6-27. The discussion below is an expansion of the duties, responsibilities, and units described in chapter 1 of this publication.

EXECUTIVE OFFICER

6-28. The XO is the SBCT weapons troop primary sustainment planner and coordinator, reporting directly to the commander. During preparations for the operation, he works closely with the 1SG to determine specific support requirements of the tactical plan. He then ensures that proper arrangements are made to provide those support requirements. The XO also performs these logistical functions:

- Determines the location of the troop's resupply point based on data developed during operational planning.
- Compiles DA Form 5988-E (*Equipment Maintenance and Inspection Worksheet*)/DA Form 2404 (*Equipment Inspection and Maintenance Worksheet)*, available through the property book unit supply enhanced system from the platoon leaders, PSGs, and the 1SG and provides updates to the commander, as required.
- Along with the 1SG, ensures that the SBCT weapons troop executes sustainment operations according to the task force plan.
- Leads the SBCT weapons troop sustainment rehearsal in cooperation with the company 1SG.
- Assists the commander in developing sustainment priorities and guidance according to the location, task organization and command support relationship of elements of the SBCT weapons troop concept of support and enforces those priorities.
- Conducts close coordination with the task force battalion or brigade operations staff officer and S-4 for planning and resourcing company missions.
- Manages all of the weapons troop commander's property books.
- Integrates all sustainment attachments to the SBCT weapons troop tactical plan.

FIRST SERGEANT

6-29. The 1SG is the senior NCO and the most experienced Soldier in the troop. He is the commander's primary tactical advisor and the expert on individual and NCO skills. He assists the commander in planning, coordinating, and supervising all activities that support the unit mission. He operates where the commander directs or where his duties require him. His specific sustainment duties include the following:

- Executes and supervises routine operations. This includes enforcing the tactical standard operating procedure, planning and coordinating training, coordinating and reporting personnel and administrative actions, and supervising supply, maintenance, communications, field hygiene, and MEDEVAC operations.
- Supervises, inspects, or observes matters designated by the commander. (For example, he observes and reports on a portion of the company's AO or zone.)
- Establishes logistics status reporting procedures to include the supplies on which to report and the reporting times/schedule.
- Directs and supervises CASEVAC, ensuring medical assets remain flexible and responsive to tactical operations.
- Assists and coordinates with the XO and is prepared to assume the XO's duties.
- Leads task-organized elements or subunits on designated missions.
- Provides an SBCT weapons troop orientation for new personnel and, in consultation with the commander, assigns replacements to the troop's subordinate elements.
- Supervises evacuation of casualties, EPWs, detainees, and damaged equipment.
- Directs and supervises the collection, initial identification, and evacuation of human remains to the contingency fatality operations collection point.
- Maintains the SBCT weapons troop battle roster.

SUPPLY SERGEANT

6-30. The supply sergeant, or his supply clerk, is the SBCT weapons troop representative to the SBCT task force S-4. The supply sergeant performs the following logistical functions:

- Controls the supply trucks that are organic to the troop.
- Monitors the tactical situation and anticipates logistical requirements.
- Executes the logistics status reporting procedures established by the executive officer.
- Uses the task force administration/logistics radio network or their JCR/BFT net to communicate with the troop.
- Coordinates with the BSB for resupply of class I, II, III (package and bulk), V, VII, and IX.
- Maintains individual supply and clothing records, and requisitions class II resupply.

- Requisitions class IV and class VII equipment and supplies.
- Picks up replacement personnel and delivers them to the 1SG.
- Receives and evacuates human remains to the mortuary affairs collection point in the brigade support area (BSA).
- Transports, guards, or transfers EPWs and detainees.
- Guides the LOGPAC, along with EPWs, detainees, and damaged vehicles (if applicable), back to the BSA.
- Coordinates with the task force battalion S-1 section to turn in or pick up mail and personnel action documents.
- Collects bagged contaminated soil and transports it to collection points as part of LOGPAC procedures.
- Maintains and provides supplies for troop field sanitation activities.
- Manages commander's property book and prepares financial liability investigations of property loss.

TROOP COMBAT MEDICS

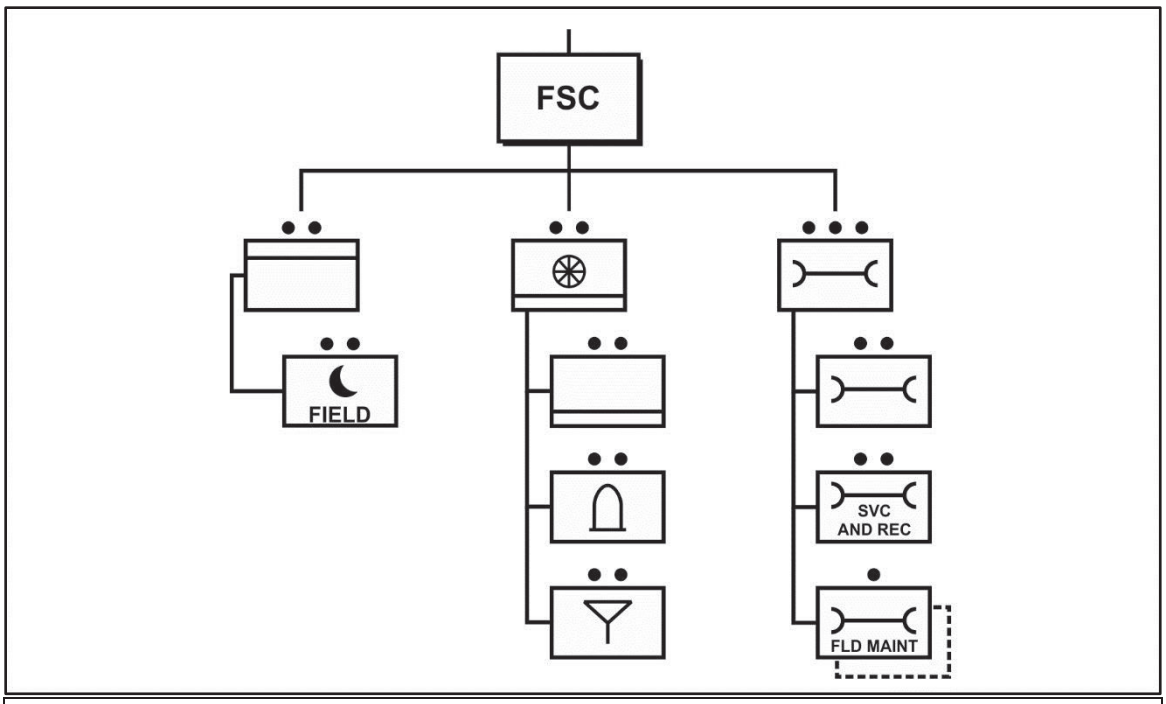
6-31. Combat medics are attached to the SBCT weapons troop. Combat medics are allocated to the SBCT weapons troop on the basis of one combat medic to a platoon, and one emergency care sergeant to the troop. They also come with an MEV. The location of the combat medic is of extreme importance for rapid medical treatment of casualties. The seating capacity in the ATGM and MGS vehicles, is limited. Medics do not typically operate with the platoons. CASEVAC with the MEV is coordinated through the troop 1SG.

6-32. The SBCT weapons troop combat medic usually locates with, or near, the 1SG or within the MEV. The troop emergency care sergeant collocates with the troop trains. When a casualty occurs, the combat life saver renders first aid, or first aid is provided through self-aid or buddy aid. The MEV and 1SG with emergency care sergeant then goes to the location of the casualty using tactical combat casualty care procedures in the combat OE. The CCP combat medic makes his assessment; administers initial medical care; initiates a DD Form 1380. (Refer to chapter 1, section III, of this publication for additional responsibilities of SBCT weapons troop combat medics.)

FORWARD SUPPORT COMPANY

6-33. The BSB of the SBCT has six organic FSCs that are task organized to support the battalions. The role of the FSC is to provide direct logistics support to the SBCT's battalions. The FSC provides the supported commander with dedicated logistics assets organized specifically to meet the battalion's requirements. The FSC provides field feeding, bulk fuel, general supply, ammunition, and field maintenance. The FSC commander assists the battalion S-4 with the battalion logistics planning and is responsible for executing the logistics plan following the BSB and supported battalion commanders' guidance. The FSC receives supplies and maintenance support for low density equipment from the BSB. The FSC is organized to support (See figure 6-2, page 6-8)—

- Food and water (class I).
- Fuel (class III).
- Ammunition (class V).
- Repair parts (class IX).
- Maintenance and recovery.
- Supply and distribution.



Legend: FLD MAINT = field maintenance, FSC = forward support company, REC = recovery, SVC = service.

Figure 6-2. Forward support company

6-34. The SBCT weapons troop receives its supply from the supporting FSC of the task force its elements are attached. The leadership of the SBCT weapons troop must ensure the associated FSC is informed and prepared to support those requirements.

SECTION III – CONDUCT LOGISTICS

6-35. There are few, if any, contingencies in which U.S. military forces have all the supplies they need for an operation. It is essential that every unit's daily logistical report accurately reflect not only its operational needs but also what supplies and equipment are on hand.

6-36. The general classes of resupply operations are routine, emergency, or prestock. The SBCT weapons troop SOP specifies cues and procedures for each method, which the troop rehearses during training exercises. The actual method selected for resupply in the field depends on METT-TC.

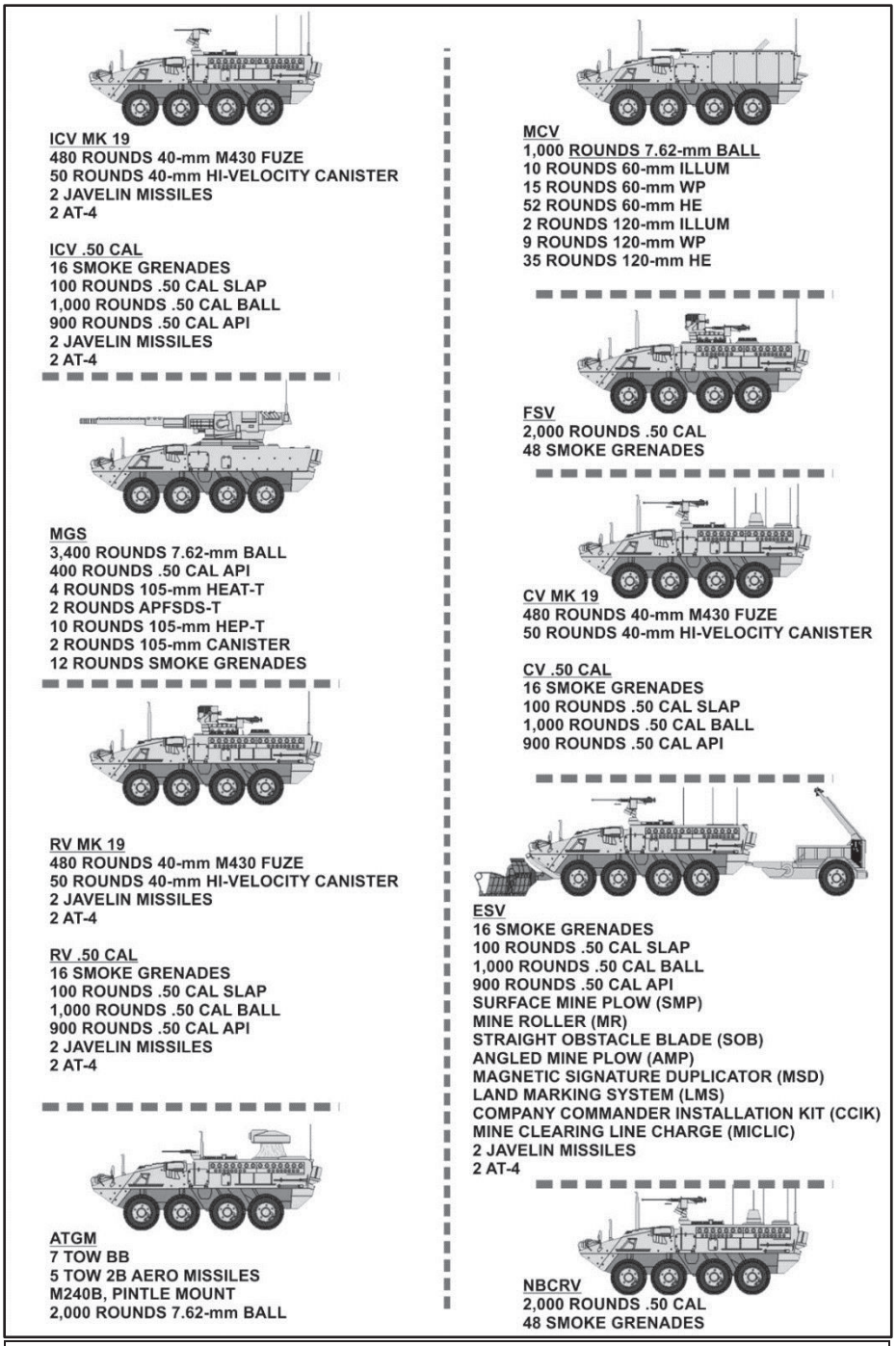
PLAN

6-37. Logistics planners adjust standardize sustainment packages, providing all units with sufficient quantities of each supply item in anticipation of their requirements. These adjusted packages are based on what supplies are reported on hand, consumed, and planned operations. Together with the commander's guidance for issuance of scarce, but heavily requested supply items, accurate reporting allows planners to quickly forecast supply constraints and then to submit requisitions to alleviate projected shortages. Inaccurate or incomplete reporting can severely handicap efforts to balance unit requirements and available supplies. As a result, some units may go into combat without enough supplies to accomplish their mission while others may have an excess of certain items.

6-38. The basic load includes supplies that the SBCT weapons troop keeps on its organic support vehicles for use in combat. The amount of time the SBCT weapons troop sustains itself in combat without resupply determines its quantity of supply items. The higher command or the SOP specifies the Class V basic load. (See table 6-1; figure 6-3, page 6-10; and figure 6-4, page 6-12.)

Table 6-1: Days of supply class I, III, and IV

	CLASS (CL) I	*CLASS III*	*CLASS IV*
Individual	9 x MRE (3 per day) 3 x gallons of water (1 gallon per day)	None	None
Crew 3	27 x MRE (2.25 cases) 9 x gallons of water plus 2 x 5 gallon cans	CL III (P) 53 gallon (full fuel tank) 2 x 5 gallon fuel cans CL III (B)	4 x rolls Concertina wire 6 x Picket
Crew 4	36 x MRE (34 cases) 12 x gallons of water plus 2 x 5 gallon cans	15w40 2 Quarts Dextron III 2 Quarts Mil 5606 2 Quarts 80w90 1 Quart Antifreeze 1 Quart	
MGS Platoon	108 x MRE (9 cases) 36 x gallon of water plus 8 x 5 gallon cans	CL III (P) \ 212 gallon (full fuel tanks) 8 x 5 gallon fuel cans	16 x rolls Concertina wire 24 x Pickets
ATGM Platoon	108 x MRE (9 cases) 36 x gallon of water plus 6 x 5 gallon cans	CL III (B) 15w40 2 gallons Dextron III 2 gallons Mil 5606 2 gallons 80w90 1 gallon Antifreeze 1 gallon	
Legend: ATGM = antitank guided missile, CL = class, MGS = mobile gun system, mil = military, MRE = meals ready to eat			



Legend: API = armor-piercing incendiary, APFSDS-T = armor-piercing fin-stabilized discarding sabot with tracer, ATGM = antitank guided missile, AT = antitank, cal = caliber, CV = combat vehicle, ESV = engineer support vehicle, FSV = fire support vehicle, HEAT-T = high-explosive antitank tracer, HEP-T = high-explosive plastic tracer, ICV = Infantry carrier vehicle, ILLUM = illumination, MCV = mobile construction vehicle, MGS = mobile gun system, mm = millimeter, NBCRV = nuclear, biological, chemical reconnaissance vehicle, RV = reconnaissance vehicle

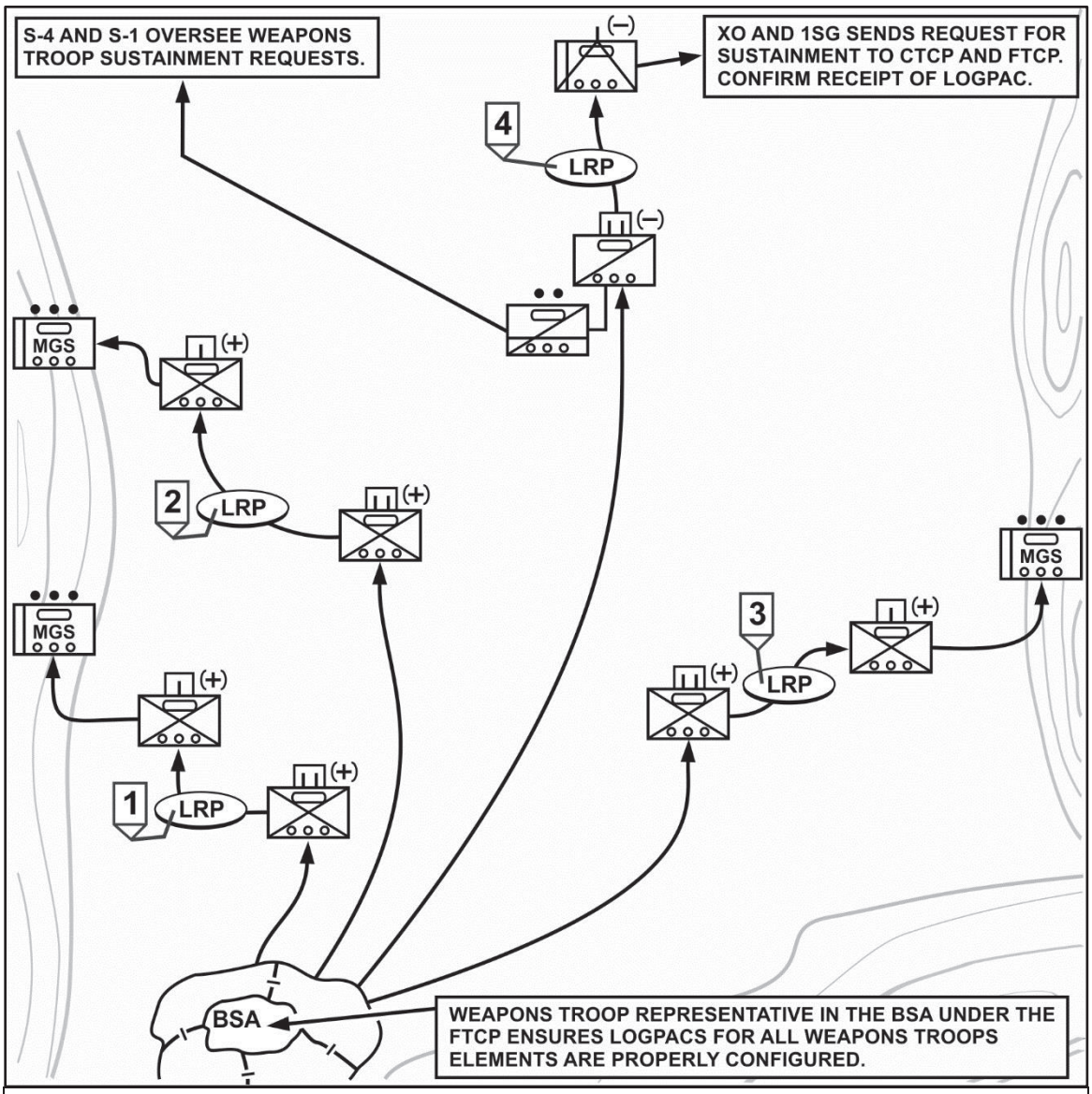
Figure 6-3. Stryker basic load

6-39. The SBCT's concept of support is depicted on figure 6-3, page 6-12. The FSC conducts replenishment for the task force and the method employed is based upon mission variables and the current tactical situation. The FSC distribution platoon leader leads the platoon, oversees LOGPAC operations and manages the distribution of supplies coming from or passing through the FSC in support of the task force. The distribution platoon can be task organized into task force and company/team support squads. The support squad provides all supplies for a supported task force employing company/teams in a widely dispersed geographic area. The platoon provides general supplies, fuel, and ammunition to the supported task force. Other items to be included in the replenishment are coordinated by the appropriate staff officer.

MOVEMENT AND RECEPTION OF THE LOGISTICS PACKAGE

6-40. Replenishment loads normally follow a sequence of movement from the BSA to the combat trains command post (CTCP); from the CTCP to the logistics release point (LRP); from the troop LRP to the troop trains; from the troop trains to the platoon and so forth to the individual level. The transportation and security requirements vary in logistics pull and logistics push. For logistics push the higher level echelon has the responsibility to resupply its subordinate units with its organic assets at their location. For logistics pull subordinate units have the responsibility to pick up their supplies from the higher echelon with their organic assets. (See figure 6-4, page 6-15.)

6-41. The method of replenishment within the SBCT weapons troop is determined by the command support relationship of its task organization. Replenishment of weapons troop elements may be conducted using either the supply point distribution or the unit distribution method. The method used must be described in the mission orders. The 1SG may send troop personnel and vehicles to a supply point designated by the FSC (supply point distribution) to be fed, to resupply, to turn in damaged equipment. This is often referred to as service station technique. It is normally used in assembly areas and when contact is not likely. It takes the least amount of time for the sustainers. Conversely, the 1SG may coordinate for supplies to be delivered to a troop or platoon location (unit distribution). The 1SG may use troop personnel and vehicles to go to each element to replenish them. Soldiers can remain in position when using this method. It is the most lengthy resupply method and may compromise friendly positions. This is often referred to as tailgate technique.



Legend: BSA = brigade support area, CTCP = combat trains command post, FTCP = field trains command post, 1SG = first sergeant, LOGPAC = logistics package, LRP = logistics release point, S-1 = battalion or brigade personnel staff officer, S-4 = battalion or brigade logistics staff officer, XO = executive officer

Figure 6-4. SBCT weapons troop logistics

PREPARE

6-42. Thorough briefings and comprehensive rehearsals are important keys to effective sustainment planning. These activities play a critical role in ensuring that the SBCT weapons troop can execute its sustainment plans efficiently. They allow the commander, his subordinate leaders, and each Soldier to discover potential problem areas and to develop contingency plans to avoid unforeseen difficulties.

6-43. The commander has several options for conducting sustainment rehearsals. One is to integrate the sustainment rehearsal into the unit's larger maneuver rehearsals. Another alternative is for the unit's sustainment operators to conduct a separate rehearsal. The SBCT weapons troop commander may direct the

XO and 1SG to rehearse sustainment operations with the troop PSGs, the task force maintenance team, and medical platoon for vehicle recovery, CASEVAC, or mass casualty. Explosive ordnance disposal (EOD) personnel are included when necessary by the mission.

ROUTINE RESUPPLY

6-44. Routine resupply operations cover items in classes I, II, III packaged and bulk, V, VII, and IX as well as provide opportunity to transport mail, Soldiers, and other items the SBCT weapons troop requests. When possible, the SBCT weapons troop should conduct routine resupply daily, ideally during periods of limited visibility. Routine resupply breaks should have standard configured packages for 24-, 48-, and 72-hours based on their operations they conduct in the offense, defense, or stability with considerations of the OE. Common to all packages are class I specifically water and food, and class III fuel. These are consumed at the highest rates and must be replenished constantly. ATGM and MGS variants consume more fuel than ICV variants due to their weight. Operation tempo for the weapons troop is also a factor. This unit relies on tactics for it the engage and move for survival which means it will consume more fuel.

LOGISTICS PACKAGE OPERATIONS

6-45. The LOGPAC technique is a simple, efficient way to accomplish routine resupply operations. The key feature is a centrally organized resupply convoy originating at the Field trains within the BSB. It carries all items needed to sustain the SBCT weapons troop for a specific period, usually 24 hours or until the next scheduled LOGPAC.

6-46. Normally, the first LOGPAC is configured during preparation phase of the supported task force operation in BSA. This LOGPAC is loaded and begins movement to the task force combat trains during the execution phase of the operation. The SBCT weapons troop commander must be aware that the LOGPAC is configured before their operation is completed. To resupply specific items through routine resupply can often take 24 to 36 hours from ordering to receiving, if the BSB has the item on hand. It will require more time if the BSB has to acquire from higher sustainment echelons.

6-47. The SBCT weapons troop supply sergeant first compiles and coordinates all of the troop's supply requests with the BSB. He obtains the following:

- Class I, class III (bulk and packaged products), and class V supplies from the BSB. This usually entails employment of one or two fuel HEMTT and one or two cargo HEMTTs.
- Class II, class IV (basic load resupply only), class VI, and class VII supplies from SBCT task force S-4.
- The battalion aid station receives support for Class VIII from the medical logistics elements located in the medical company, and headquarters and headquarters company of the brigade support battalion. The battalion aid station then pushes required class VIII to each of the forward company, troop, and batteries during LOGPAC.
- Routine class IX supplies and maintenance documents (as required) from the prescribed load list section in the BSB.
- Replacement personnel and Soldiers returning from a medical treatment facility.
- Vehicles returning to the SBCT weapons troop area from maintenance.
- Mail and personnel action documents (to include awards and finance and legal documents).

6-48. The supply sergeant oversees that all LOGPAC preparations are completed with all elements of the SBCT weapons troop that are bound to their destinations. He coordinates directly with other supply representatives in the BSA and the FSC transportation platoon leaders. He confirms receipt of the items in the LOGPAC through standardized reporting sent by the leaders of the SBCT weapons troop to the troop XO.

EXECUTE

6-49. The following paragraphs show the techniques the SBCT weapons troop uses to execute logistics.

ACTIONS AT THE LOGISTICS RELEASE POINT

6-50. When the 1SG or his representative arrives at the LRP to pick up the SBCT weapons troop LOGPAC, he updates all personnel and logistical reports. The 1SG briefs on changes to the tactical or support situation. He then escorts the convoy to the SBCT weapons troop resupply point, providing security during movement from the LRP.

Resupply Procedures

6-51. The time required for resupply is an important planning factor. Units need to conduct resupply quickly and efficiently to ensure operational effectiveness, and to allow the SBCT weapons troop LOGPAC to return to the LRP on time.

6-52. Once the unit completes resupply operations, the unit prepares the LOGPAC vehicles for the return trip. SBCT weapons troop vehicles requiring recovery for maintenance or salvage are lined up and prepared for towing. Cargo trucks, fuel trucks, or damaged vehicles transport those killed in action. EPWs and detainees ride in the cargo trucks, and are guarded by walking wounded or other company personnel. All supply requests, human resources actions, and outgoing mail are consolidated for forwarding to the field trains, where the appropriate staff section processes them for the next LOGPAC.

6-53. The 1SG or the supply sergeant leads the LOGPAC back to the LRP, where he links up with the BSB transportation platoon leader. When possible, the reunited task force LOGPAC convoy returns to the field trains together. When METT-TC dictates or when the LOGPAC arrives too late to rejoin the larger convoy, the SBCT weapons troop vehicles need to return to the field trains on their own. Because only minimal security assets are available, this situation should be avoided.

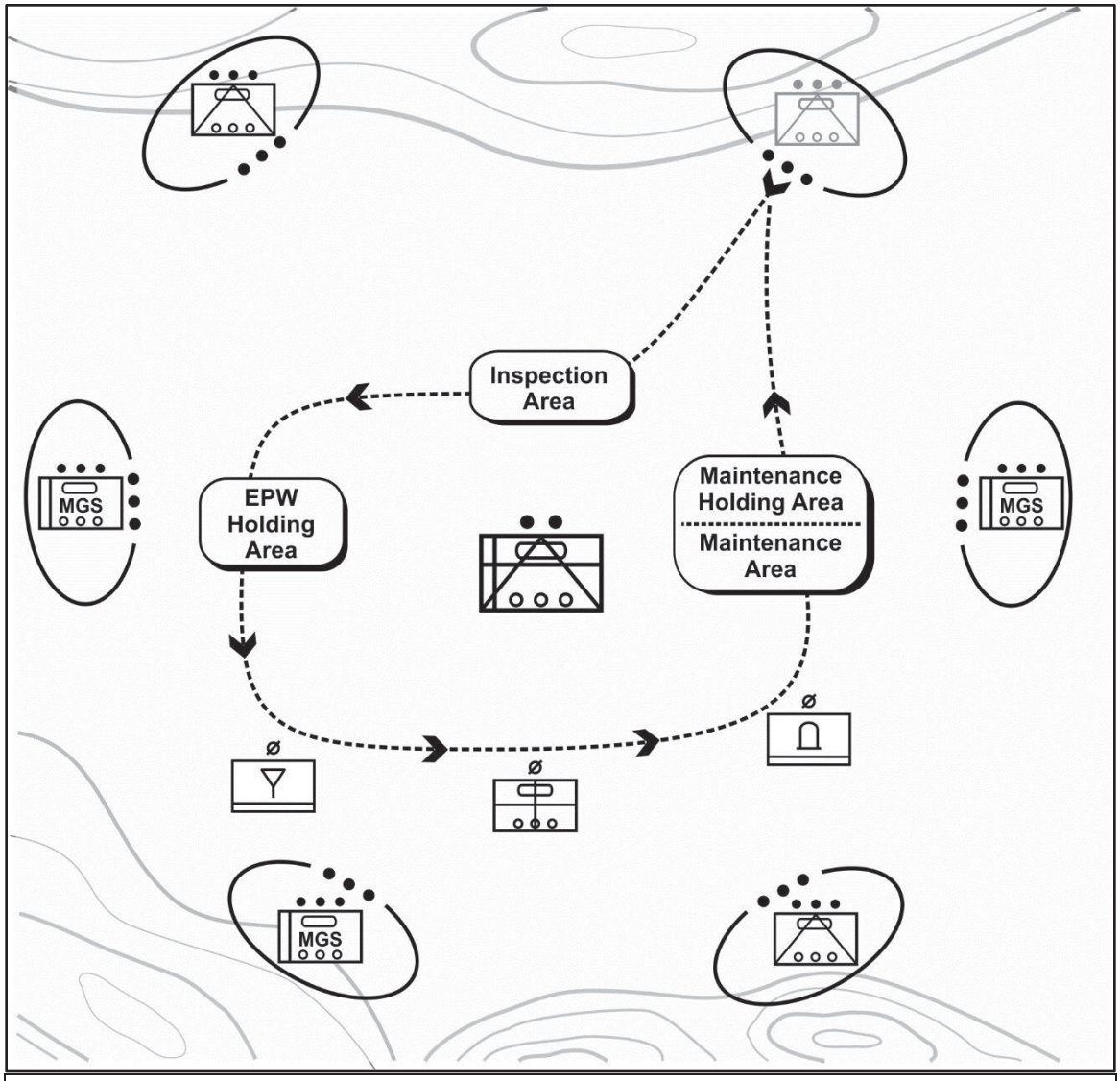
Resupply Methods

6-54. As directed by the commander or XO, the 1SG establishes the SBCT weapons troop resupply point using the service station method or the tailgate method. He briefs each LOGPAC driver on which method or methods to use. When the resupply point is ready, the 1SG informs the commander, who in turn directs each platoon or element to conduct resupply based on the tactical situation.

Service Station Resupply

6-55. With the service station method, vehicles move individually or in small groups to a centrally located resupply point. Depending on the tactical situation, one vehicle or section, or even an entire platoon, moves out of its position, conducts resupply operations, and then moves back into position. This process continues until the entire SBCT weapons troop has been resupplied. (See figure 6-5, page 6-16.)

6-56. When using this method, vehicles enter the resupply point following a one-way traffic flow; only vehicles requiring immediate maintenance stop at the maintenance holding area. Vehicles move through each supply location, with crews rotating individually to eat, pick up mail and sundries, and refill or exchange water cans. When all platoon vehicles and crews have completed resupply, they move to a holding area where, time permitting, the platoon leader and PSG conduct a PCI. The troop command group (commander, XO, and 1SG) can take this opportunity to conduct PCI of each platoon as they pass through the resupply point.

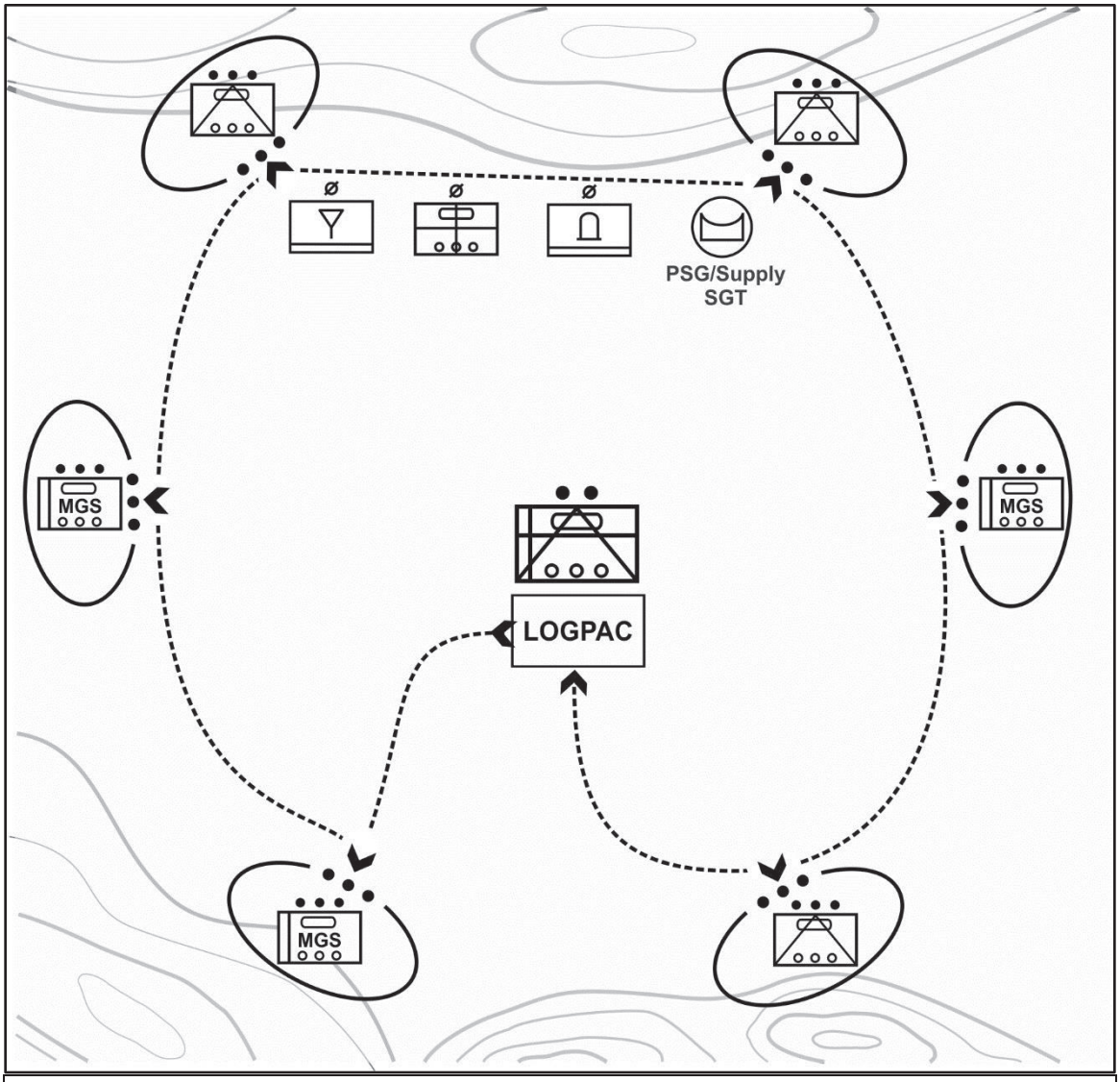


Legend: EPW = enemy prisoner of war, MGS = mobile gun system

Figure 6-5. Service station method

Tailgate Resupply

6-57. Tailgate resupply usually requires much more time than do service station operations. Usually, units use the tailgate method only when the tactical situation allows or dictates vehicles remain in their positions or back out a short distance to allow trucks carrying class III and class V supplies to reach them. Individual crewmen rotate through the feeding area, pick up mail and sundries, and fill or exchange water cans. Any EPWs and detainees are centralized and guarded. Soldiers and their personal effects are brought to the holding area, where the 1SG takes charge of them. (See figure 6-6, page 6-16.)



Legend: LOGPAC = logistics package, PSG = platoon sergeant, MGS = mobile gun system, SGT = sergeant

Figure 6-6. Tailgate resupply method

Combination of Service Station and Tailgate Resupply

6-58. The SBCT weapons troop may select to employ the tailgate resupply method, but selected platoons may have to use the service station resupply method. Selected platoon(s) may use the service station resupply method and some sections may have to use the tailgate resupply method.

Emergency Resupply

6-59. Occasionally (usually during combat operations), the SBCT weapons troop has such an urgent need for resupply that it cannot wait for a routine LOGPAC. Emergency resupply may involve classes III, V, and VIII, and CBRN equipment. On rare occasions, class I emergency resupply can be conducted using either the service station or tailgate method, although procedures may have to be adjusted when the SBCT weapons troop is in contact with the enemy. In the service station method, individual vehicles pull back during a lull in combat on order of the commander or platoon leader; they conduct resupply and then return to the fight. With tailgate resupply, the SBCT weapons troop brings limited supplies forward to the closest concealed

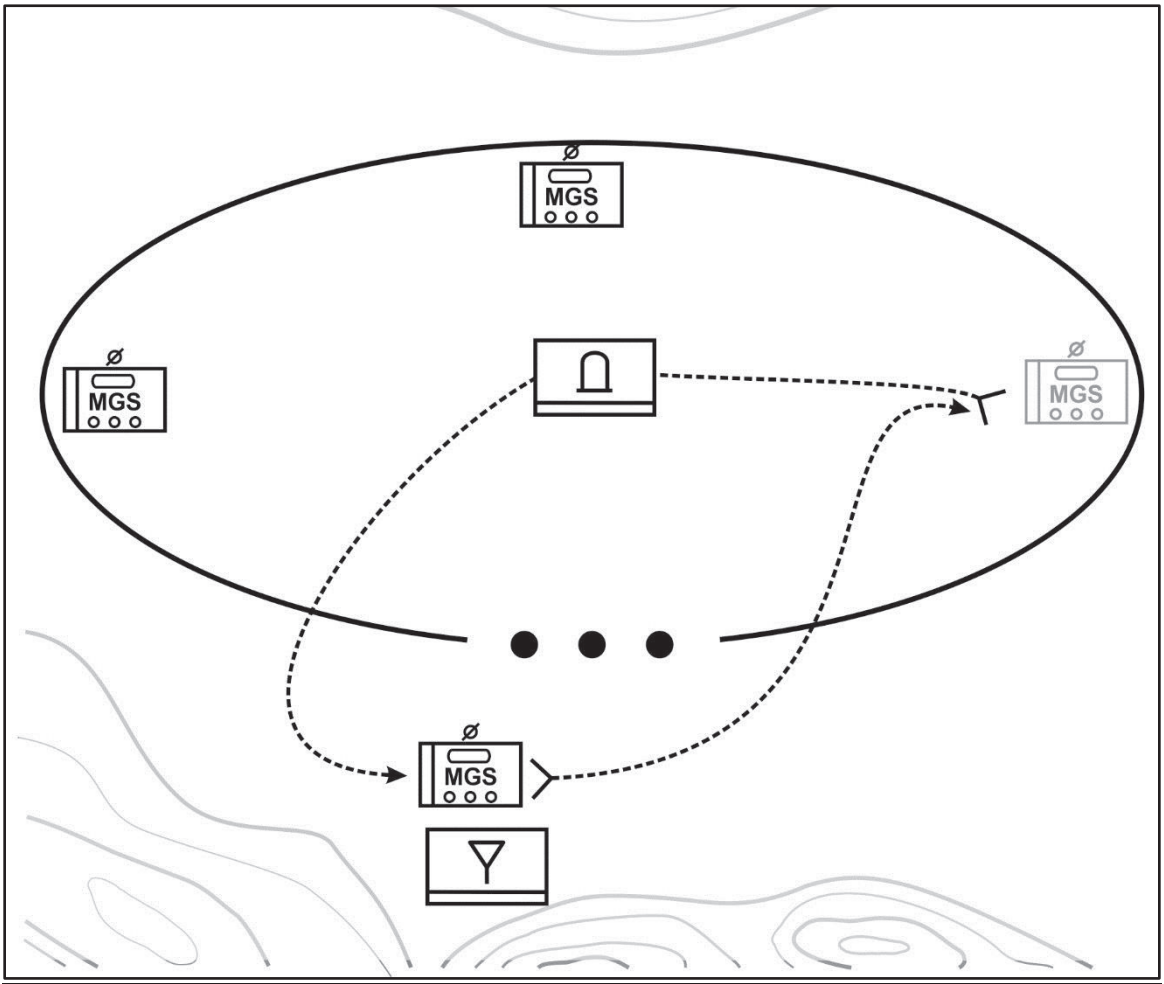
position behind each vehicle or element. In case of emergency, class VIII resupply is conducted in concert with the evacuation of casualties/patients or through the use of push packages.

PREPOSITIONED SUPPLIES

6-60. Prepositioning of supplies is most often required in defensive or stability tasks. Usually only class V items are prepositioned. Class III supplies can be prepositioned. However, this requires SBCT weapons troop vehicles to refuel before moving into fighting positions during initial occupation of the battle position. They may move out of their fighting positions to conduct refueling operations at the rear of the BP.

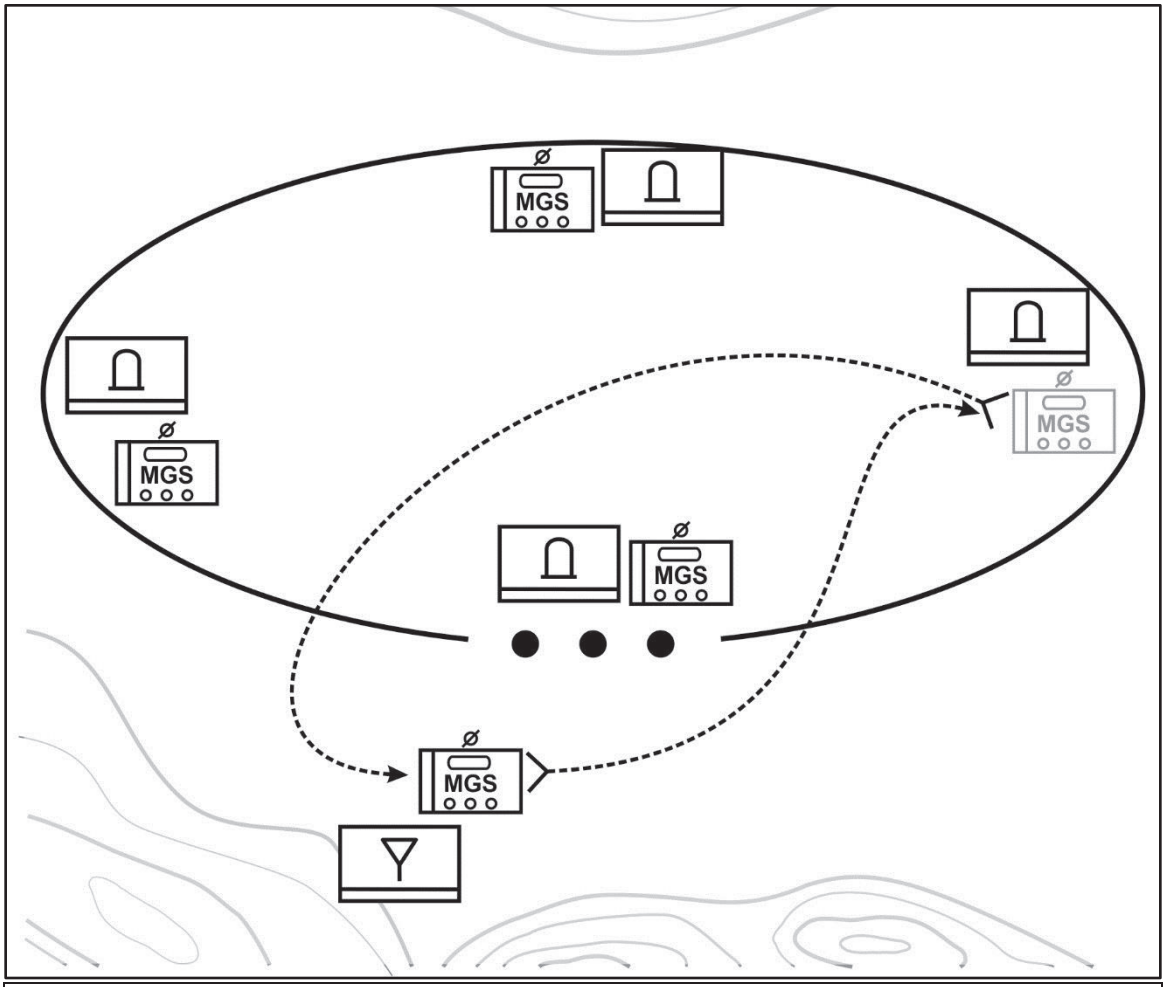
6-61. Leaders at every level carefully plan and execute prepositioning supplies. All leaders, down to vehicle commander and squad leader, know the exact locations of prestock sites, which they verify during reconnaissance or rehearsals. The SBCT weapons troop takes steps to ensure survivability of prestock supplies. These measures include digging in prestock positions and selecting covered and concealed positions. The weapons troop commander develops a plan to remove or destroy prepositioned supplies to prevent the enemy from capturing them. (See figure 6-7 and figure 6-8, page 6-18.)

6-62. During offensive tasks, leaders can employ mobile pre-positioning loading supplies on trucks and positioning them forward in the AO. This technique works well if the SBCT weapons troop expects to use a large volume of ammunition during a fast-moving operation.



Legend: MGS = mobile gun system

Figure 6-7. Prestock resupply operations—Method 1 (central class V prestock site)



Legend: MGS = mobile gun system

Figure 6-8. Prestock resupply operations—Method 2 (class V prestock site for each vehicle)

AERIAL DELIVERY

6-63. Aerial delivery can be used as a method of resupply (see chapter 6, section IV, of this publication for more information). The following should be considered:

- The use of aerial delivery requires the coordination of the SBCT task force staff and the brigade combat team (BCT) battalion or brigade operations staff officer, S-4, and air defense and airspace management//brigade aviation element (ADAM/BAE) sections. Special reemphasis is placed on the enemy air defense capability.
- All companies need to know how to select LZ/drop zone to receive aerial resupply. The delivered supplies are immediately transported away from the LZ/drop zone.
- Units should return the sling or air delivery equipment to its owning unit.

SECTION IV – MAINTENANCE AND VEHICLE RECOVERY

6-64. The maintenance of weapons, equipment, and the Stryker vehicle is continuous. Every Soldier needs to know how to maintain his weapon, equipment, and perform operator level maintenance on the Stryker vehicle according to the related technical manual. The commander, XO, and 1SG need to understand maintenance for every piece of equipment in the troop as well as the standard operating procedures within

the task force and SBCT. It is critical for the commander and XO to understand that maintenance support for the Stryker weapon systems is only available in the supporting FSC. There is no other source of maintenance for this weapon system. Maintenance planning must account for this and ensure that Stryker maintenance assets are properly allocated and echeloned.

LEVELS OF MAINTENANCE

6-65. The Army employs the field and sustainment levels of maintenance as described below.

FIELD MAINTENANCE

6-66. Field maintenance is on-system maintenance, repair and return to the user, including maintenance actions performed by operators. Field maintenance is often performed on or near the unserviceable piece of equipment or weapon system utilizing line replaceable units or modules and component replacement or repair. It is most often performed by the owning or support unit using tools and test equipment found in the unit. Field maintenance is not limited to simply remove and replace actions. Field maintenance allows for repair of components or end items on or near the system if the maintainers possess the requisite skills, proper tools, proper repair parts, references, and adequate time. Field maintenance also includes adjustment, alignment, service, applying approved field level modification work orders, fault/failure diagnoses, BDAR, and recovery. Field maintenance is always repair and return to the user and includes maintenance actions performed by operators.

SUSTAINMENT MAINTENANCE

6-67. The troop executive officer oversees sustainment maintenance of troop headquarters elements that include communications, CBRN, armorer, vehicle maintenance, and supply. He is responsible to ensure that replacement or defective parts for all equipment are conducted within Army standards. The 1SG oversees the Soldiers working within the troop headquarters to ensure that the Soldiers within the troop have the proper equipment and supplies to perform their tasks.

RECOVERY

6-68. Vehicle recovery must be planned as a contingency to an operation. The SBCT weapons troop commander must remain flexible with his maneuver plan to lessen the impact of an inoperative vehicle during the execution phase. The leaders of the troop should rehearse battle drills to speed in the recovery of the vehicle to continue operations. The Stryker vehicle has the advantage of self-recovery but occasionally requires a wrecker. For the weapons troop leaders should know that an MGS can only tow an MGS or ICV. An ATGM can tow an ATGM, an MGS, or an ICV.

6-69. The command support relationship determines who is responsible for providing the necessary assistance, assets, and support for vehicle recovery. The weapons troop command group must be aware of the support relationship and report through the chain of command it issues arise.

6-70. The techniques with Stryker vehicle recovery are to recover the vehicle to the rear or recover the vehicle forward during reorganization and consolidation. The decision is made by the mission commander on which technique to employ and based on METT-TC. Soldiers with the vehicle requiring recovery will either stay with the vehicle to assist in its repair or cross level equipment and personnel onto other vehicles and continue mission.

SECTION V – ARMY HEALTH SUPPORT SYSTEM

6-71. Army health system is a component of the military health system that is responsible for operational management of the health service support and force health protection missions for training, predeployment, deployment, and postdeployment operations. Army Health System includes all mission support services performed, provided, or arranged by the Army medical department to support health service support and force health protection requirements for the Army and as directed, for joint, intergovernmental agencies, coalition, and multinational forces. This system includes both force health protection and health service support.

6-72. Force health protection encompasses measures to promote, improve, conserve, or restore the mental or physical well-being of Soldiers. These measures enable a healthy and fit force, prevent injury and illness, and protect the force from health hazards. These measures include the prevention aspects of a number of Army medical department functions (preventive medicine, including medical surveillance and occupational health surveillance; veterinary services, including the food inspection and animal care missions, and the prevention of zoonotic disease transmissible to man; combat and operational stress control; dental services [preventive dentistry]; and laboratory services [area medical laboratory support]).

6-73. Health service support completes the Army health system. Health service support encompasses all support and services performed, provided, or arranged by the Army medical department to promote, improve, conserve, or restore the mental and physical well-being of personnel in the Army. Additionally, as directed, provide support in other services, agencies, and organizations. This includes casualty care (encompassing a number of Army medical department functions—organic and area medical support, hospitalization, and treatment aspects of dental care and behavioral/neuropsychiatric treatment, clinical laboratory services, and treatment chemical, biological, radiological, and nuclear patients), medical evacuation, and medical logistics. (Refer to FM 4-02 for more information.)

CASUALTY PROCEDURES

6-74. Casualties are an unfortunate part of combat. They can occur at any point during an operation and are contingency leaders must prepare for. Before moving a casualty it is important to know where the casualty needs to go, this may be determined by the severity of injuries, number of casualties, and availability of the medical treatment facility. Casualties vary in level of care and are treated at different facilities with various levels of capability. They are labeled as Roles 1 to 4. Army air and ground evacuation platforms provide connectivity to assure a seamless continuum of medical treatment (refer to ATP 4-02.2 for more information).

6-75. The SBCT weapons troop is responsible for planning and coordination for the quickest response to a casualty with minimal impact on the mission as possible. This may include coordination with adjacent units and their support. The platoon or element with the casualty is responsible to provide security, respond to the casualty, and notify the troop of the situation. The SBCT weapons troop is in a unique situation because the availability of a combat medic is very limited. They are not part of the crew for MGS and ATGM. The Commander and 1SG have to make a very detailed plan with specific criteria to escort combat medics to a casualty or require the MGS or ATGM platoon to move to them. A platoon will often be the security requirement to move a casualty to a casualty collection point.

6-76. The combat medic's assessment of the casualty determines the time requirement and levels of treatment the commander needs to support his decision for possible options. The commander must nest his CASEVAC plan and procedures with his higher echelons as well as know the locations of adjacent unit's medical treatment facilities to meet a timely response for the casualty. The table 6-2, page 6-22, will tell what evacuation procedures are required for casualties. (Refer to ATP 4-25.13 for more information.)

Table 6-2. Categories of evacuation precedence

Priority I—URGENT	Is assigned to emergency cases that should be evacuated as soon as possible and within a maximum of 1 hour to save life, limb, or eyesight, to prevent complications of serious illness, or to avoid permanent disability.
Priority IA—URGENT-SURG	Is assigned to patients who must receive far forward surgical intervention to save life and to stabilize them for further evacuation.
PRIORITY II—PRIORITY	Is assigned to sick and wounded personnel requiring prompt medical care. This precedence is used when the individual should be evacuated within 4 hours or his medical condition could deteriorate to such a degree that he will become an URGENT precedence, or whose requirements for special treatment are not available locally, or who will suffer unnecessary pain or disability.
PRIORITY III—ROUTINE	Is assigned to sick and wounded personnel requiring evacuation but whose condition is not expected to deteriorate significantly. The sick and wounded in this category should be evacuated within 24 hours.
PRIORITY IV—CONVENIENCE	Is assigned to patients for whom evacuation by medical platform is a matter of medical convenience rather than necessity.
The NATO STANAG 3204 has deleted the category of Priority IV—CONVENIENCE; however, it will still be included in the U.S. Army evacuation priorities as there is a requirement for it on the battlefield.	

TECHNIQUES

6-77. Techniques for the SBCT weapons troop to handle casualties are—

- Consolidate casualties at a troop casualty collection point for further movement to a MTF.
- Have the element with the casualty establish a secure LZ and call for MEDEVAC.
- The troop sends the MEV with security escort and picks up casualties at point of injury and transports them to Role 1 medical treatment facility or higher facility.
- The troop MEV with security escort conducts a linkup with the element with the casualty.
- The troop authorizes direct liaison to the element with the casualty and they transport the casualty to the nearest Role 1 or higher medical treatment facility.

6-78. Within the SBCT weapons troops, the following vehicles can be used to support medical evacuation.

Vehicle	*Maximum (Max) Liter*	*Max Ambulatory*	*Mix Liter/Ambulatory*
Antitank guided missile (ATGM)/ Mobile gun system (MGS)	1	0	1
Medical evacuation vehicle (MEV)	4	6	2/3
Infantry carrier vehicle (ICV)	2*	8	1*/4
Light medium tactical vehicle (LMTV)	7*	12	Multiple combinations
Medium tactical vehicle (MTV)	8*	14	Multiple combinations
*Indicates a modification to the vehicle can be made for a nonstandard casualty evacuation (CASEVAC) litter.			

SECTION VI – ENEMY PRISONER OF WAR AND RETAINED/DETAINED PERSONS

6-79. Law of war, international law, military training, ROE, and ethical principles demand that EPWs, detainees, and civilians be accorded the utmost humane treatment—

- Ensure procedures of 5-S's and T (search, silence, segregate, safety, speed, and tag) are followed.
- When necessary for security reasons, detainees may be secured temporarily with handcuffs, flex cuffs, blindfolds, or other security devices. Sensory deprivation of persons who are detained may in some circumstances amount to ill-treatment if used as a form of punishment or to inflict suffering. Standardize EPW kits.
- Gather detainee packets with vehicles or at a collection point.
- Evacuate all detainees to the same location.
- Keep personal effects with the detainee. Use Ziploc baggies for this purpose.
- Take photos of each detainee and items of intelligence or evidentiary value in possession of the detainee.
- Conduct biometrics identity data collection.
- Use zip ties or flex cuffs to secure detainees.
- Dedicate vehicles for detainee transportation. This requirement should be separate from CASEVAC and HNSF transportation requirements.
- Plan for blankets or clothing to safeguard detainees when operations are conducted at night during inclement weather.
- Recover shoes for the detainee to wear.
- Remember documentation is important. Enemy forces may be released because of improper documentation.
- Use explosive detection kits when available. They should be used immediately to provide additional evidence for future legal processing.
- Provide needle proof gloves if possible to avoid injury to those searching and handling detainees.

CAPTURED ENEMY EQUIPMENT AND CAPTURED ENEMY AMMUNITION

6-80. Consolidate captured enemy equipment (CEE) and captured enemy ammunition (CEA) at the end of the operation. This action should have senior leadership oversight preferably the company 1SG and XO. Normally the 1SG is responsible and oversees the consolidation and the XO is responsible for the coordination for transportation and disposal with supporting elements. Units need to develop a plan to consolidate, handle, and move CEE and CEA. Be prepared to secure areas where CEE and CEA are found. Blow it up in place, if needed. All units should have this capability due to lack of availability of EOD/engineers. Follow restrictions in ROE or unit directives. Possess the means to carry contraband (garbage bags, sandbags, and so forth) and backhaul it to a captured enemy equipment or ammunition site. Handle unexploded explosive ordnance/IED/booby traps according to unit SOP. Possess the means to catalog and record CEE and CEA information, to include photographic media.

TRANSPORTATION

6-81. The XO and commander are responsible to plan sufficient transportation to move the unit in a manner that supports the ground tactical plan. A technique is to plan ground movement in a manner similar to an air assault operation with five phases. They are as follows:

- Staging plan.
- Loading plan.
- Movement plan.
- Unloading, control, security, and consolidation of vehicles plan (during execution).
- Withdrawal plan.

6-82. Be aware that vehicles may not be organic to a unit, so place someone from that unit to mission command and maintain accountability/liaison with the vehicles. Make every effort to integrate attached units, assets, and personnel. Usually, the XO coordinates with the attached units and the 1SG manages their accountability of personnel and equipment as well as oversees their support efforts. This includes briefings, rehearsals, and inspections of personnel, equipment, and vehicles. Ensure understanding of SOPs and contact drills and conduct detailed rehearsals. HNSF need to be part of the transportation plan. Movement may be by their own assets or provided to them. If they are part of the operation then they are included and accounted for in our transportation plan.

6-83. A master manifest should be maintained at unit level that includes sensitive item inventories and other important information. This list can be used to establish accountability if vehicles or sensitive items are lost. Conduct preventive maintenance or preventive maintenance checks and services on vehicles before departure. Cross-level or load vehicles with key leaders, skills, logistics, medical assets, and weapons systems to avoid the loss of critical assets with the loss of one vehicle. Make sure vehicles are marked or possess markers that can be used to identify their locations to deconflict air and other friendly fires. To facilitate mission command, vehicles can be marked on the sides or back based on their departure times or elements during movement. Nontraditional assets such as civilian trucks may be appropriated according to established ROE to assist in moving personnel or material to or from the objective.

Chapter 7
Augmenting Combat Power

For the SBCT weapons troop to achieve its full combat potential, the commander integrates all available assets effectively. This chapter discusses fires, protection, aviation, information operations, military information support operations, and civil affairs.

SECTION I – FIRES

7-1. *Fire support* is fires that directly support land, maritime, amphibious, and special operations forces to engage enemy forces, combat formations, and facilities in pursuit of tactical and operational objectives (JP 3-09). Fire support assets include mortars, field artillery (FA) cannons, rockets, missiles, CAS, attack aviation, and naval surface fire support. Nonlethal effects may be achieved using obscuration or illumination munitions, and some electronic warfare assets. Nonlethal effects may be achieved by using munitions in a manner designed to influence rather than injure an opponent. An example of this use might be firing massed artillery at an uninhabited area in the opponent's view to influence his actions.

FIRE SUPPORT TEAM

7-2. Chapter 1, sections III and IV of this publication discussed briefly the organization, duties, and responsibilities of the SBCT weapons troop FIST personnel. This section examines in more detail the equipment, capabilities, procedures, and other considerations that affect the SBCT weapons troop FIST and its employment in the accomplishment of lethal and nonlethal fire support tasks.

- A fire support team is a field artillery team that plans and coordinates all available company supporting fires, including mortars, field artillery, naval surface fire support and close air support integration. The weapons troop commander is ultimately responsible for integrating fires in support of his scheme of maneuver; the weapons troop FSO serves as his principle advisor for fire support. The weapons troop FSO fully needs to understand the commander's scheme of maneuver. On the basis of the commander's guidance, the troop FSO synchronizes fire support within the maneuver plan and presents the fire support plan to the commander for his approval.
- A *forward observer* is an observer operating with front line troops trained to adjust ground or naval gunfire and pass back battlefield information (JP 3-09). In the absence of a qualified air controller, the observer may control close air support strikes. Platoon FOs are equipped with target acquisition devices that assist in accurately locating targets and the communications gear needed to call for fire. They are the primary fire support observers in the company/troop and are frequently collocated with platoon leaders. They provide target refinement, execute planned fires, and request fires for their supported platoons.
- A *joint fires observer* is a trained Service member who can request, adjust, and control surface-to-surface fires, provide targeting information in support of Type 2 and 3 close air support terminal attack control, and perform autonomous terminal guidance operations (JP 3-09.3). For air-to-surface fires, they can provide timely and accurate targeting information to the joint terminal air controller (JTAC) or, when approved by the JTAC, to the aircraft directly, and perform autonomous terminal guidance operations. The JFO adds joint warfighting capability but cannot provide terminal attack control during CAS operations

COMMUNICATIONS

7-3. The FIST has the capability to transmit on or monitor these networks:

- Fires battalion fire direction net (digital). The FIST uses this net to send calls for fire.

- SBCT weapons troop command network (voice). This network enables the FIST to monitor troop operations, and links it to the commander and platoon leaders for planning and coordination.
- JCR/BFT enables the FIST to have a COP with the SBCT weapons troop, the task force fires cell, and other fire support teams.
- Task force fire support network (voice). The FIST communicates with the fires on this network for which the fires cell is the net control station (NCS).

FIRE SUPPORT TEAM EMPLOYMENT

7-4. The SBCT weapons troop FSO, usually collocated with the troop commander, positions the fire support vehicle where the FIST can observe and control execution of the fires plan or a specified fire support task most effectively. The FIST establishes an OP that takes maximum advantage of the capability of the lightweight laser designator/rangefinder system and laser designator module to execute lethal, accurate fires. The FSO communicates with the commander on the troop command net. This option allows the FSO to maintain effective control of his FOs and to conduct required fires coordination.

7-5. The FIST in the troop can designate individuals from the FIST as platoon FOs, however due to TOE allocations they will be extremely limited in employing this option fully and will be able to only man three platoons in the troop with a forward observer. The FSO will remain at the troop headquarters to provide fire support to the commander.

FIRE SUPPORT PLANNING AND COORDINATION

7-6. Effective fire support does not happen without prior planning and coordination. The observer knows what his responsibilities are and where he fits into the overall plan.

7-7. The FSO is in charge of the troop FIST. He is also the principal fire support advisor to the troop commander when assigned or attached. The FIST plans, coordinates, and executes fire support for the commander's concept of operations. The FSO ensures he thoroughly understands what the commander is trying to do and how the commander wants fires to influence the operation.

7-8. The maneuver commander has the responsibility to integrate fire support with the scheme of maneuver. He provides the commander's intent for an operation and issues guidance, including guidance for fire support. The FSO translates the guidance into tasks for fire support. The FSO then assigns tasks to the observers that enable the FIST to complete the tasks assigned by the commander.

7-9. The maneuver commander also has the responsibility to ensure that observers understand what targets can be engaged, when they can be engaged, and which targets are the priority for the operation.

7-10. Observers have a responsibility to ensure they understand the criteria for engaging targets established by the commander. (Refer to ATP 3-09.30 and ATP 3-09.32/MCRP 3-16.6A/NTTP 3-09.2/AFTTP(I) 3-2.6) for more information on fire support planning and coordination.)

7-11. Fire support planning includes developing integrated fire plans (target lists, fire support execution matrix, FIST matrix, scheme of fires, and overlays) and determining forward observer control options that support the commander's scheme of maneuver.

7-12. The FIST stays abreast of the maneuver situation at all times and monitor voice requests for fire support within the maneuver element to prevent fratricide as the result of friendly fire support. The FIST advises the commander on any FSCMs in effect.

Note. Risks are always present when employing fires. Everyone involved with the planning, coordinating, and delivery of fires is responsible for evaluating and managing the risks. (Refer to ATP 5-19 for more information.)

FIELD ARTILLERY EMPLOYMENT

7-13. When planning the integration of fires into an operation, commanders and staffs should consider the memory aid AWIFM.

- Adequate Fire Support for the Committed Units. The minimum adequate fire support for committed units is considered to be one field artillery battalion for each committed brigade. Weight to the Main Effort. The main effort can be weighted by a variety of ways:
  - Reinforcing or general support-reinforcing support relationships can be assigned to provide additional responsive fires to the maneuver forces in contact.
  - Field artillery units can be positioned and assigned directions of fire to concentrate their fires in the appropriate operational area. In this manner, units in GS can add weight to the main attack or strength to the most vulnerable area.
  - Ammunition may be allocated to provide for more support in the affected area.
  - Priority of fires may be given to the main effort (decisive operation).
- Immediately Responsive Fires. The force commander should establish command or support relationships for available artillery with which he can immediately influence the operation. The practice of establishing field artillery support relationships of GS and GSR enhances flexibility and facilitates ability to provide immediately responsive fires for the force as a whole. The artillery commander maintains the capability to shift fires rapidly and add weight when enemy vulnerabilities are detected or the force is threatened. As the engagement unfolds, the maneuver commander may shift the priority of fires to exploit opportunities as they are presented.
- Facilitate Future Operations. Future operations can be facilitated by the assignment of a command or support relationship, the positioning of field artillery, and the allocation of ammunition. The assignment of GS and GSR support relationships, as well as on-order command or support relationships enables the transition to a future mission. Another way to facilitate future operations is to modify the current command or support relationship in accordance with anticipated requirements.
- Maximum Feasible Centralized Control. The optimum degree of centralized control varies with each tactical situation. A high degree of centralized control is desired in a defensive situation. Since the enemy has the initiative, it is difficult to accurately predict where and when he will attack. A lesser degree of centralized control is required in an offensive situation, because the supported force has the initiative.

TYPES OF FIRES

7-14. In fire planning, consider the following types of fires—

- Fires not only in front of the force, but also to the flanks and rear. The commander and FSO usually plans one third of the maximum range of organic fire support to stay behind the forward line of troops.
- Massed fires on choke points and key terrain to canalize, slow, and block the enemy movement.
- Fires to suppress bypassed enemy pockets of resistance until friendly maneuver elements are safely past. Suppressive fires and other fires may then be needed to support follow-on force actions against the bypassed forces.
- Fires that do not create obstacles and barriers to friendly forces and limit forward progress.

DESIRED EFFECTS

7-15. Desired effects describe the lethal and nonlethal effects fires (including electronic warfare systems) that need to be achieved against a specific target. The weapons troop commander can use numerous terms to describe desired effects, with the most common being deceive, degrade, delay, deny, destroy, disrupt, divert, exploit, interdict, influence, neutralize, and suppress. (Refer to ADRP 3-09 for more information.)

EFFECTS

7-16. An effect is—

- The physical or behavioral state of a system that results from an action, a set of actions, or another effect.
- The result, outcome, or consequence of an action.
- A change to a condition, behavior, or degree of freedom as the result, outcome, or consequence of an action.

7-17. Army and joint doctrine describe effects in two ways—

- Direct effect. A direct effect is the proximate, first-order consequence of an action, such as the destruction of a target by precision-guided munitions. Direct effects are immediate and easily recognizable.
- Indirect effect. An indirect effect is a delayed or displaced consequence associated with the action that caused the direct effect. Indirect effects often are less observable or recognizable than direct effects, particularly when they involve changes in an adversary's behavior. However, an indirect effect may be the one desired.

ALLOCATION

7-18. Decisions on allocations of fires are based on the decisive operation, the task of each unit, and the expected enemy capabilities. The commander ensures all fires assets are addressed to include target acquisition. Allocation may be expressed as specific targets, numbers of targets/zones for planning purposes, or as assets available (for example, 1x FA PLT DS to Alpha Co). Priority of fires is addressed for planned activities but can change based on a change to the enemy COA, completion of events, or planned branches and sequels.

POSITIONING GUIDANCE

7-19. Positioning guidance provides instructions for the movement of fires assets and observer positioning to support the scheme of maneuver. Positioning guidance should highlight any specific changes to the unit basic load, if necessary for special missions. The positioning guidance should address the controlled supply rate particularly if it impacts successful mission accomplishment. An example of positioning guidance is as follows: "Mortar platoon in position ready to fire vic NLT H+20 and support 1st platoon breach vic OBJ CHIEFS. Ensure 40 min x 400 of smoke on hand. 2nd platoon establish OP1 vic with laser designating capability. Engagement limited to 10 high explosive/ 5 SMK/ 3 ILLUM."

ATTACK GUIDANCE

7-20. Attack guidance describes which delivery systems are to be used to attack specific target types and the criteria that needs to be met before processing the target. Initial attack guidance is usually provided from a higher headquarters order and should be modified as needed based on mission analysis and COA development. Attack guidance is usually articulated in a matrix format. It also may be included in the following products:

- High-payoff target list.
- Target selection standards.
- Attack guidance matrix.

RESTRICTIONS

7-21. Restrictions describe constraints in terms of requiring something to do or prohibiting an action. Some considerations include restrictions on ammunition expenditures, types of fires, areas of employment, creation of obstacles, limiting risk to friendly troops, minimizing the loss of civilian life, and permissive and restrictive FSCMs. Examples of restrictions are: "No cratering munitions on highway 322. No occupation or use of incendiary munitions in built up areas. Coordinated fire line is Phase line BLUE, On Order Phase line RED. No Fire Are over OP 1 in effect."

CLEARANCE OF FIRES

7-22. The maneuver commander is the final authority to approve (clear) fires and their effects within his zone or AO. Although the commander may delegate authority to coordinate and clear fires to his FSO, the ultimate responsibility belongs to the commander. During certain operations, especially in stability tasks, it may take a BCT commander or a division commander to approve fires. Usually, the FSO assists the commander by recommending the clearance of fires and provides an assessment of collateral damage if necessary. Using JCR/BFT allows request fires digitally by highlighting the call-for-fire box on the JCR/BFT supporting arms liaison team report tab or using a traditional call-for-fire format. Once the FSO receives this request via JCR/BFT, he clears the request through the company commander. If the troop commander

approves the request, the FSO then forwards the request through the fire support channels via FM or the Advanced Field Artillery Tactical Data System.

OBSCURATION AND SCREENING

7-23. Leaders have a variety of smoke munitions available to achieve the desired effects. Since weather conditions can affect obscuration, the company commander ensures that they set the conditions for the proper employment and placement of smoke to enable the mission with respect to adjacent units that may be affected.

7-24. When used correctly smoke can significantly reduce the enemy's effectiveness both in daytime and at night. Use smoke to reduce the ability of the enemy to deliver effective fires, to hamper hostile operations, and to deny the enemy information on friendly positions and maneuvers. Smoke reduces the effectiveness of laser beams and inhibits electro-optical systems including some night vision devices. The four types of smoke are—

- Obscuring smoke is placed on or near the enemy to suppress enemy observers and to minimize their vision.
- Screening smoke is a smoke curtain used on the battlefield between enemy observation points and friendly units to mask friendly forces, positions, and activities.
- Deception smoke is a smoke curtain used to deceive and confuse the enemy as to the nature of friendly operations.
- Signaling smoke is used to establish a reference for friendly forces.

7-25. Use obscuring smoke to—

- Defeat flash ranging and restrict the enemy's counterfire program.
- Obscure enemy observation posts and reduce their ability to provide accurate target location for enemy fire support assets.
- Obscure enemy direct fire weapons and lasers.
- Instill apprehension and increase enemy patrolling.
- Slow enemy vehicles to blackout speeds.
- Increase control problems by preventing effective visual signals and increasing radio traffic.
- Defeat night observation devices and reduce the capability of most infrared devices.

7-26. Use screening smoke for—

- Deceptive Screens. Smoke draws fire. Deceptive screens cause the enemy to disperse his fires and expend his ammunition.
- Flank Screens. Smoke may be used to screen exposed flanks.
- Areas Forward of the Objective. Smoke helps the maneuver units consolidate on the objective unhindered by enemy ground observers.
- River Crossing Operations. Screening the primary crossing site denies the enemy information. Deceptive screens deceive the enemy as to the exact location of the main crossing.
- Obstacle Breaching. The enemy is denied the ability to observe breaching unit activities.

ILLUMINATION

7-27. Illumination fires (visible or infrared) are useful in exposing an opponent at night. Illumination fires may give friendly forces an advantage by reducing the enemy forces' ability to operate at night without being targeted and attacked with minimal collateral damage. Infrared illumination enhances the Soldier's use of some night vision devices to more easily locate targets and enable surprise fires on enemy forces not equipped with night vision devices.

FIELD ARTILLERY

7-28. FA is the maneuver commander's principal means for providing indirect fire support to his maneuver forces. FA can neutralize, suppress, or destroy enemy direct fire forces, attack enemy artillery and mortars, provide battlefield obscuration, and deliver FASCAM to isolate and interdict enemy forces, or to protect friendly operations. FA elements within maneuver organizations serve as the integrating center for all

elements of fire support. FA delivery systems include cannons, rockets, and missiles. These systems can provide fires under all conditions of weather and in all types of terrain. They can shift and mass fires rapidly without having to displace.

MORTARS

7-29. The mortar platoon organic to the SBCT Infantry battalions can augment the SBCT weapons troop to provide high angle indirect fires. Battalion mortars provide close, responsive fire support for committed units. These fires harass, suppress, neutralize, and destroy enemy attack formations and defenses; obscure the enemy's vision; and inhibit the enemy's ability to maneuver. Mortars can be used for final protective fires, smoke, and illumination.

SECTION II – PROTECTION

7-30. Protection tasks and systems reduce risk, mitigate identified vulnerabilities, and act on opportunity. The tasks and systems that comprise the protection warfighting function effectively protect the force, enhance the preservation of combat power, and increase the probability of mission success. The SBCT weapons troop commander integrates and synchronizes organic and augmented forces that support their own and higher echelons protection tasks with their operations. (Refer to ADRP 3-37 for more information.)

7-31. The 14 protection tasks and systems are—

- Air and missile defense.
- Personnel recovery.
- Operational area security.
- Antiterrorism.
- Survivability.
- Force health protection.
- CBRN defense.
- Employ safety techniques (including fratricide).
- Operations security.
- Provide EOD and protection support.
- Intelligence support to protection.
- Physical security procedures.
- Law and order.
- Internment and resettlement.

7-32. The following paragraphs discuss the seven protection tasks and systems that the SBCT weapons troop encounter that have not been previous explained.

AIR AND MISSILE DEFENSE

7-33. Air defense artillery is to provide fires to protect the force and selected geopolitical assets from aerial attack, missile attack, and surveillance. The SBCT weapons troop operates with air defense systems and synchronize operations to ensure that the air defense systems are protected from a ground threat to ensure the higher unit's commander's protection plan is implemented accordingly. Air and missile defense elements protect installations and personnel from over-the-horizon strike by conventional and CBRN warheads according to METT-TC.

7-34. Indirect fire protection systems protect forces from threats that are largely immune to air defense artillery systems. The indirect fire protection intercept capability is designed to detect and destroy incoming rocket, artillery, and mortar fires. This capability assesses the threat to maintain friendly protection and destroys the incoming projectile at a safe distance from the intended target.

7-35. The air and missile defense task consists of active and passive measures that protect personnel and physical assets from an air or missile attack. Passive measures include camouflage, cover, concealment,

hardening, and OPSEC. Active measures are taken to destroy, neutralize, or reduce the effectiveness of hostile air and missile threats. (Refer to ADRP 3-37 for more information.)

THE THREAT

7-36. In analyzing the physical variable of a battalion's operational environment, planners must take into account the airspace above the battalion's AO. Some areas to consider include:

- Location of threat airfields and launching points.
- Range of aircraft and missiles.
- Physical constraints in the friendly AO.
- Buildings and other structures.
- Power lines and antennas.
- Hills, trees, and other natural barriers to movement and observation.
- Weather.

7-37. The following are some of the types of air threats and typical maneuvers that the battalion can expect to encounter against a well-equipped enemy:

- Unmanned aerial vehicles (UAV's) are small and elusive. They usually fly low, but the altitude can vary. Once in the target area, they may fly an orbit attempting to stay out of engagement range of air defense artillery.
- Most surface-launched cruise missiles follow the terrain and use terrain masking. Due to their range, they might take indirect approach routes.
- Ballistic missiles are not terrain-dependent. They fly from launch point to objective. Their flight is not restricted by terrain.
- Tactical air-to-surface missiles usually fly direct routes from launch platform to the target.
- Rotary-wing aircraft primarily conduct contour flights. They follow ridgelines and military crests, using the terrain to mask their approach to the target area.
- Fixed-wing aircraft usually follow major terrain or man-made features. Depending on range, they may fly a straight line to the target.
- Ordnance or payload can affect range and altitude of the air system and, thus, influence the selection of avenues of approach for airborne and air assault operations.

7-38. Units can expect the threat to attempt to counter U.S. defensive and offensive operations with a myriad of aerial platforms. UAS provide the threat commander the necessary information to determine friendly unit locations, movements, and objectives. Aerial and artillery strikes can be generated from the intelligence gathered against the following targets:

- Maneuver force.
- Forward arming and refueling points.
- Aviation bases.
- Command and control nodes.
- Reserve troop concentrations.
- Forward support company areas.
- Terrain features.
- Obstacles constricting unit movements as U.S. forces advance to close with the enemy forces.

7-39. Lethal UAS can be effective in disabling mission command, and intelligence facilities or destroying armored vehicles. The threat probably will use missiles and rockets against logistical concentration, mission command nodes, or with submunitions for area denial. It probably will use rotary wing aircraft to attack forward elements and the flanks of the advancing enemy maneuver force to slow their tempo, cause confusion and, thereby, inflict maximum casualties. Rotary wing aircraft also can be used to conduct operations across forward line of own troops, CAS, and air insertion operations. Armed attack helicopters constitute the most widespread and capable air threats to friendly ground forces in the close battle.

PASSIVE AIR DEFENSE

7-40. Soldiers use passive air defense measures to avoid detection from enemy air attack. Passive air defense is all measures, other than active air defense, taken to minimize the effectiveness of hostile air and missile threats against friendly forces and assets. These measures include camouflage, concealment, deception, dispersion, reconstitution, redundancy, detection and warning systems, and the use of protective construction. (JP 3-01) Concealing large vehicles like the ATGM and MGS is difficult. Commanders should consider deception techniques to disguise their intentions and active air defense.

7-41. Damage-limiting measures are attempts to limit any damages should the enemy detect friendly forces. These measures are used when units are in a static position such as an assembly area, or when they are maneuvering. If caught in the open, personnel should immediately execute battle drills and move to positions of cover and concealment that reduce the enemy's ability to acquire or engage them. The same measures taken to limit damage from artillery attack are used for dispersion, protective construction, and cover. Examples of damage-limiting measures include vehicle dispersion, camouflage, and movement to specified graphical control measures or terrain features reduce the effectiveness of enemy targeting. Establishing rally points facilitate rapid dispersion and re-consolidation at any moment when contact with enemy aircraft is made.

ACTIVE AIR DEFENSE

7-42. Although passive measures are the first line of defense against air attack, troops must be prepared to engage attacking enemy aircraft. The decision to fight an air threat is based on the immediate situation and weapons system capabilities. Based on the mission, the weapons troop does not typically engage aircraft except for self-preservation or as directed by the commander.

Engagement Techniques

7-43. The crew's goal is to engage and destroy or suppress targets as fast as possible. Basic engagement procedures used for all engagements include:

- The vehicle commander might be required to lay the gun for direction if the gunner's scan is away from the target. He will release control to the gunner (target hand-off) and issue the fire command.
- Once the target is acquired, the gunner identifies and discriminates the target.
- The vehicle commander then confirms the target and gives the fire command.
- The gunner completes his switch checks.

Smalls Arms Used for Air Defense

7-44. Small arms used for air defense incorporate the use of volume fire and proper aiming points according to the target. The key to success in engaging enemy air is to put out a high volume of fire. All weapons designated by the commander should be used, including Stryker vehicles, high mobility multipurpose wheeled vehicle and trucks, and Infantry direct fire automatic weapons. The commander must decide whether to engage and must provide the engagement command for the entire unit to fire upon the attacking aircraft rather than having Soldiers fire at the aircraft individually.

SURVIVABILITY

7-45. *Survivability* is a quality or capability of military forces which permits them to avoid or withstand hostile actions or environmental conditions while retaining the ability to fulfill their primary mission (ATP 3-37.34). Survivability includes all aspects of protecting personnel, weapons, and supplies while simultaneously deceiving the enemy. Survivability activities include constructing fighting positions, constructing protective positions, harden facilities, employing camouflage and concealment and conducting operational decontamination. Key factors affecting survivability are described in more detail below and include mobility, situational understanding and terrain and weather condition. Additional factors that can impact survivability are dispersion, morale, leadership and discipline.

7-46. Survivability of friendly forces is typically more likely when they are moving or when they possess the ability to reposition quickly. Maintaining freedom of movement and maneuver often increase survivability.

7-47. Situational understanding is the product of applying analysis and judgment to relevant information to determine the relationship between the mission variables to facilitate decision making (ADRP 3-0). It requires the ability to identify, process, and comprehend the critical elements of information about what occurs inside the commander's AO. Having accurate situational understanding provides the baseline for hazard assessments

7-48. Terrain and weather, while often a threat as part of environmental conditions, can also enhance survivability. Existing terrain features (natural or manmade) can provide cover (protection from the effects of fires) and concealment (protection from observation and surveillance). Terrain features can also be reinforced or constructed with natural and manmade materials to provide or enhance cover, concealment, or camouflage. Weather conditions can also reduce visibility such as fog or snow providing concealment for personnel and assets.

Note. There is a close connection between cover (protection from the effects of fires) and shelter from the elements. Often, things that provide cover also provide some shelter from the elements—and vice versa. This is particularly true when considering CBRN weapons, since many of their effects have similar characteristics to some weather conditions. (See ATP 3-37.34 for more information.)

7-49. All units conduct survivability operations within the limits of their capabilities. Engineer and CBRN personnel and units have additional capabilities to support survivability operations. Augmented engineers to the SBCT can mass their skills and equipment to develop and improve friendly positions. They provide survivability applications to HN facilities and U.S.-operated facilities to include entry control points, guard towers, and other means of hardening. CBRN personnel support survivability operations by advising units on conduct of operational decontamination (with organic decontamination equipment and trained teams) which allows forces to reduce contact hazard, limit the spread of contamination and minimize the hazard while allowing operations to continue. (See ATP 3-11.32/MCWP 3-37.2/NTTP 3-11.37 for additional information on operational decontamination) Obscurants can enhance survivability by concealing friendly positions and screening maneuvering forces from enemy observation.

7-50. Units at all echelons have an inherent responsibility for conducting survivability operation activities. They must also continually improve positions whether in a tactical assembly area or on a base camp. Survivability activities include constructing fighting positions, constructing protective positions, harden facilities, employing camouflage and concealment and conducting operational decontamination. See below and ATP 3-37.34 for more information on Survivability Operations Activities.

7-51. In addition to altering the physical environment other capabilities and activities support survivability operations as well. Military deception enables survivability by present enemy forces with false information causing them to expend ordnance or resources on nonthreatening targets (see FM 6-0 or JP 3-13.4 for more information). Protective obstacle, while part of countermobility operations, provide friendly forces with close in protection that enhances survivability positions (see ATP 3-90.8 for more information). Obscuration is another key enabler for concealment. Units can achieve obscuration effects by using the weather, battlefield dust, and debris or smoke munitions (see ATP 3-11.50 for more information).

FORCE HEALTH PROTECTION

7-52. Force health protection includes measures taken by commanders, leaders, individual Soldiers, and the military health system to promote, improve, or conserve the behavioral and physical well-being of Soldiers. These measures enable a healthy and fit force, prevent injury and illness, and protect the force from health hazards. It includes the prevention aspects of several Army medical department functions, such as—

- Preventive medicine to include medical surveillance and occupational and environmental health surveillance.
- Veterinary services, including food safety, food security, quality assurance, animal care missions, and the prevention of animal borne diseases transmissible to man.
- Combat and operational stress control.

- Laboratory services to include area medical laboratory (AML) support.
- Dental services to include preventive dentistry.

7-53. Army personnel need to be physically and behaviorally fit. This requirement demands programs that promote and improve the capacity of personnel to perform military tasks at high levels, under extreme conditions, and for extended period. These preventive and protective capabilities include physical exercise, nutritional diets, dental hygiene and restorative treatment, combat and operational stress management, rest, recreation, and relaxation that are geared to individual or organizations. (Refer to ADRP 3-37 for more information.)

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR OPERATIONS

7-54. CBRN operations are the employment of tactical capabilities that counter the entire range of CBRN threats and hazards. Protecting Soldiers from the harmful hazards associated with CBRN attacks in an AO is essential to preserving combat power. Training all tasks under CBRN conditions is the best way to prepare all Soliders for operations in CBRN environments. When the probability of CBRN threat exists, commanders and leaders conduct a vulnerability analysis to aid in developing vulnerability reduction measures to counter the CBRN threat and improve the command FP. (See ATP 3-11.36/MCRP 3-37B/NTTP 3-11.34/ AFTTP 3--2.70 for additional information on CBRN vulnerability assessments). CBRN personnel consider METT-TC and related information to provide recommendations on protection requirements that are reflected in the mission-oriented protective posture (MOPP) level. Staff and leader involvement ensures safe and sustained operations under various climatic conditions. Commanders should develop standard responses and COAs for each projected mission. The standard MOPP levels are—

- MOPP Ready. Carry a protective mask, and ensure that individual protective gear is available within 2 hours. A second set needs to be available in 6 hours.
- MOPP0. Carry a protective mask, and ensure that individual protective gear is available, within arm's reach.
- MOPP1. Don a protective suit.
- MOPP2. Don protective boots.
- MOPP3. Don a protective mask and secure hood.
- MOPP4. Don protective gloves.

7-55. Standardized MOPP levels allow leaders to increase and decrease levels of protection. Leaders must be familiar with MOPP levels to understand the flexibility in the system, the protection afforded by each level and as well as the physical limitations created by it. Familiarity with these levels aids in making rapid and educated decisions for mitigating risks and improving protection. Through proper MOPP analysis, leaders determine the coordinated level of protection their subordinate units should assume and then direct their units to assume that MOPP level.

EMPLOY SAFETY TECHNIQUES

7-56. Safety needs to be considered as part of planning for all missions. Operational conditions often impose significant hazards to Soldiers through the increased probability of an accidental event. In an extreme OE, these hazards raise the risk level as equipment and personnel are taxed. Leaders need to know their Soldiers and trained crews, and operators need to know the capabilities and limitations of their platforms and systems. To maintain a continuous operational tempo, commanders need to know how to employ and sustain personnel and equipment. When planning operations, commanders—

- Consider human endurance limits and environmental conditions.
- Balance the possible benefits of sustained, high-tempo operations with the level of risk.
- Accept no unnecessary risks.
- Conduct high-risk operations only when the potential gain or benefit outweighs the potential loss.

7-57. Integrating safety into the operations process through the protection warfighting function and the risk management process provides an opportunity to identify and assess hazards to the force and develop risk reduction measures. The responsibility for safety starts with the commander and continues through the chain

of command to individuals. Safety works best when all leaders and Soldiers receive training to recognize hazards and implement controls to reduce or mitigate risks in their daily operations. (Refer to ATP 5-19 for more information.)

7-58. Fratricide and friendly fire are the unintentional killing of friendly personnel by friendly firepower. The destructive power and range of modern weapons, coupled with the high intensity and rapid tempo of combat, increase the potential for fratricide and friendly fire. Tactical maneuvers, terrain, and weather conditions may increase the danger of fratricide and friendly fire. (See chapter 1 of this publication.)

7-59. SBCT weapons troop need to pay close attention to SDZs when conducting operations. With the addition of ATGM, MGS, and Infantry; intermixed in engagements awareness is much more of a factor. The Stryker vehicle is designed to be a carrier vehicles. The technique is to deploy Soldiers from the vehicle before making contact. This can often lead to Infantry being forward of the vehicles and their weapon systems and in their SDZs. Leaders should plan means of mounted maneuver with dismounted elements to avoid potential fratricide.

OPERATIONS SECURITY

7-60. OPSEC is the process of identifying essential elements of friendly information and analyzing friendly actions attendant to military operations and other activities to—

- Identify those actions that can be observed by adversary intelligence systems.
- Determine indicators hostile intelligence systems might obtain that could be interpreted or pieced together to derive critical information in time to be useful to adversaries.
- Select and execute measures that eliminate or reduce to an acceptable level the vulnerabilities of friendly actions to adversary exploitation.

7-61. OPSEC applies to all operations across the range of military operations. All units conduct OPSEC to preserve essential secrecy. Commanders establish routine OPSEC measures in unit SOPs.

EXPLOSIVE ORDNANCE DISPOSAL

7-62. The mission of EOD is to eliminate or reduce the effects of explosive ordnance hazards to protect combat power. Explosive ordnance hazards are frequently increasing dangers in the modern combat. They limit mobility, deny the use of critical assets, and threaten to injure or kill Soldiers at levels unprecedented in the past. U.S. and multinational use of munitions that disperse submunitions across a wide area has led to increased amounts of unexploded explosive ordnance on the battlefield. EOD forces are trained, equipped, and organized to deal with the increased quantity, sophistication, and lethality of explosive ordnance and support U.S. and multinational forces across the range of military operations.

7-63. The IED defeat framework is derived from the fundamentals of assured mobility. Assured mobility encompasses those actions that provide commanders with the ability to deploy, move, and maneuver where and when they desire (without interruption or delay) and to achieve the mission. (Refer to FM 3-34 for more information.) The fundamentals of assured mobility assist in developing SA for the commander that allows them to exploit opportunities to defeat the IED before its inception.

7-64. Because all IEDs will not be eliminated, the commander plans to mitigate the impact by developing SOPs, TTP, battle drills, and other responsive means to lessen the effects of the IED or eliminate the enemy's desired outcome. To effectively mitigate the impact of IEDs, the fundamentals of detect, avoid, neutralize, and protect are used in conjunction with METT-TC to plan and develop coordinated and well-executed responses.

7-65. The commander conducts clearing operations in support of an overall IED defeat mission. The reemphasis of clearing operations is on the IED or explosive hazard itself. However, the device is merely the end product of a complex set of enemy activities. An IED attack is the result of a planned attack with several key elements that work in a coordinated and synchronized manner to attain a desired result. Collection of biometric identity data enables the commander to attack the IED human network and enable the route clearing tasks for the very same reason.

7-66. Route clearance is an enabling task in IED defeat. It provides the maneuver commander the capability to employ a combined arms force of combat engineers, EOD, and other units task-organized, equipped, and

trained to neutralize the IED threat along critical routes. Route clearance provides one of a number of solutions the commander may employ to defeat this type of threat. A cleared route is only clear as long as it is under friendly observation. (Refer to ATP 3-90.37 for more information.)

PERSONNEL RECOVERY

7-67. Personnel Recovery (PR) operations are planned and may be conducted during the offensive, defensive, stability, and defense support of civil authorities' tasks. Regardless of task or level of command, guidance must be communicated to organizations or individuals on expectations in an isolating event. Effective personnel recovery planning guidance accounts for the operational environment and the execution of operations. Personnel recovery guidance is addressed in the synchronization of each warfighting function. It broadly describes how the commander intends to employ combat power to accomplish personnel recovery tasks within the higher commander's intent. This guidance is developed based on three interrelated categories: personnel recovery guidance (PRG), isolated Soldier guidance (ISG), and evasion plan of action.

PERSONNEL RECOVERY GUIDANCE

7-68. Higher-level commands reinforce policy and doctrine, including the definition of PR, the designation of isolated persons, and the requirement for staffing and coordination. Leaders develop and include PRG in execution documents. PR appears in appendix 2 (PR) of annex E (Protection) of the operations order.

ISOLATED SOLDIER GUIDANCE

7-69. Commanders translate the PRG and develop ISG. The ISG provides Soldiers with guidance concerning isolating incidents. The ISG focuses on awareness, accountability, reporting of isolation incidents and actions to take when isolated. There is no set format; the ISG first se is intended to be flexible for the mission, area, threat, and so forth and adjusted by the tactical commander as required.

EVASION PLAN OF ACTION

7-70. Evasion plans of action are specific instructions and are developed when the risk of isolation is elevated. Evasion plans of action are developed by units for specific missions or when conditions change.

7-71. All echelons of command above battalion have trained PR specialists. The PR specialist and the personnel recovery officer responsibilities fall into four broad categories: advisor to the commander, point of contact for personnel recovery efforts to the staff and others, coordinator of PR activities across the command, and trainer.

SECTION III – AVIATION

7-72. Army aviation uses maneuver to concentrate and sustain combat power at critical times and places to find, fix, and destroy threat forces. Aviation units design, tailor, and configure their assets in support of the SBCT weapons troop for specific operational support based on mission guidance and the specific area of responsibility in which the units operate. The organization could be a combination of attack reconnaissance, assault, lift, and maintenance units. (Refer to ATP 3-04.1 for more information.)

AIR-GROUND OPERATIONS

7-73. Today's operational environment requires combined arms at all levels, therefore, the likelihood of SBCT weapons troop commander receiving attack and utility aviation for support is ever increasing. The following are some considerations for the troop commander when receiving aviation assets:

- Exchange of frequencies, call signs, and FM check-in times.
- Terrain model and radio rehearsals.
- Location of air corridors and air control points.
- Location of aerial attack by fire (ABF)/SBF/BPs.
- Identification method for marking ground targets.

- Aircraft weapons configuration and station times.
- Friendly recognition symbols for both aircraft and ground vehicles.
- Fire coordination measures.
- Location and marking of LZs and PZs for MEDEVAC, CASEVAC, and aerial resupply.

7-74. Ground maneuver commanders understand that aviation forces can provide a significant advantage during operations. The troop commander must understand that the unique capabilities of Army aviation require unique planning and coordination. Direct fire aviation missions in the close fight differ greatly from engagements in a cross-forward line of troops operation. In a cross-forward line of troops operation, attack aircraft can benefit from deliberate planning and freely engaging at maximum ranges with a reduced concern of fratricide. Engagements in the close fight, on the other hand, often result in engagements within enemy direct fire weapons system ranges that are close to friendly units. The TLPs need to integrate Army aviation forces to ensure effective combined arms employment. Effective combined arms employment requires that aviation and ground maneuver forces synchronize their operations by operating from a common perspective. The following paragraphs highlight some possible procedures that aid in creating a common air-ground perspective.

COMBAT AIR SUPPORT AND CLOSE COMBAT ATTACK EXECUTION

7-75. The air liaison officer and JTAC personnel in the tactical air control party are the primary means for requesting and controlling CAS. However, reconnaissance units conducting shaping operations, such as reconnaissance and surveillance missions that have joint fires observer certified personnel, may observe and request CAS through the JTAC.

7-76. Any element in contact uses the attack aviation call for fire 5-Line attack brief to initiate. The 5-Line attack brief allows the ground maneuver forces to communicate and reconfirm to the aircraft the exact location of friendly and enemy forces. The ground commander owning the terrain clears fires by giving aircrews the situational awareness of the location of friendly elements. The ground commander deconflicts the airspace between indirect fires and the aircraft.

Ground Maneuver Force and Target Marking

7-77. The rapid and accurate marking of a target is essential to a positive target handover. Aircraft conducting attack by fire will develop an attack plan that is METT-TC dependent and meets the ground commander's task and purpose. The aircrew generally has an extremely limited amount of time to acquire both the friendly and enemy locations. Attack reconnaissance aircrews use both thermal sight and night vision goggles to fly with and acquire targets.

7-78. Marking methods for identifying targets and friendly positions vary from one ground maneuver force to another. Request should include a detailed description of all friendly locations and target locations in relation to friendly positions. It should include the target description and how it is marked.

7-79. For mutual protection and clarity on the appropriate target, the ground maneuver force does not mark the target until requested by the aviation element. This in no way restricts the ground maneuver force from returning fire from the enemy. However, the ground maneuver force should consider that the aircrews may not be able to distinguish the correct target from other fires if they mark the target with fire. Visual markings can be viewed by the enemy force and provide them early warning to an attack from the air. Ground maneuver forces should have multiple means of marking their positions. If the target is marked by fire, the aviation element requests the ground maneuver force to stop marking. The aviation element calls when clear of the area and reports estimated battle damage assessment.

Handover

7-80. The ground forces commander ensures that effects from fires both direct and indirect systems are not endangering air assets prior to handing over the engagement to air assets. Ground forces normally require means to suppress or fix the enemy in position within moments before the air asset engages the targets.

7-81. Aircraft normally rely on a high rate of speed and low altitude for survivability in the target area. As such, the aircrew generally has an extremely limited amount of time to acquire both the friendly and enemy

marks. The ground maneuver force must have the marking ready and turned on when requested by the aircrew. If target is not marked the air asset may not engage, miss its target, or commit fratricide.

7-82. After initially engaging the target, the aircrew generally approaches from a different angle for survivability reasons if another attack is required. The observer makes adjustments using the eight cardinal directions and distance (meters) with the last round's impact and the actual target. At the conclusion of the attack aviation call for fire, the aircrew provides its best estimate of battle damage assessment to the unit in contact.

Considerations for Close Combat Attack and Combat Air Support Execution

7-83. Aircraft leaders normally offset the battle position, attack or support by fire position from the flank of the friendly ground position. This helps to ensure that minimal interfere with operations on the ground. The offset position allows the aircraft to engage the enemy on its flanks rather than its front. It reduces the risk of fratricide along gun-target line.

7-84. The engaging of the target normally cannot be conducted without positive identification of friendly and enemy forces by both the ground and aviation commander before opening fire. The aviation element tailors its attack angles and weapon selections based upon the target and friendly unit proximity to the target.

7-85. Attack aviation call for fire and CAS can continue until the aircraft have expended all available munitions or fuel. However, if the air element receives a request for another attack, the pilot must carefully evaluate his ability to extend the operation. If not able, the pilot calls for relief on station by another air element if available.

7-86. Clearance of fires considerations include—

- Ensure aircrews have the current airspace coordinating measures and FSCMs for indirect fire positions (to include mortars) supporting the ground tactical plan.
- Plan for informal airspace coordinating areas and check firing procedures and communications to ensure artillery and mortars firing from within the LZ do not endanger subsequent serials landing or departing, attack aviation call for fire, or CAS.
- Ensure at least one of the aviation team members monitors the FS net for situational awareness.
- Advise the aviation element if the location of indirect fire units changes from that planned.
- Ensure all participating units are briefed daily on current airspace control order or air tasking order changes and updates that may affect air mission planning and execution.
- Ensure all units update firing unit locations, firing point origins, and final protective fire lines as they change for inclusion in current airspace control order.

7-87. After receiving the request for CAS/attack aviation call for fire the aircrew informs the ground maneuver force leader of the battle position, attack- or support-by-fire position (or series of positions) the team is occupying, and the location from which the attack aircraft engages the enemy with direct fire. The size of this position varies depending on the number of aircraft using the position, the size of the engagement area, and the type of terrain. The position must be close enough to the requesting unit to facilitate efficient target handover.

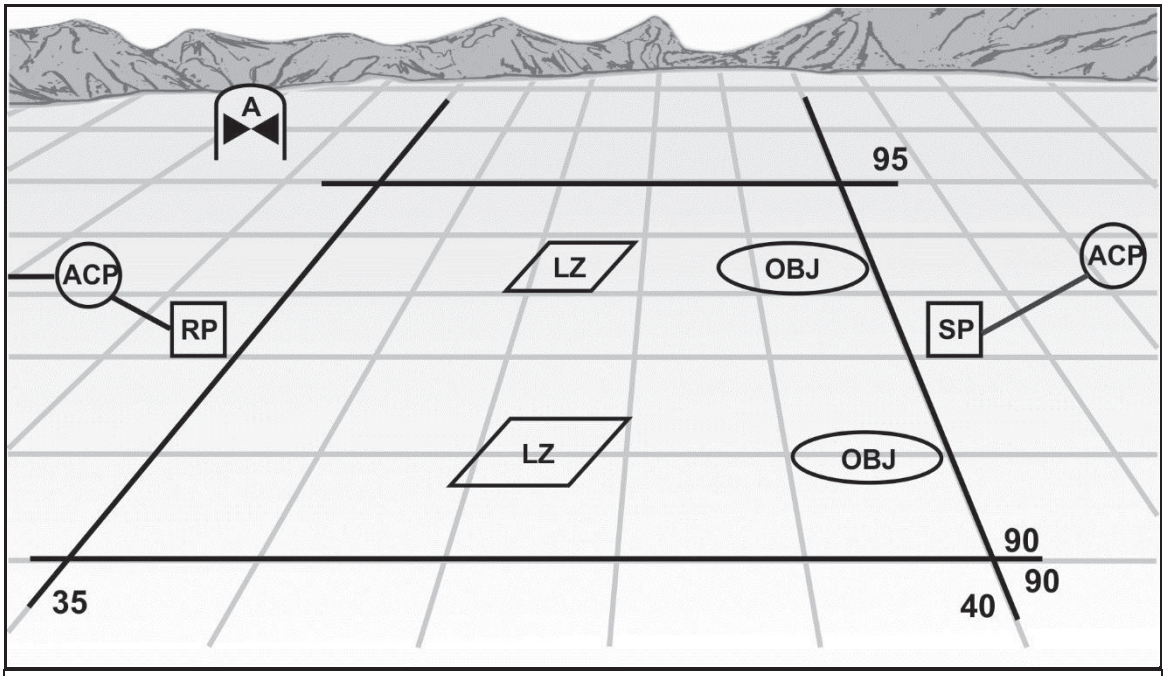
7-88. The ground commander owning the terrain clears fires during the attack aviation call for fire by giving aircrews the situational awareness of the location of friendly elements. The ground commander deconflicts the airspace between indirect fires and the aircraft.

Methods to Deconflict on the Objective Area

7-89. The three methods to deconflict airspace for aircraft on the objective are described in the following paragraphs.

Grid Line or Terrain Feature Separation

7-90. This is the most restrictive but easiest method to execute. It may not allow the attack reconnaissance units to engage targets in the attack aviation call for fire role during the air assault, but this technique is appropriate when time is limited for rehearsals, or when prior planning is extremely limited or not possible. With this method, the attack reconnaissance units clear the airspace for inbound assault units by moving to a designated grid line or terrain feature on either side of the objective. This movement and the subsequent maneuver of the attack reconnaissance units in and around the objective area are executed according to the instructions in the order. (See figure 7-1.)



Legend: ACP = air coordination point, LZ = landing zone, OBJ = objective, RP = release point, SP = start point.

Figure 7-1. Grid line method

Attack-by-Fire Positioning

7-91. Attack-by-fire positioning is the preferred method of deconfliction, as it allows attack reconnaissance aircraft the greatest flexibility to engage targets during the air assault in support of the ground tactical commander. The attack reconnaissance units occupy known attack-by-fire positions according to the published OPORD. This method restricts the attack reconnaissance units to the general vicinity of the attack-by-fire positions but not to a specific grid. (See figure 7-2, page 7-16.)

7-92. The attack-by-fire positioning method requires the attack reconnaissance units to ensure they stay clear of the LZ and do not cross the centerline of the direction of flight. Using this method requires the attack reconnaissance aircraft to have increased situational awareness. This method is best used when all elements have adequate time to rehearse.

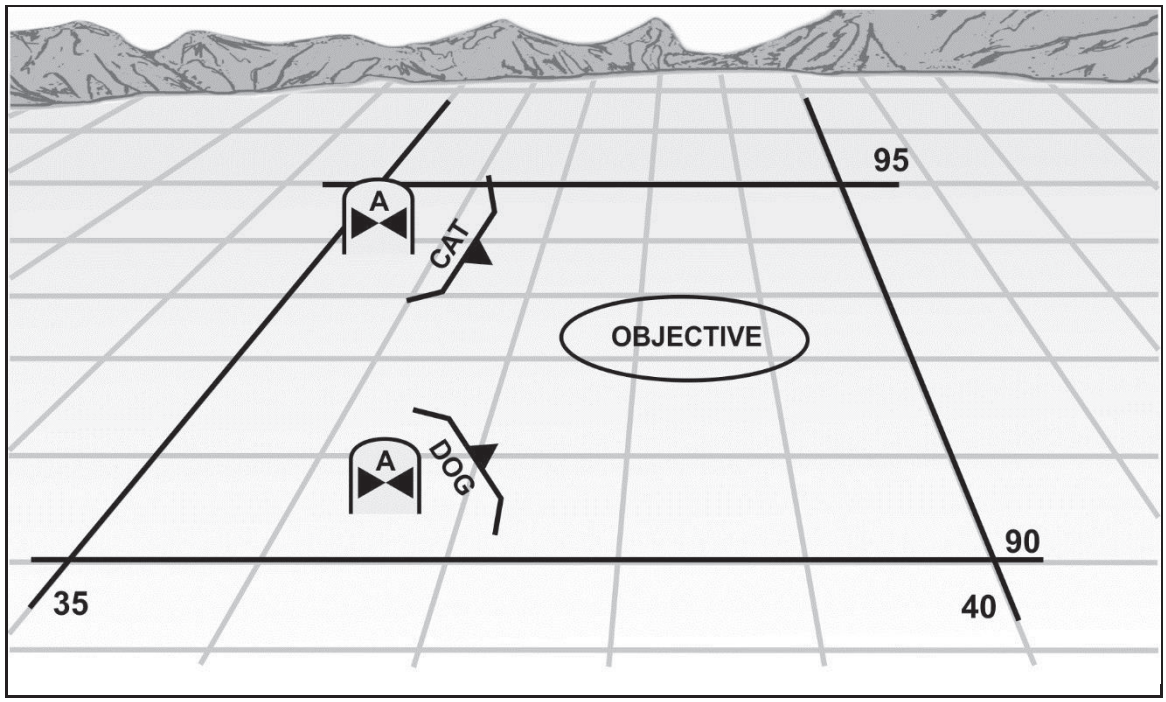


Figure 7-2. Attack-by-fire method

Call Clear

7-93. The call clear method is used in contingency circumstances when assault or other aircraft (such as air medical evacuation or mission command aircraft) are inbound to the objective area. It is initiated with an inbound call of the assault or other aircraft to the LZ and a response from the attack reconnaissance air mission command indicating that all elements of the LZ and the flight path to it from the release point (RP) are clear. Avoid using this method during the main air assault itself due to congestion on the air battle net.

ASSESSING

7-94. After the attack aircraft complete the requested attack aviation call for fire mission, the aircrew provides a battle damage assessment to the ground commander. Based on his intent, the ground maneuver commander determines if another attack is required to achieve his desired end state.

7-95. Upon identification that air support is no longer required the ground forces release the supporting air elements from bottom up echelons. Higher level echelons always have the authority to retask and reassign air assets based upon METT-TC. Lower levels ensure that support is met within their higher level commander's intent to support ground maneuver. The ground forces do this by submitting closing reports after air support is completed its tasks.

RESPOND TO DOWNED AIRCRAFT

7-96. Response to downed aircraft is always a planning consideration for all air assets and supported ground forces. When an aircraft is downed the nearest ground element immediately moves to secure the area, recover personnel and equipment. Various echelons have differing tasks to support downed aircraft and personnel recovery. Typically the sequence of events goes in order of—

- Determine location of downed aircraft.
- Closest ground element moves to site.
- Secure site and units rotate if needed to conduct follow on operations.
- Search for missing personnel and equipment.

- Destroy items that cannot be recovered if needed based on METT-TC.
- Form a recovery team.
- Recover equipment.
- Follow up tasks and accountability of secondary effects.
- Investigation for cause.
- Implement findings of investigation.

7-97. Follow on operations will occur while the downed aircraft is being secured or recovered. The responding unit must be aware of the actions they take as well as what they notice when they arrive onsite. The timeliness of their response mitigates the effort and impact and scope of the follow operations.

AIR MOVEMENT

7-98. Air movement operations are conducted to reposition units, personnel, supplies, equipment, and other critical combat elements in support of current or future operations. These operations include both airdrops and air landings.

7-99. The SBCT conducts air movement with its vehicle by fixed wing. The SBCT weapons troop should have at least one trained unit movement officer. The Stryker vehicle have the following Capabilities and limitation for air movement:

- Capabilities:
  - Many of the Stryker vehicles are able to be transported by C-130 and heavier aircraft.
  - Ability to deploy rapidly for global response if lift assets are available.
- Limitations:
  - The Stryker vehicle cannot travel and land ready to fight. It requires fitting with additional armament, fueling, mission command system data upload and loading ammunition.
  - The aircraft carrying a Stryker vehicle require a secure airfield to land.

7-100. Planning for air movements with the Stryker vehicles and without them is similar to that for other missions. Besides the normal planning process, air movement planning need to cover specific requirements. They are as follows:

- Coordinate with the supporting aviation unit(s).
- Plan and rehearse with the supporting aviation unit before the mission if possible. If armed escort accompanies the operation, the company commander—and the assault or general support aviation unit—should ensure that aircrews are included in the planning and rehearsal.
- Gather as much intelligence as possible, such as the enemy situation, in preparation for the mission.
- Plan and coordinate joint suppression of enemy air defense.

7-101. The unit should plan different ingress and egress routes, covering the following:

- Planned insertion and extraction points.
- Emergency extraction rally points.
- Lost communications extraction points.

7-102. Planned extraction points and emergency extraction rally points require communications to verify the preplanned pickup time or coordinate an emergency pickup time window when dismounted. Planning need to include details for extraction when communications between higher headquarters and the unit are lost. The lost communications extraction point involves infiltration teams moving to the emergency extraction point after two consecutive missed communications windows and waiting up to 24 hours for pickup.

AIR RESUPPLY

7-103. The SBCT weapons troop and subordinate units may operate in forward locations and even distant hide positions requiring helicopter resupply to include both internal and external load operations.

7-104. Planning for aerial resupply requires close coordination, with elements reviewing the entire mission and resolving all limitations and problem areas. If a resupply item poses a problem that cannot be resolved, leaders should consider another mode of transport. Planning factors include the following:

- Priorities of cargo/unit resupply.
- Integration of the resupply operation into the tactical plan.
- Selection, identification, and marking of the PZ/LZ.
- Type/amount of cargo.
- Helicopter assets available.
- Requirements for slings, cargo nets, or cargo containers.
- Ground crew training requirements, such as those for ground guides and hookup personnel.
- PZ and LZ security.
- Flight routes.

7-105. The selection of a usable PZ or LZ is extremely important. The troop analyzes logistical and tactical considerations taking into account that PZ/LZ positioning is at the right place to support the ground unit. The area must be accessible to the aircraft involved in the resupply operation. The air mission commander, the pilot in command, an air liaison officer, or a pathfinder-qualified officer or NCO make the final decision on PZ/LZ selection and acceptance.

7-106. The SBCT weapons troop receiving the supplies is responsible for preparing the PZ/LZ. Besides the general PZ/LZ responsibilities, Soldiers in the troop perform the following specific tasks for aerial resupply:

- Recover and assemble equipment and supplies.
- Train available ground crews in guiding the aircraft during approach, landing, unloading/loading, departure, and de-rigging the load.
- Train hookup personnel.
- Coordinate with the sending unit for the control and return of that unit's transport equipment such as slings and (aerial delivery cargo bag, NSN 1670-00-587-3421) A-22 bags.
- Prepare, coordinate, and inspect backloads, such as slings and A-22 bags, and have them ready for hookup or loading when the aircraft arrives.

SECTION IV – MILITARY INFORMATION SUPPORT OPERATIONS

7-107. Military information support (MIS) forces provide the commander with an increased ability to degrade the enemy's will to fight, reduce civilian interference, minimize collateral damage, and increase relevant and local population support for operations. These forces operate as three 5-man teams, and are integrated with maneuver units to conduct MISO in support of unified land operations. A staff sergeant leads the MIS team and advises the commander on the use of information, and is responsible for the integration and employment of the team. The team leader serves as a planner in the absence of a MIS planner on the supported unit's staff.

7-108. Troop commanders align themes and messages during operations that are nested with the SBCT commanders. Messages and themes that the troop commander initiates should be submitted to their supporting task force and be analyzed by the MISO to determine the possible reach of the theme and message. Messages and themes often cross over company and battalion AOs.

CAPABILITIES

7-109. MISO capabilities include—

- Influencing foreign populations through planned messages, activities, and actions that target select individuals and populations to affect decision making and change behavior.
- Advising the commander on the psychological effects of military actions in the OE, and providing cultural expertise.
- Delivering messages to intended audiences to inform, influence, and direct.
- Collecting, processing, and analyzing information to enhance the commander's understanding of the OE and to facilitate decision making.

- Training, advising, and assisting government organizations and security forces to establish HN/partner nation (PN) information capabilities.

PLANNING CONSIDERATIONS

7-110. Planning and employment considerations for MISO include—

- Approval authority. Messages and actions intended to influence foreign populations need to comply with higher-level programs, plans, objectives, themes, and orders. The program approval may or may not authorize the geographic combatant commander to further delegate approval authority to subordinate commanders as low as the brigade level for select products and actions. When the SBCT commander has this authority, he determines the length and timeliness of the approval process at his level. MIS element leaders are obligated to operate within the established approval process and to ensure the maneuver commander does not deliberately or inadvertently violate policies or the approval process.
- Interpreter. When language requirements exceed the abilities of the MIS team members, an interpreter is required.
- Security. MIS teams rely on the supported unit to provide security.
- Intelligence. Intelligence operations provide accurate, predictive, continuous, and timely intelligence to assess changes in decision making and actions.
- Mobility. Mission analysis determines if organic transportation assets of the MIS team are adequate for the terrain to be navigated. Provisions for transporting team members, equipment, and products may be needed in difficult terrain or conditions.

THEMES, MESSAGES, AND ACTIONS

7-111. Mission command requires the commander to use overarching information themes, supported by synchronized messages, and integrated with complimentary actions to achieve a desired end state. In doing so, leaders personally engage key players to ensure the themes and messages are transmitted and received as the command intends. In an information-saturated environment, messages, themes, and actions are inextricably linked. Information as an element of combat power is a critical and sometimes decisive factor in mission success.

7-112. A message is a verbal, written, or electronic communications supporting an information theme focused on an audience and in support of a specific action or objective. A psychological action is planned for its psychological impact and conducted to influence decision making and subsequent actions of selected target audiences. (Refer to FM 3-13 and FM 3-53 for more information.) Accurate, timely, and synchronized messages delivered to the right audiences and integrated with effective actions—increase the pressure on the enemy. This is extremely important in dealing with friendly, neutral and threat audiences, and where synchronized and integrated actions and messages create significant opportunities to gain support for operations.

7-113. Properly employed, information themes and messages can shape the OE and multiply the effects of friendly successes while countering threat or enemy information efforts. An information theme usually produced by the SBCT or higher, is a unifying or dominant idea or image expressing the purposes for an action. The weapons troop commander should incorporate higher commanders' themes and messages into all actions the company conducts. Proper employment of themes and messages begins during planning, continues through execution, and requires continuous assessment. The weapons troop commander needs to leverage all available assets in order to ensure both the appropriateness and best method of delivery of themes and messages to the target audience within their AO. Additionally, during planning, the weapons troop commander should establish a collection plan to assess the effectiveness and impact of the messages and themes within their AO.

INFORMATION-RELATED CAPABILITIES

7-114. Information-related capabilities of information operations is a military capability or activity specifically designed to influence, inform, or inform and influence select leaders, decision makers, and audiences whose behaviors and perceptions are deemed integral to mission success. Information-related capabilities of information operations are—public affairs (PA), military information support operations,

Soldier and leader engagement, combat camera, military deception, civil affairs operations (CAO), and operations security (OPSEC).

PUBLIC AFFAIRS

7-115. PA effort factually and accurately informs various populations without intent to misinform or change behaviors. It synchronizes components of PA with other information operations to ensure consistency, command credibility, and operations security. (Refer to FM 3-61 for more information.)

MILITARY INFORMATION SUPPORT OPERATIONS

7-116. MISO are planned operations to convey selected information and indicators directed towards foreign**,** friendly, neutral, threat, and enemy audiences. (Refer to section V of this chapter or FM 3-53 for more information.)

SOLDIER AND LEADER ENGAGEMENT

7-117. *Soldier and leader engagement* is interpersonal interactions by soldiers and leaders with audiences in an area of operations (FM 3-13). It can occur as an opportunity, a face-to-face encounter on the street, or a scheduled meeting. This interaction can also occur via telephone calls, video teleconferences, or other audiovisual mediums. Soldier and leader engagement is an information-related capability that supports the commanders' responsibility to inform and influence audiences inside and outside their organizations. Soldiers and leaders conduct engagement**s** to provide information or to influence attitudes, perceptions, and behavior. These engagements provide a venue for building relationships, solving conflicts, conveying information, calming fears, and refuting rumors, lies, or incorrect information. Effectively integrating soldier and leader engagement into operations increases the potential for commanders to mitigate unintended consequences, counter adversary information activities, and increase local support for friendly forces and their collective mission. (Refer to FM 3-13 for more information.)

7-118. Face-to-face interaction by Soldiers and leaders strongly influences the perceptions of the local populace. Carried out with discipline, professionalism, and cultural sensitivity, day-to-day interaction of Soldiers with the local populace among whom they operate has positive effects. Such interaction amplifies positive actions, counters threat information, and increases goodwill and support for friendly missions. Actions in keeping with the commander's themes and messages demonstrated during operations provide an opportunity for persuasion, and reduce friction and mistrust. When conducting these meetings or engagements, never promise something you can't deliver.

7-119. Likewise, meetings and other engagements conducted by leaders with key communicators, civilian leaders, or others whose perceptions, decisions, and actions will affect mission accomplishment can be critical to mission success. These deliberate engagements provide the most convincing venue for conveying positive information, assuaging fears, and refuting rumors, lies, and misinformation. Conducted with detailed preparation and planning, both activities often prove crucial in garnering local support for Army operations, providing an opportunity for persuasion, and reducing friction and mistrust. Never promise something you can't deliver.

7-120. SBCT weapons troop commander and subordinate leaders use information shaped by intelligence to inform, influence, and persuades the local populace within limits prescribed by their higher headquarters, other authoritative guidance, and U.S. law. They integrate inform and influence with stability tasks. They do this to counter false and distorted information and propaganda according guidance of higher headquarters. Within the limits of OPSEC, leaders make the populace aware of the techniques used to provide security and control. Actions on the ground reinforced by a clear and consistent message produce transparency. This transparency reinforces credibility. Credibility reflects the populace's assessment of whether the force can accomplish the mission. Leaders must leave no doubt as to their capability and intentions.

7-121. SBCT weapons troop leaders are not restricted to the above listed components when conducting information operations and may add or subtract information-related capabilities as the situation dictates. Information-related capabilities can support information operations include combat camera, CA operations, cyber/electromagnetic activities, operations security, and other military actions as designated by the company commander. (Refer to FM 3-13 for more information.)

CONDUCT NEGOTIATIONS

7-122. The SBCT weapons troop leaders may face a number of situations in which they need to conduct negotiations. There are two general types of negotiations, situational and planned. Units conduct situational negotiations in response to a requirement for on-the-spot discussion and resolution of a specific issue or problem. (Example, a unit is patrolling its AO when a local official approaches it; the local official wishes to discuss an assault that occurred in the area.) Units conduct planned negotiations when they foresee a problem, or identify a situation that needs to be resolved through advanced planning or coordination. (Example, the platoon leader conducts a coordination meeting, otherwise known as key leader engagement between leaders of two belligerent groups to determine route clearance responsibilities.)

7-123. At the platoon level, situational negotiations are far more common than the planned type. In fact, employment in stability tasks requires the leader, his subordinate leaders, and other Soldiers to conduct some form of negotiations almost daily. This in turn requires them to have a thorough understanding of the ROE, rules of interaction (ROI), and understanding of themes and messages from the higher command.

7-124. Members of the SBCT weapons troop apply this working knowledge to the process of discussing and, whenever possible, resolving issues and problems may arise between opposing parties, which may include the platoon itself. A critical aspect of this knowledge is the negotiator's ability to recognize that he has exhausted his options under the ROE/ROI and turned the discussion over to a higher authority. Negotiations continue at progressive levels of authority until the issue is resolved.

COMBAT CAMERA

7-125. Combat camera units provide a powerful documentary and supports the components of information operations. Combat camera provides leaders with a directed imagery capability to DSCA operational and planning requirements. These forces use video documentation capabilities ranging from aerial photography to underwater photography to support information operations. They access areas and events inaccessible to other personnel or media. Furthermore, combat camera teams have a technological capability to transmit real-time images. The accurate portrayal provided by U.S. forces in action enables information operations section to reinforce other information-related capability efforts. Likewise, their documentation of operations and provided imagery products support countering misinformation or propaganda.

MILITARY DECEPTION

7-126. Military deception involves actions executed to deliberately mislead threat military, paramilitary, or violent extremist organization decision makers. This information-related capability intends the threat to take specific actions (or inactions) contributing to accomplishment of the friendly mission. Military deception does not fall under the direct purview of the MISO but is considered a primary influencing capability of information operations.

7-127. Military deception comprises counter deception, deception in support of operations security, and tactical deception.

CYBER ELECTROMAGNETIC ACTIVITIES

7-128. Given the dependence on cyberspace and the electromagnetic spectrum, leaders at all levels fully integrate cyber/electromagnetic activities within the overall operation. The components of cyber/electromagnetic activities are—cyber situational awareness, network operations, cyber warfare, electronic attack, electronic protection, electronic support, and electromagnetic spectrum operations. (Refer to ATP 3-36 for more information.)

OPERATIONS SECURITY

7-129. Operations security information-related capabilities deny threat and enemy's information in turn influences their decision making process. Operations security is the process by which the Army protects human and automated decision making in peacetime and in conflict. It is a commander's responsibility and is supported by every Soldier and supporting civilian staff members and operators. Operations security aims to enhance the probability of mission success by preserving the advantages of initiative secrecy and surprise. Operations security is a force multiplier. It includes reducing predictability and eliminating indicators of operations. Leaders use operations security countermeasures to deny threat knowledge of friendly operations,

requiring threat to expend further resources to obtain the critical information needed to make decisions. (Refer to FM 3-13 for more information.)

SECTION V – SPECIAL OPERATIONS FORCES

7-130. Special Forces may operate with the SBCT weapons troop or within their area of operation and with units conducting operations inside a joint special operations area. Physical contact between SF operation units may range from short-term direct action operations to sustained combat operations. It is essential to conduct adequate coordination and integration to accomplish the specific mission. Special forces operations have several elements to aid in coordination at the battalion level and above.

7-131. As part of the SBCT, the weapons troop may conduct operations with or in support of SOF in the OE. Detailed planning and coordination may be required. In today's OE, the weapons troop may find SOF operating within or near its area of operation. To maximize their combined combat power, these forces need to share an appreciation and understanding of each other's mission, purpose, capabilities, and limitations. For more information. (Refer to ADP 3-05, ADRP 3-05, and FM 3-05 for more information.)

7-132. When operating with or near SOF, the SBCT weapons troop commander should coordinate, at a minimum, the following with the SOF unit leader:

- Mission command relationship.
- Communication information (frequencies, call signs, challenge and passwords, emergency signals and codes).
- Safe house locations.
- Number and types of vehicles.
- Control measures being used.
- Battle handover criteria.
- Liaisons.
- Sustainment plans.
- Contingency plans for mutual support.

SECTION VI – CIVIL AFFAIRS

7-133. CAO performed or supported by CA personnel and organizations enhance the relationship between military forces and indigenous populations and institutions in areas where military forces are present. The goal is to facilitate military operations and to consolidate and achieve U.S. objectives. These operations may occur before, during, or after military actions. They may occur, if directed, in the absence of other military operations. CAO is aligned as an additional task under mission command warfighting function (Refer to FM 3-57 for more information).

CIVIL-MILITARY OPERATIONS

7-134. Tactical-level civil-military operations (CMO) include support of stakeholders at local levels, and promoting the legitimacy and effectiveness of U.S. presence and operations between locals, while minimizing friction between the military and the civilian organizations in the field. These may include local security operations, processing, and movement of displaced civilians, project management and project nomination, civil reconnaissance, and basic health service support. (Refer to JP 3-57 for more information.)

CIVIL AFFAIRS

7-135. CAO are those military actions planned, or executed and assessed by CA forces to enhance CMO in support of unified land operations. The purpose of CA operations is to modify behaviors and mitigate or defeat underlying causes of instability within civil society. These operations are conducted throughout the range of military operations, support the commander's civil-military operations plan and they are fundamental to executing stability tasks.

7-136. CA units establish, maintain, influence, or exploit relations between military forces and the indigenous populations and institutions where military forces are located. CA units conduct CAO in

coordination with civil authorities (both government and nongovernment) and the civil populace in a friendly, neutral, or hostile AO. This coordination facilitates military operations and consolidates civil component operational objectives. CA units are designed for employment independently, attached OPCON, or tactical control to other forces. The most commonly encountered element from a CA organization is civil affairs team. The c is structured to assess and provide recommendations on the immediate needs of the HN indigenous populations and institutions by executing CAO in support of the commanders' operations plan. At the platoon level, the typical relationship with the CATs is one of providing security support during CAO in high threat areas.

7-137. At the tactical level, the primary focus of CA forces is to plan, assess, and execute CAO to assist in the stabilization of the indigenous population and institutions within the area of operations. Stability tasks emphasize nonlethal, constructive actions by Soldiers working with the indigenous population and institutions to promote a safe and secure environment and facilitate reconciliation among local or regional adversaries. In operations focused on stability tasks, CA forces work with indigenous population and institutions, unified action partners, and the interagency to enhance the HN government's legitimacy. A framework for evaluating civil considerations in support of stability operations is areas, structures, capabilities, organizations, people, and events. (Refer to FM 3-07 for more information.) Each consideration is described as follows:

- **A**reas. Determine the geographic variations in the area of responsibility, their potential military impact, and how they influence how people live.
- **S**tructures. Describe the man-made structures in which the people live and work; determine those having cultural, religious, and economic significance.
- **C**apabilities. Determine the ability of various groups to influence the AO and the rest of the population relative to their possible intent to do so-determine economic and military potential given the areas and infrastructure.
- **O**rganizations. Determine what informal and formal social, religious, familial, or political organizations exist and what their intent, purpose, and resources are.
- **P**eople. Determine how the population aligns with organizations and one another; determine if they are likely to be supportive, detrimental, or neutral to the unit's mission.
- **E**vents. Create significant population event template and determine if future activity can be predicted based on pattern analysis.

7-138. While CA forces are organized, trained, and equipped specifically to support CMO, other enablers performing CMO include MISO, SOF, legal support, PA, engineer, transportation, Army health system, military police, security forces, and maneuver units.

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Chapter 8
Tactical Enabling Tasks

Tactical enabling operations are specialized missions that units plan and conduct to achieve or sustain a tactical advantage. Units execute these operations as part of offensive, defensive, or stability tasks. The fluid nature of OE increases the frequency with which the SBCT weapons troop conducts these tactical operations. This chapter discusses assembly area operations, patrols, relief in place, passage of lines, linkup operations, breaching operations, gap crossing and troop movement.

SECTION I – ASSEMBLY AREA

8-1. An assembly area is an area a unit occupies to prepare for an operation (FM 3-90-1). Ideally, an assembly area provides—

- Concealment from air and ground observation.
- Adequate entrances, exits, and internal routes.
- Space for dispersion; each assembly area is separated by enough distance from other assembly areas to avoid mutual interference.
- Cover from direct fire.
- Good drainage and soil conditions that can sustain the movement of the unit vehicles and individual Soldier.
- Terrain masking of electromagnetic signatures.
- Terrain allowing observation of ground and air avenues into the assembly area.
- Sanctuary from enemy medium-range artillery fires because it is located outside the enemy's range.

8-2. The proper location of assembly areas contributes significantly to both security and flexibility. It should facilitate future operations so movement to subsequent positions can take place smoothly and quickly by concealed routes. The mobility of the SBCT weapons troop allows it to occupy assembly areas at greater distances from the LD.

QUARTERING PARTY EMPLOYMENT

8-3. Usually, the SBCT weapons troop employs a quartering party (also known as an advance party) to assist in the occupation of an assembly area. A quartering party is a group of unit representatives dispatched to a probable new site of operations in advance of the main body to secure, reconnoiter, and organize an area prior to the main body's arrival and occupation (FM 3-90-2).

8-4. The SBCT weapons troop establishes the quartering party according to their SOPs. For example, the quartering party could consist of one vehicle from a platoon and a vehicle from the headquarters section. The SBCT weapons troop XO, 1SG, or a senior NCO usually leads the quartering party. The quartering party's actions at the assembly area include the following:

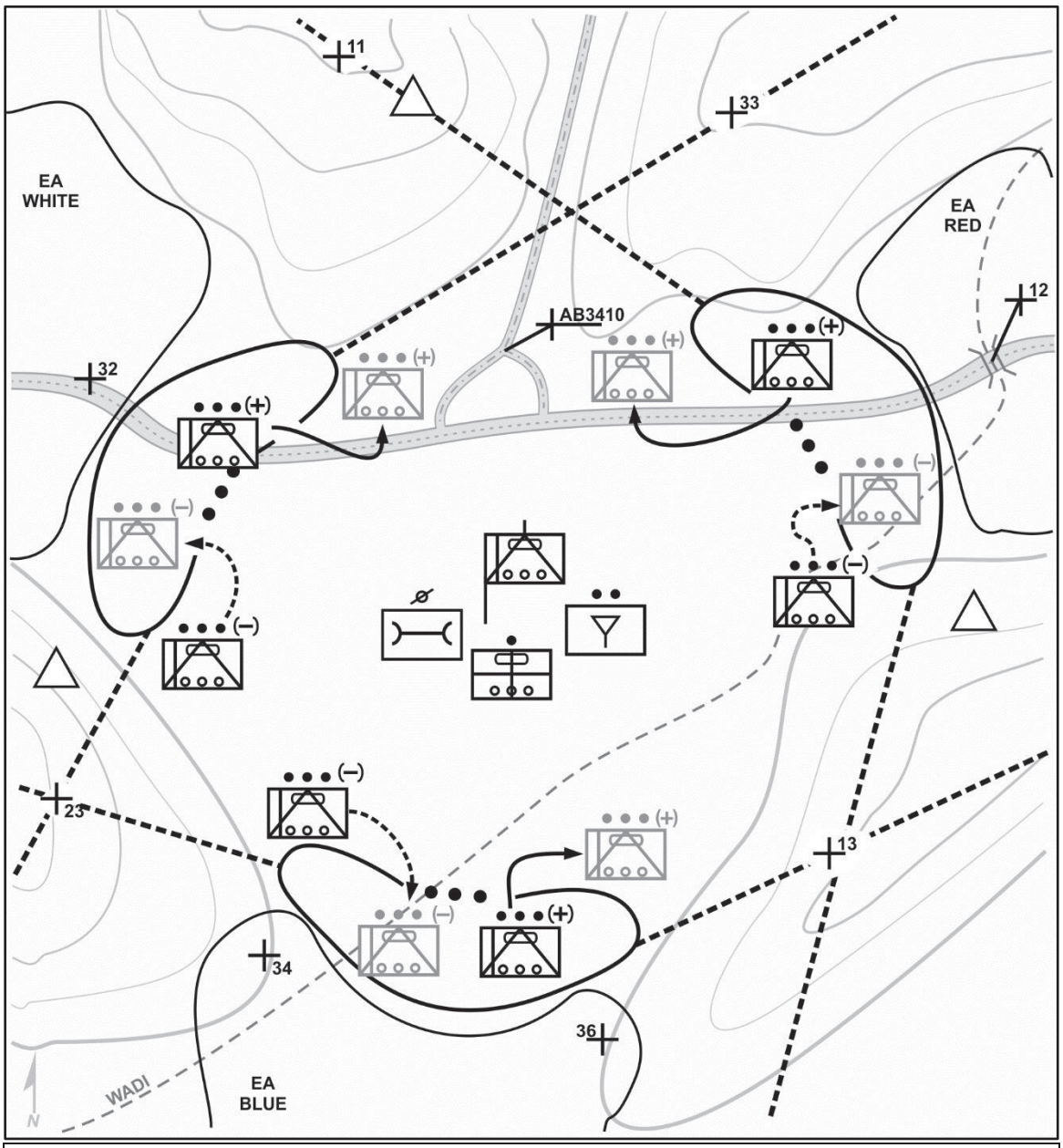
- Reconnoiter for enemy forces and CBRN contamination.
- Evaluate the condition of the route leading into the assembly area and the suitability of the area (drainage, space, internal routes).
- Organize the area based on the commander's guidance; designate and mark tentative locations for platoons' vehicles, command post vehicles, and trains.
- Improve and mark entrances, exits, and internal routes.

- Mark bypasses or reduces obstacles (within the party's capabilities).
- Develop digital assembly area overlay and send overlays to SBCT weapons troop main body and task force main command post.

OCCUPATION OF THE ASSEMBLY AREA

8-5. Once the quartering party finishes preparing the assembly area, the quartering party awaits the arrival of the SBCT weapons troop main body, maintaining surveillance and providing security of the area within its capabilities. The main body is the principal part of a tactical command or formation. It does not include detached elements of the command, such as advance guards, flank guards, and covering forces. (FM 3-90-1). SOPs and guides assist vehicle commanders to quickly find their positions, clear the route, and assume designated positions in the assembly area. (See figure 8-1.)

8-6. The SBCT weapons troop may occupy the assembly area as an independent element or as part of the larger one. In either situation, the weapons troop occupies its positions upon arrival using the procedures for hasty occupation of a BP. The commander establishes local security and coordinates with adjacent units. He assigns weapons orientation and sector of fire for each platoon and subordinate element. If the SBCT weapons troop occupies the assembly area alone, it establishes a perimeter defense.



Legend: EA = engagement area

Figure 8-1. SBCT Weapons troop assembly area

ACTIONS IN THE ASSEMBLY AREA

8-7. Following occupation of the assembly area, the SBCT weapons troop prepares for future operations by conducting TLPs and priorities of work according to the task force and the SBCT weapons troop OPORDs. These preparations include the following:

- Establish and maintain security (at the appropriate readiness level).
- Develop plan to displace the assembly area is it is attacked with chemical or indirect fire.
- Develop a defensive fire plan and forward it to the task force main CP via JCR/BFT, if equipped.
- Employ security patrols to clear dead space and restrictive terrain.

- Conduct troop leading procedures.
- Conduct precombat check and PCI based on time available.
- Perform maintenance on vehicles and communications equipment.
- Verify weapons system status; conduct bore sighting, prepare-to-fire checks, test-firing, and other necessary preparations.

Note. The SBCT weapons troop usually coordinates test firing of its machine guns with its higher headquarters.

- Weapons control status
- Conduct resupply, refueling and rearming operations.
- Conduct rehearsals and other training for upcoming operations.
- Conduct personal care and hygiene activities.
- Adjust task organization as needed.
- Account for SBCT weapons troop personnel, to include attachments and sensitive items.
- Reestablish vehicle load plans as needed.

SECTION II – PATROLS

8-8. A patrol is a detachment sent out by a larger unit to conduct a combat or reconnaissance mission. A patrol's organization is temporary and specifically matched to the immediate task. Because a patrol is an organization, not a mission, it is not correct to speak of giving a unit a mission to "*Patrol*." (Refer to ATP 3-21.8 for additional information about patrols.)

8-9. For the SBCT weapons troop a patrol can consist of a unit as small as a two vehicle section or as large as two platoons. Platoon-size patrols are normal and can mix MGS and ATGM sections if needed. If a patrol is made up of a single unit, such as a MGS platoon sent out on a reconnaissance patrol, the platoon leader is responsible. If a patrol is made up of mixed elements from several units, then the senior officer or NCO is designated as the patrol leader. This temporary title defines his role and responsibilities for that mission. The patrol leader may designate an assistant, normally the next senior man in the patrol, and any subordinate element leaders he requires.

8-10. The planned action determines the type of patrol. The two types of patrols are combat and reconnaissance. Regardless of the type of patrol, the unit needs a clear task and purpose. The leader of any patrol, regardless of the type or the tactical task assigned, has an inherent responsibility to prepare and plan for possible enemy contact while on the mission. Patrols are never administrative as they are always assigned a tactical mission. (Refer to ATP 3-21.8 for more information.)

COMBAT PATROL

8-11. A combat patrol provides security and harasses, destroys, or captures enemy troops, equipment, or installations. When the commander gives a unit the mission to send out a combat patrol, he intends for the patrol to make contact with the enemy and engage in close combat. A combat patrol always tries to avoid detection while moving, but discloses their location to the enemy in a sudden, violent attack. For this reason, the patrol normally carries a significant amount of weapons and ammunition. It may carry specialized munitions. A combat patrol collects and reports any combat information gathered during the mission, whether related to the combat task or not. The three types of combat patrols are as follows:

- Raid.
- Ambush.
- Security.

RECONNAISSANCE PATROL

8-12. A reconnaissance patrol collects combat information or confirms or disproves the accuracy of intelligence previously gained. The intent for this type of patrol is to avoid enemy contact and accomplish its tactical task without engaging in close combat. Reconnaissance patrols always try to accomplish their mission

without being detected or observed. Because detection cannot always be avoided, a reconnaissance patrol carries the necessary arms and equipment to protect itself and break contact with the enemy. A reconnaissance patrol is comprised of as few personnel, arms, and equipment as only necessary. This increases stealth and cross-country mobility in close terrain. Regardless of how the patrol is armed and equipped, the leader always plans for the worst case: contact. The three types of reconnaissance patrols Infantry units conduct are as follows:

- Route.
- Area.
- Zone.

8-13. The SBCT weapons troop can only conduct route independently. Zone reconnaissance patrols must be task organized with Infantry or Cavalry.

SECTION III – RELIEF IN PLACE

8-14. A RIP is an operation in which, by the direction of higher authority, all or part of a unit is replaced in an area by the incoming unit. The responsibilities of the replaced elements for the mission and the assigned AO are transferred to the incoming unit. The incoming unit continues the operations as ordered (FM 3-90-1). The commander conducts a RIP as part of a larger operation, primarily to maintain the combat effectiveness of committed units. The higher headquarters directs when and where to conduct the relief and establishes the appropriate control measures. Normally, the unit relieved is defending. However, a relief may set the stage for resuming offensive tasks. A relief may serve to free the relieved unit for other tasks (such as decontamination, reconstitution, routine rest, resupply, maintenance, or specialized training). Sometimes, as part of a larger operation, the commander wants the enemy force to discover the relief, because that discovery might cause it to do something in response that is prejudicial to its interest, such as move reserves from an area where the friendly commander wants to conduct a penetration.

8-15. There are three techniques for conducting a relief—sequentially, simultaneously, or staggered. A sequential relief occurs when each element within the relieved unit is relieved in succession, from right to left or left to right, depending on how it is deployed. A simultaneous relief occurs when all elements are relieved at the same time. A staggered relief occurs when the commander relieves each element in a sequence determined by the tactical situation, not its geographical orientation. Simultaneous relief takes the least time to execute, but is more easily detected by the enemy. Sequential or staggered reliefs can take place over a significant amount of time. These three relief techniques can occur regardless of the range of military operations in which the unit is participating.

8-16. A relief can be characterized as either deliberate or hasty, depending on the amount of planning and preparations associated with the relief. The major differences are the depth and detail of planning and, potentially, the execution time. Detailed planning generally facilitates shorter execution time by determining exactly what the commander believes needs to be done and the resources needed to accomplish the mission. Deliberate planning allows the commander and staff to identify, develop, and coordinate solutions to most potential problems before they occur and to ensure the availability of resources when and where they are needed.

PLANNING

8-17. Once ordered to conduct a RIP, the commander of the relieving unit contacts the commander of the unit to be relieved. The collocation of unit CPs helps achieve the level of coordination required. If the relieved unit's forward elements can defend the AO, the relieving unit executes the RIP from the rear to the front. This facilitates movement and terrain management.

8-18. When planning for a RIP, the SBCT weapons troop commander takes the following actions:

- Issue an order immediately.
- Send an advance party composed of key leaders to conduct detailed reconnaissance and coordination.
- As the relieving unit, adopt the outgoing unit's normal pattern of activity as much as possible.

- As the relieving unit, determine when the SBCT weapons troop will assume responsibility for the outgoing unit's position.
- As the relieving unit, collocate company level headquarters with the relieved unit's headquarters.
- Maximize operations security to prevent the enemy from detecting the relief operation.

Note. Whenever possible, conduct the relief at night or under other limited visibility conditions.

- Plan for relief of sustainment elements after combat elements are relieved.
- As the unit being relieved, plan for transfer of excess ammunition, wire, petroleum, oil, and lubricants, and other material of tactical value to the incoming unit.
- Control movement by reconnoitering, designating, and marking routes, and providing guides.

COORDINATION

8-19. The incoming and outgoing commanders meet to exchange tactical intelligence, conduct a joint reconnaissance of the area, and complete other required coordination. The two commanders carefully address passage of command and jointly develop contingency actions to deal with enemy contact during the relief. This process usually includes coordination of the following information:

- Location of vehicle and individual fighting positions (to include hide, alternate, and supplementary positions). Leaders should verify fighting positions both by conventional map and on JCR/BFT (if equipped).
- The enemy situation.
- The outgoing unit's tactical plan, to include graphics, SBCT weapons troop fire plans, down to individual vehicles' sector sketches.
- Fire support coordination, to include indirect fire plans and the time of relief for supporting artillery and mortar units.
- Types of weapons systems being replaced.
- Time, sequence, and method of relief.
- Location and disposition of obstacles, and the time when the commanders will transfer responsibility.
- Supplies and equipment to be transferred.
- Movement control, route priority, and placement of guides.
- Command and signal information.

Note. Units conduct relief on the radio nets of the outgoing unit.

- Maintenance and logistical support for disabled vehicles.
- Visibility considerations.
- Capability gaps and recommendations to fill gaps if the Stryker Infantry rifle company is conducting relief with another non-Stryker organization.

CONDUCTING THE RELIEF

8-20. When conducting the relief, the outgoing commander retains responsibility for the AO and the mission. He exercises operational control over all subordinate elements of the incoming unit that have completed their portion of the relief. Responsibility passes to the incoming commander when all elements of the outgoing unit are relieved and adequate communications are established.

STAGGERED RELIEF

8-21. A staggered relief occurs when the commander relieves each element in a sequence determined by the tactical situation, not its geographical orientation and usually in situations where the commander desires to conceal the relief from the enemy (FM 3-90-1). The staggered relief often follows the sequence of the sequential relief.

SEQUENTIAL RELIEF

8-22. Sequential relief is the most time-consuming relief method. The relieving unit moves to an assembly area to the rear of the unit to be relieved. Subordinate elements are relieved one at a time. This can occur in any order, with the relief following this general sequence:

- The outgoing and incoming units collocate their headquarters and trains elements to facilitate mission command and transfer of equipment, ammunition, fuel, water, and medical supplies.
- The first element being relieved (such as a platoon) moves to its alternate fighting positions or battle positions while the relieving element moves into the outgoing element's primary fighting positions. The incoming element occupies vehicle and individual fighting positions as appropriate.
- Incoming and outgoing elements complete the transfer of equipment and supplies.
- The relieved element moves to the designated assembly area behind its position.
- Once each outgoing element clears the rally point en route to its assembly area, the next relieving element moves forward.

SIMULTANEOUS RELIEF

8-23. Simultaneous relief is the fastest, but least secure, method. All outgoing elements are relieved at once, with the incoming unit usually occupying positions, to include battle positions, and vehicle and individual fighting positions. The relief takes place in this general sequence:

- Outgoing elements move to their alternate BPs or vehicle and individual positions.
- Incoming elements move along designated routes to the outgoing elements' primary fighting positions.
- The units complete the transfer of equipment and supplies.
- Relieved elements move to the designated unit assembly area.

SECTION IV – PASSAGE OF LINES

8-24. *Passage of lines* is an operation in which a force moves forward or rearward through another unit's positions with the intent of moving into or out of contact with the enemy. A passage may be designated as a forward or rearward passage of lines (DOD Dictionary). Units usually conduct passage of lines when at least one METT-TC factor does not permit the bypass of a friendly unit. A passage of lines is a complex operation requiring close supervision and detailed planning, coordination, and synchronization between the battalion commanders of the unit conducting the passage and the unit being passed. The primary purpose of a passage of lines is to transfer responsibility (forward or rearward) for an area from one unit to another.

8-25. A passage of lines occurs under two basic conditions. A forward passage of lines occurs when a unit passes through another unit's positions while moving toward the enemy. A rearward passage of lines occurs when a unit passes through another unit's positions while moving away from the enemy (FM 3-90-1).

PLANNING CONSIDERATIONS

8-26. The controlling task force is responsible for planning and coordinating a passage of lines involving the SBCT weapons troop. In some situations, such as the SBCT weapons troop using multiple passage routes (that is, a separate route for each platoon), the weapons troop commander takes responsibility for planning and coordinating each phase of the operation.

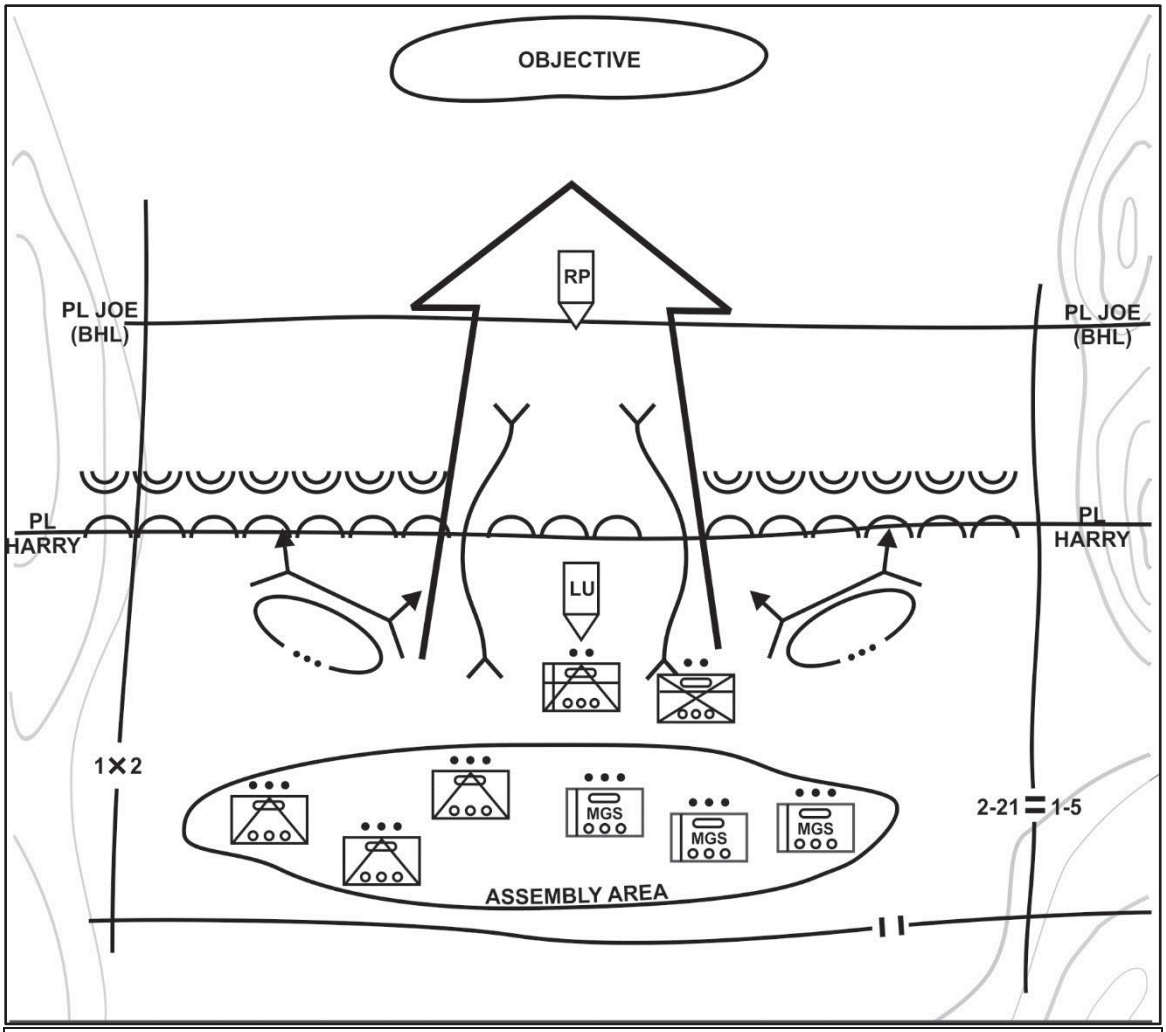
8-27. When planning a passage of lines, the commander considers the following tactical factors and procedures: passage lanes, use of deception, battle handover, obstacles, air defense, sustainment responsibilities, mission control, reconnaissance and coordination, forward passage of lines, and rearward passage of lines.

FORWARD PASSAGE OF LINES

8-28. In a forward passage, the passing unit first moves to an assembly area or an attack position behind the stationary unit. Designated liaison personnel move forward to link up with guides and confirm coordination

information with the stationary unit. Guides then lead the passing elements through the passage lane. (See figure 8-2.)

8-29. The SBCT weapons troop conducts a forward passage by employing tactical movement. It moves quickly, using appropriate dispersal and formations whenever possible, and using its digital communication systems to make initial contact. It bypasses disabled vehicles, as needed. The company holds its fire until it passes the BHL or the designated fire control measure, unless the commander has coordinated fire control with the stationary unit. Once clear of passage lane restrictions, the unit consolidates at a rally point or attack position, and then conducts tactical movement according to its orders.

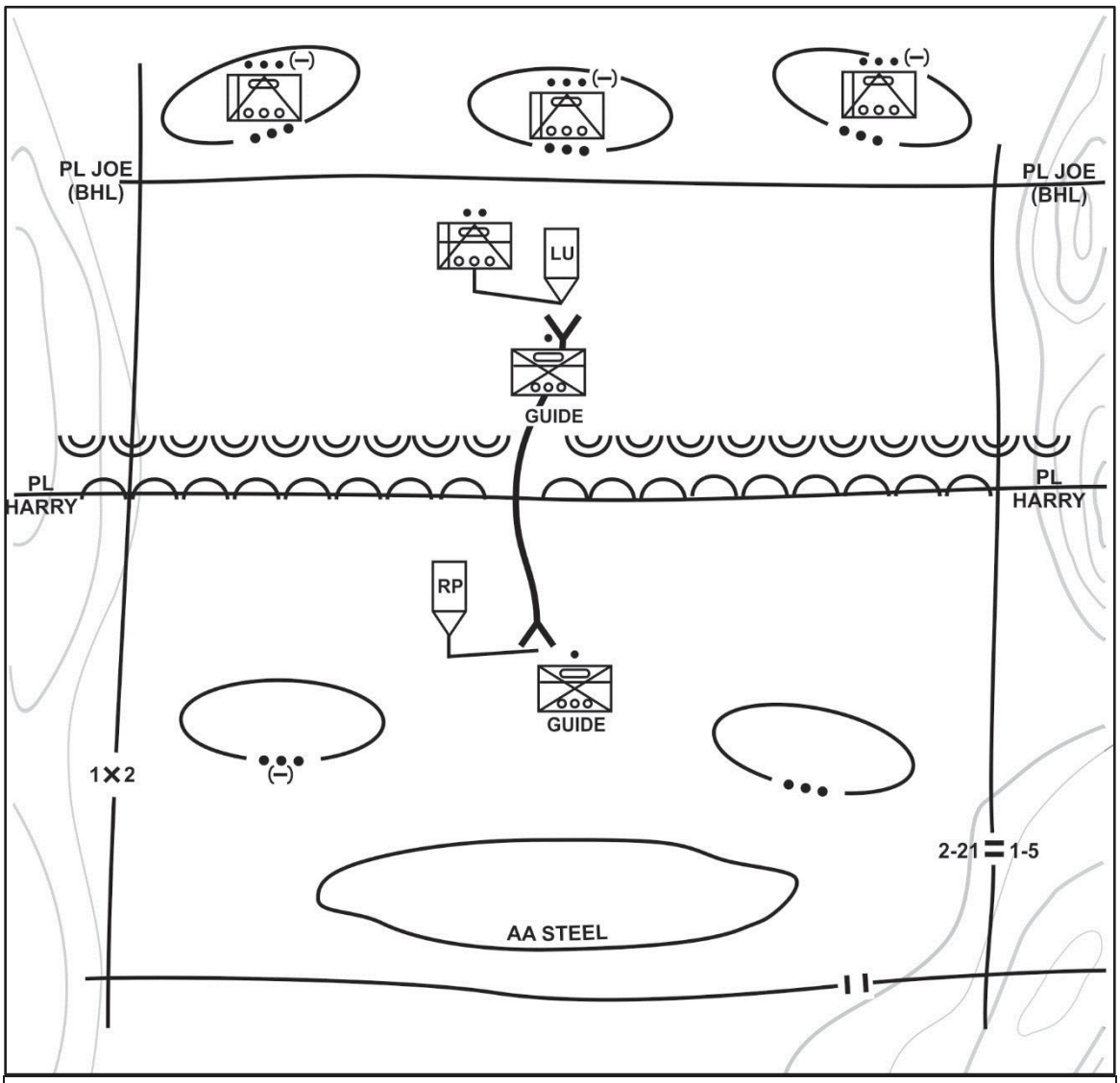


Legend: BHL = battle handover line, LU = linkup, MGS = mobile gun system, PL = phase line, RP = rally point, SP = start point

Figure 8-2. SBCT Infantry rifle company forward passage of line

REARWARD PASSAGE OF LINES

8-30. Because of the increased chance of fratricide and friendly fire during a rearward passage, coordination of recognition signals and direct fire restrictions is critical. (See figure 8-3.) Rehearsals and training can help reduce fratricide and friendly fire. The passing unit contacts the stationary unit while it is still beyond direct fire range and conducts coordination as discussed previously. Near recognition signals and location of the BHL are emphasized. Both the passing unit and the stationary unit can employ additional fire control measures, such as restrictive fire lines (RFL), to minimize the risk of fratricide and friendly fire.



Legend: AA= assembly area, BHL = battle handover line, LU = linkup, MGS = mobile gun system, RP = rally point

Figure 8-3. SBCT Infantry rifle company rearward passage of lines

8-31. Following coordination, the passing unit continues tactical movement toward the passage lane. The passing unit is responsible for its security until it passes the BHL. If the stationary unit provides guides, the passing unit can conduct a short halt to link up and coordinate with them. The passing unit moves quickly through the passage lane to a designated location behind the stationary unit.

8-32. Stationary unit and passing unit responsibilities. (See table 8-1.)

Table 8-1. Stationary and passing unit responsibilities

Stationary Unit	*Passing Unit*
Clears lanes or reduces obstacles along routes.	May assist with reducing obstacles
Provides obstacle and friendly units' locations.	Provides order of movement and scheme of maneuver.
Clears and maintains routes up to the battle handover (BHO) line.	May assist with maintaining routes.
Provides traffic control for use of routes and lanes.	Augments the traffic control capability of the stationary unit as required.
Provides security for the passage up to the BHO line.	Maintains protection measures.
Identifies locations for the passing unit to use as assembly areas and attack positions.	Assumes full responsibility for its own sustainment support forward of the BHO line.
Controls all fires in support of the passage.	Positions artillery to support the passage.

SECTION V – LINKUP

8-33. A linkup is a meeting of friendly ground forces, which occurs in a variety of circumstances (FM 3-90-1). It happens when an advancing force reaches an objective area previously seized by another force, when an encircled force breaks out to rejoin friendly forces, or when a force comes to the relief of an encircled force, and when converging maneuver forces meet. Both forces may be moving toward each other, or one may be stationary. Whenever possible, joining forces exchange as much information as possible before starting a mission.

8-34. The headquarters ordering the linkup establishes—

- A common operational picture.
- Command relationship and responsibilities of each force before, during, and after linkup.
- Coordination of fire support before, during, and after linkup, to include control measures.
- Linkup method.
- Recognition signals and communication procedures to use, to include pyrotechnics, armbands, vehicle markings, weapon orientation, panels, colored smoke, lights, and challenge and passwords.
- Actions to conduct following linkup.

CONTROL MEASURES

8-35. The commander who orders the linkup establishes control measures for units conducting the linkup. He assigns each unit an AO defined by left and right boundaries and a restricted fire line. He establishes a no-fire area around one or both companies to ensure that uncleared air-delivered munitions or indirect fires do not cross either the RFL or a boundary and impact friendly forces.

8-36. The restricted fire line assists with the prevention of fratricide. The linkup forces use the linkup points established by the commander to make physical contact with each other. The commander designates alternate linkup points, since enemy action may interfere with the primary linkup points. Control measures are adjusted during the mission to provide for freedom of action and positive control.

EXECUTION

8-37. There are two linkup techniques. The preferred method is when the moving force has an assigned limit of advance near the other force and conducts the linkup at predetermined contact points. Units then coordinate further actions.

8-38. The least preferred method of linkup a commander can use during highly mobile or fluid operations is when the enemy force escapes from a potential encirclement or when one of the linkup forces is at risk and requires immediate reinforcement. In this method, the moving force continues to move and conduct long-range recognition via radio or other measures, stopping only when it makes physical contact with the other force.

PHASES OF THE LINKUP

8-39. The SBCT weapons troop conducts linkup activities independently or as part of a larger force. Within a larger unit, the SBCT weapons troop may lead the linkup force. The linkup consists of three phases. The following actions are critical to the execution of a successful linkup.

PHASE 1, FAR RECOGNITION SIGNAL

8-40. During this phase, the forces conducting a linkup establish both FM radio and digital communications before reaching direct fire range. The lead element of each linkup force should monitor the radio frequency of the other friendly force and its digital communications for messages.

PHASE 2, COORDINATION

8-41. Before initiating movement to the linkup point, the forces coordinate necessary tactical information/intelligence that includes the following:

- Known enemy situation.
- JCR/BFT (if equipped) filter setting and address book commonality.
- Type and number of friendly vehicles and number of vehicles equipped with JCR/BFT.
- Disposition of stationary forces (if either unit is stationary).
- Routes to the linkup point and rally point (if any).
- Direct and indirect fire control measures.
- Near recognition signal(s).
- Communications information.
- Sustainment responsibilities and procedures.
- Finalized location of the linkup point and rally point(s) (if any).
- Any special coordination, such as those covering maneuver instructions or requests for medical support.

PHASE 3, MOVEMENT TO THE LINKUP POINT AND LINKUP

8-42. All units or elements involved in the linkup enforce strict fire control measures to help prevent fratricide and friendly fire. Moving or converging forces must easily recognize linkup points and RFL. Linkup elements take the following actions:

- Conduct far recognition using FM radio or JCR/BFT (if equipped).
- Conduct short-range (near) recognition using the designated signal.
- Complete movement to the linkup point.
- Establish local security at the linkup point.
- Conduct additional coordination and linkup activities, as needed.

SECTION VI – BREACHING

8-43. Breaching is a synchronized combined arms operation under the control of the maneuver commander. Whenever possible, units should bypass obstacles, enabling it to maintain the momentum of the operation.

Commanders ensure that conducting the bypass provides a tactical advantage without exposing the unit to unnecessary danger. Breaching begins when friendly forces detect an obstacle. Breaching ends when friendly forces destroy the enemy on the far side of the obstacle, or when battle handover has occurred between a unit conducting the breaching and follow-on forces. Successful obstacle breaching depends on the SBCT units effectively applying the breaching fundamentals of SOSRA. Deliberate, hasty (includes in-stride), and covert are the three general types of breaching operations. (Refer to ATP 3-34.22 for more information.)

BREACHING TENETS

8-44. Successful breaching is characterized by applying breaching tenets. These tenets should be applied whenever an obstacle is encountered in the AO, whether during an attack or a route clearance. The tenets are—

- Intelligence.
- Breaching fundamentals.
- Breaching organization.
- Mass.
- Synchronization.

INTELLIGENCE

8-45. Success depends largely on the force commander's ability to see the AO. He identifies how the enemy is using the terrain to minimize the risk of surprise. This is particularly true when attempting to counter the enemy's use of obstacles. The IPB process allows the commander to visualize the enemy's position throughout the AO. During the IPB process, the situation template is developed. The situation template is a graphical depiction of assumed adversary dispositions based on that adversary's preferred method of operations, and the impact on the operational environment if the adversary should adopt a particular course of action. (Refer to ATP 2-01.3 for more information.)

BREACHING FUNDAMENTALS

8-46. SOSRA are the breaching fundamentals that are applied to ensure success when breaching against a defending enemy. These fundamentals always apply, but they may vary based on the mission variables. (See table 8-2, page 8-14.)

8-47. Suppression is a tactical task used to employ direct or indirect fires or an electronic attack on enemy personnel, weapons, or equipment to prevent or degrade enemy fires and observation of friendly forces (ATP 3-34.22). The purpose of suppression during breaching is to protect forces reducing and maneuvering through an obstacle. The MGS platoon is designed to provide majority of the direct fire suppression tasks with it 105-mm main gun, M240 COAX, and .50 cal (caliber). The ATGM's can assist with its TOW missiles aimed at hardened positions or armored vehicles overwatching the obstacle. Mortars and field artillery can provide indirect fire suppressing, obscuring, disrupting, or destroying enemy forces on the far side of the obstacle.

8-48. Obscuration is employed to protect forces conducting obstacle reduction and the passage of assault forces. Obscuration hampers enemy observation and target acquisition and conceals friendly activities and movement. Obscuration smoke deployed on or near the enemy's position minimizes its vision. Screening smoke employed between the reduction area and the enemy conceals movement and reduction activities. It also degrades enemy ground and aerial observations. Obscuration needs to be planned carefully to provide maximum degradation of enemy observation and fires, but it must not significantly degrade friendly fires and control. Sources of Smoke for the SBCT weapons troop can come from artillery, mortars, and smoke salvos on the Stryker vehicles. The mortars and field artillery can provide both suppression and obscuration during a breach if using smoke, white phosphorus and high explosive rounds.

8-49. Friendly forces secure the reduction area to prevent the enemy from interfering with obstacle reduction and the passage of the assault force through the lanes created during the reduction. Security needs to be effective against outposts and fighting positions near the obstacle and against overwatching units, as necessary. The far side of the obstacle is secured by fires or be occupied before attempting any effort to reduce the obstacle. The attacking unit's higher headquarters has the responsibility to isolate the breach area

by fixing adjacent units, attacking enemy reserves in depth, and providing counter-fire support. Identifying the extent of the enemy's defenses is critical before selecting the appropriate technique to secure the point of breach. If the enemy controls the point of breach and cannot be adequately suppressed, the force secures the point of breach before it can reduce the obstacle. The breach force is resourced with enough maneuver assets to provide local security against the forces that the support force cannot sufficiently engage. Elements within the breach force that secure the reduction area may be used to suppress the enemy once reduction is complete.

8-50. Reduction is the creation of lanes through or over an obstacle to allow an attacking force to pass. The number and width of lanes created varies with the enemy situation, the assault force's size and composition, and the scheme of maneuver. The lanes need to allow the assault force to rapidly pass through the obstacle. The breach force will reduce, proof (if required), mark, and report lane locations and the lane-marking method to higher headquarters. Follow-on units will further reduce or clear the obstacle when required. Reduction cannot be accomplished until effective suppression and obscuration are in place, the obstacle has been identified, and the point of breach is secure.

8-51. A breaching is not complete until—

- Friendly forces have assaulted to destroy the enemy on the far side of the obstacle that is capable of placing or observing direct and indirect fires on the reduction area.
- Battle handover with follow-on forces has occurred, unless no battle handover is planned.

BREACHING ORGANIZATION

8-52. The commander organizes friendly forces to accomplish the breaching fundamentals quickly and effectively. This requires him to organize support, breach, and assault forces with the necessary assets to accomplish their roles.

Support Force

8-53. The support force's primary responsibility is to eliminate the enemy's ability to interfere with a breach and is usually comprised of the MGS and ATGM platoon, and indirect fire support. This element may be augmented with Infantry to provide local security.

Breach Force

8-54. The breach force assist in the passage of the assault force by creating, proofing (if necessary), and marking lanes. This is usually comprised of an Infantry platoon, or platoons and engineer assets, if available. An MGS section or platoon may be attached to provide additional firepower at the breach point.

Assault Force

8-55. The assault force's primary mission is to destroy the enemy and seize terrain on the far side of the obstacle to prevent the enemy from placing direct fires on the created lanes. The Stryker vehicle is designed to provide protection to the point of deployment. It should not be used as a fighting vehicle to assault the objective on the far side of the breach. The weapons troop commander should make the determination based on mission variable of METT-TC to risk possible destruction of a Stryker vehicle to achieve speed and some protection for the assault force while moving through the breach to assault the objective.

CONDUCTING THE BREACH

8-56. Breaching entails the coordinated efforts of three task-organized elements: the support force, the breach force, and the assault force. The discussion in this section covers the actions and responsibilities of these elements role in the operation.

BREACHING ORGANIZATION

8-57. The commander in charge of the breach organizes forces to accomplish the five breaching fundamentals quickly and effectively.

Table 8-2. Relationship between breaching organization and breaching fundamentals

Breaching Organization	*Breaching Fundamentals*	*Responsibilities*
Support force	Suppress Obscure	Suppress enemy direct-fire systems covering the reduction area. Control obscuring smoke. Prevent enemy forces from repositioning or counterattacking to place direct fires on the breach force. Indirect fires can provide both suppression and obscuration simultaneously.
Breach force	Suppress (provides additional suppression) Obscure (provides additional obscuration in the reduction area) Secure (provides local security) Reduce	Create and mark the necessary lanes in an obstacle. Secure the nearside and far side of an obstacle. Defeat forces that can place immediate direct fires on the reduction area. Report the lane status/location.
Assault force	Assault Suppress (if necessary)	Destroy the enemy on the far side of an obstacle that is capable of placing direct fires on the reduction area. Assist the support force with suppression if the enemy is not effectively suppressed. Be prepared to breach follow-on or protective obstacles after passing through the reduction area.

Support Force

8-58. This element usually leads movement of the breach elements. After identifying the obstacle, it moves to covered and concealed areas and establishes SBF positions. The support force leader sends a voice or digital spot report to the commander. This report describes the location and complexity of the obstacle, the composition of enemy forces that are overwatching the obstacle, and the location of possible bypass. The commander decides whether to maneuver to a bypass or to breach the obstacle.

Note. He needs to keep in mind that a bypass may lead to an enemy engagement area.

8-59. In either case, the support force suppresses any enemy elements that are overwatching the obstacle to allow the breach force to breach or bypass the obstacle. The support force should be in position to request suppressive artillery fires and smoke for obscuration. As the breach and assault forces execute their missions, the support force lifts or shifts supporting fires. Because the enemy is likely to engage the support force with artillery, the support force needs to be prepared to move to alternate positions while maintaining suppressive fires.

Breach Force

8-60. The breach force receives a voice or digital spot report identifying the location of the obstacle or bypass. It then organizes internally to meet these responsibilities—

- Provide local security for the breach site as needed.
- Conduct the actual breach. The breach force creates, proofs, and marks a lane through the obstacle or secures the bypass.
- Move through the lane to provide local security for the assault force on the far side of the obstacle. In some instances, the breach force may move to firing positions that allow it to suppress enemy elements overwatching the obstacle. At other times, it may assault the enemy, with suppressive fires provided by the support force.

Breaching Methods

8-61. The SBCT weapons troop can create a lane by itself, if it is equipped with the assets and breach the type of obstacle encountered. If the SBCT weapons troop does not have this capability, it provides security with long range precision fires for attached Infantry, engineers with breaching assets. Three breaching methods are—

- Mechanical breaching, usually with mine plows, blades, rollers, or mine rakes.
- Explosive breaching, employing such means as the mine-clearing line charge (MICLIC), M173 line charge, the MK 7 Antipersonnel Obstacle Breaching System (APOBS), Bangalore torpedo, or hand emplaced explosives like C4 and TNT. The MGS and ATGM can also use this method for walls, structures, and buildings.
- Manual breaching, with Soldiers using such items as grappling hooks, shovels, picks, axes, wire cutters, chain saws, and other hand tools. This may include using logs, or other available items to conduct a breach of a wire obstacle. Manual breaching is the least preferred method.

8-62. In extreme cases, the commander may order an obstacle to be forced through. This technique requires the breach force to move in column formation through the obstacle location. If available, a disabled vehicle can be pushed ahead of the lead breach vehicle in an attempt to detonate mines or overrun barricades and wire obstacles.

Creating and Proofing the Lane

8-63. The mine plow and other engineer assets are the preferred breaching devices, but if they are not available the breach team may only have hand tools, picks, and shovels to create the lane. When properly equipped and supported, the platoon can create up to two lanes through an obstacle.

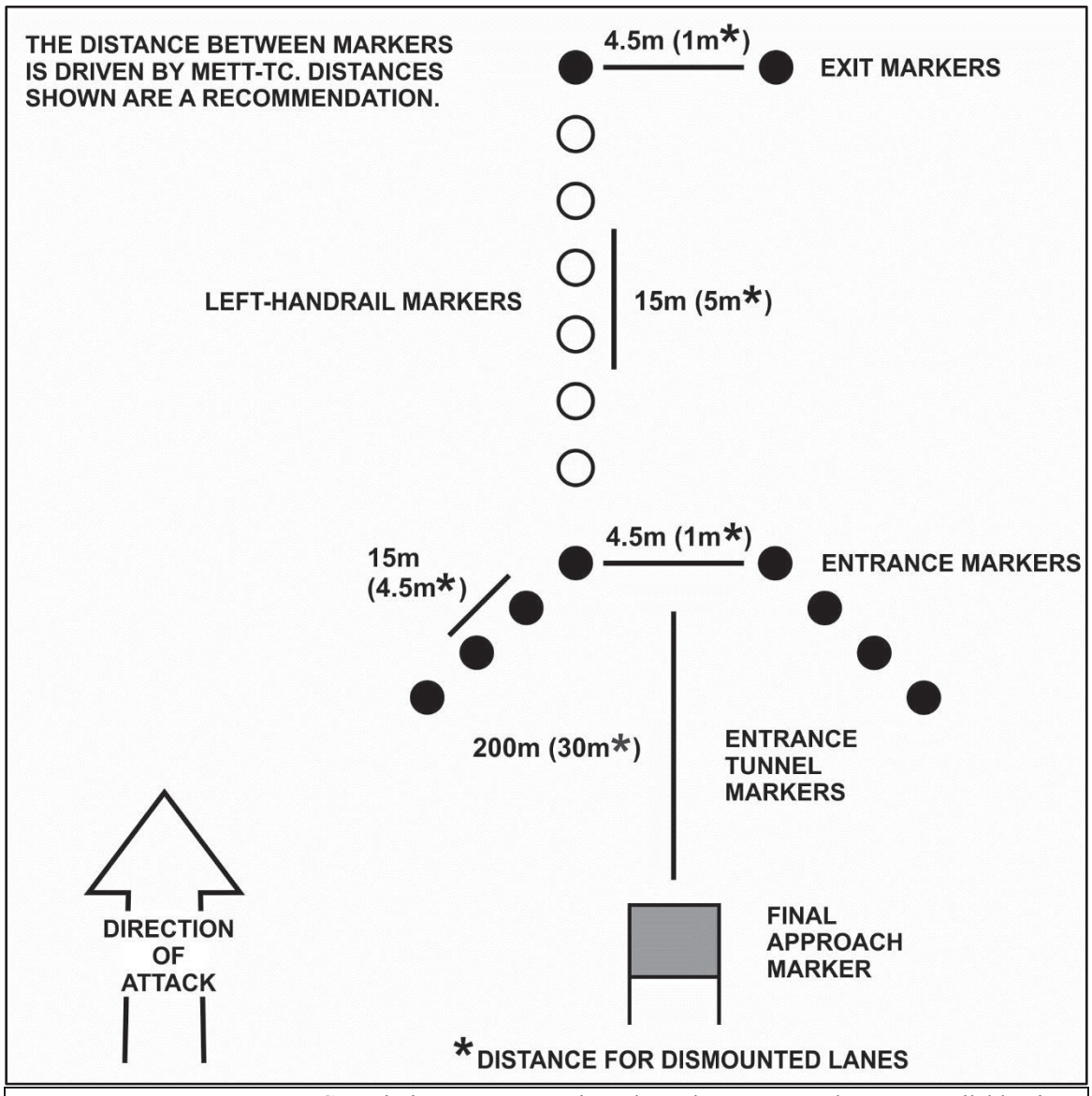
8-64. Proofing verifies that a lane is free of mines and that the width and trafficability of the point of breach are suitable for the assault force. Proofing can be conducted visually (against surface-laid minefields), electronically (mine detectors), or mechanically (mine clearing rollers) this process ensures that the lane is clear.

Marking the Lane

8-65. After the lane is created and proofed, it can then be marked to ensure safe movement by vehicles and personnel; this is critical for follow-on forces that may not know the exact location of the cleared lane. Distinctive markers show where the lane begins and ends. A visible line along the left hand side of the proofed lane is effective. Follow on forces can mark both sides of the breached lane to eventually allow for two way traffic (See ATP 3-90.4 for more information).

8-66. To minimize the necessary breaching time, the proofing vehicle may simultaneously mark the lane. (See figure 8-4.) Unit SOPs will dictate marking methods and materials, which commonly include the following:

- Cleared lane mechanical marking system.
- Pathfinder system.
- Engineer stakes with tape.
- Guides.
- Chemical lights.
- Expended shell casings.



Legend: m = meter, METT-TC = Mission, enemy, terrain and weather, troops and support available, time available, and civil considerations

Figure 8-4. Initial lane marking

Completing the Breach

8-67. Throughout the operation, the breach element provides continuous updates of the breach force's progress to higher headquarters and other elements involved in the breach. They coordinate with the support force for suppressive fires.

8-68. After marking is complete, the breach element uses voice and JCR/BFT to report the location of the lane and the method of marking to expedite the movement of the assault force. Digital overlays enable units to move quickly to the breach lanes using the position navigation or global positioning system.

8-69. The assault force will often move behind the breach force and closely follow the breach vehicles through the new lane.

ASSAULT FORCE

8-70. While the breach is in progress, the assault force assists the support force or follows the breach force while maintaining cover and dispersion. Once a lane is cleared through the obstacle, the assault force then moves through the breach. It secures the far side of the obstacle by physical occupation or continues the attack according to the commander's intent.

ATTACHMENTS

8-71. The types and quantities of these attachments depend on the mission and the number, size, and type of organizations requiring support. These attachments and assets are used to breach and reduce obstacles.

Engineer Squad

8-72. The most versatile of all breaching assets, the engineer squad can conduct explosive or manual breaches, proof and mark lanes through an obstacle, and provide guides during breaching. While it conducts breaching and proofing, the squad is vulnerable to enemy direct and indirect fires, and is secured by the higher, supporting, or requesting unit due to the engineer squad's limited capabilities. The engineer squad will probably have limited capabilities.

MINE-CLEARING LINE CHARGE

8-73. Used to breach wire and mine obstacles, the MICLIC can be either towed or mounted. MICLICs can mount on the Assault Breacher Vehicle or an Armored Vehicle Launched MICLIC. Each vehicle can carry two MICLIC systems.

8-74. The charge creates two skip zones, where the mines are not detonated, on the right and left side of the center line of the cleared lane. The skip zones necessitate the proofing of all MICLIC lanes.

8-75. The MICLIC is effective against pressure-activated antitank mines and against mechanically activated antipersonnel mines. Effectiveness is limited against magnetically activated mines, to include scatterable mines, and those with multi-impulse (double-impact) or time-delay fuse. The MICLIC is not effective on severely broken ground where the line charge cannot lay flat. When detonated, the MICLIC has a danger area with a radius of 1600 meters.

SECTION VII – GAP CROSSING

8-76. Gap crossing is projecting combat power across a linear obstacle (wet or dry gap). It requires specific procedures, detailed planning, and technical support that differ from other tactical operations. The SBCT weapons troop and its elements can take part in two types of gap crossing operations: hasty and deliberate. The weapons troop usually participates in a hasty or deliberate gap crossing as part of a task force or larger element. (Refer to ATP 3-90.4 for more information.)

8-77. Because deliberate gap crossings generally involve multiple brigades, they are usually planned and coordinated by higher echelons. SBCT commanders may choose to conduct a hasty crossing when the momentum of the operation is maintained, when the banks are lightly held or undefended, and when sufficient engineer assets are available to support the crossing. Despite the use of the term "hasty," the commander uses all available time and assets to ensure that the conditions are set for the crossing. The crossing is similar to a breach in that suppression and obscuration normally precede any attempt to cross the obstruction.

HASTY GAP CROSSING

8-78. Hasty gap-crossings are decentralized operations to cross wet or dry gaps spanning typically 65 feet or less in width (such as canal, stank or irrigation ditches, railroad cuts, or rivers). Depth and width of the gap, bank conditions, stream velocity and available assets determine the required crossing equipment and techniques. These operations include crossing by tactical bridging, vehicle swimming or fording operations, employing earthmoving equipment (like the deployable universal combat earthmover or high mobility engineer excavator) or by expedient methods if the objective area is close to the gap crossing point.

8-79. The task force commander organizes his units into assault, assured mobility, and bridgehead and breakout forces. The SBCT weapons troop prepares to execute any of these missions the same as participating in a breach.

ASSAULT FORCE

8-80. The assault force conducts the initial assault across the body of water dismounted. Assault boats, air assault aircraft transport, or rope bridge are used by the assault force to cross the body of water. The assault force usually seizes immediate objectives on the far side to secure the crossing site for other elements. If it has the capability, the assault force then continues the advance from the exit bank to the final objective. Infantry elements establish local security on the exit bank to permit development of the crossing site. Engineers move with the assault force to breach obstacles and open or improve trails.

ASSURED MOBILITY FORCE

8-81. The assured mobility force comprises engineer elements, MGS and ATGM, and mission command elements. It develops the crossing site, emplaces the crossing means usually the Rapid Emplaced Bridging System (REBS) organic to the engineer company (if applicable), and controls units moving into and away from the crossing site. The controlling commander may position the assured mobility force where it can assist the assault force in the direct assault on the crossing site. The engineers provide the following types of support for crossing operations to:

- Improve mobility and reduce obstacles at the entrance and exit to the crossing site.
- Improve fording sites.
- Emplace assault boats, rafts, ferries, or bridges as the means of crossing the body of water. Bridges used by supporting engineers include the REBS, armored vehicle launched bridge, Wolverine, and ribbon or medium girder bridges. Engineers might repair a bridge so that it can support the crossing operation.

BRIDGEHEAD AND BREAKOUT FORCE

8-82. As part of the bridgehead and breakout force, the SBCT weapons troop primary mission is to provide support by fire as the bridgehead force moves to the far side of the water obstacle and seizes its immediate objectives. Once the bridgehead force has seized a bridgehead on the far side of the objective elements of the SBCT weapons troop may move across the wet gap to provide more firepower to the bridgehead or breakout forces.

SECTION VIII – TROOP MOVEMENT

8-83. *Troop movement* is the movement of troops from one place to another by any available means (ADRP 3-90). The ability of a commander to posture friendly forces for a decisive or shaping operation depends upon the commander's ability to move that force. The essence of battlefield agility is the capability of conducting rapid and orderly movement to concentrate combat power at decisive points and times. Successful movement places troops and equipment at their destination at the proper time, ready for combat. There are three types of troop movement: administrative movement, tactical road march, and approach march (Refer to FM 3-90-2 for more information).

METHODS OF MOVEMENT

8-84. Troop movements are made by dismounted and mounted marches using various combinations of organic combat and tactical vehicles, air, rail, and water means. The method employed depends upon the

situation, size and composition of the moving unit, distance the unit covers, urgency of execution, and the condition of the troops. It depends on the availability, suitability, and capacity of the different means of transportation.

TACTICAL ROAD MARCH

8-85. A *tactical road march* is a rapid movement used to relocate units within an area of operations to prepare for combat operations (ADRP 3-90). The primary consideration of the tactical road march is rapid movement. However, the moving force employs security measures even when contact with enemy ground forces is not expected. Stryker units conduct tactical road marches and approach marches.

8-86. Units conducting road marches may or may not be organized into a combined arms formation. During a tactical road march, the commander is always prepared to take immediate action if the enemy attacks.

ORGANIZATION

8-87. The commander organizes a march column into four elements: reconnaissance, quartering/advance party, main body, and trail party. These elements are further organized with considerations concerning vehicles that have similar rates of march, levels of fuel consumption, maintenance and recovery. All elements of a march column use the same route for a single movement. The task force may designate an alternate route for more than one column.

8-88. March column subordinate elements are a march serial and a march unit. A march serial is a major subdivision of a march column that is organized under one commander who plans, regulates, and controls the serial. An example is a battalion serial formed from a brigade-size march column. It moves and halts under the control of a single commander who uses digital, FM, voice and visual signals.

APPROACH MARCH

8-89. An *approach march* is the advance of a combat unit when direct contact with the enemy is intended (ADRP 3-90). A unit using an approach march moves in a task-organized tactical formation to its destination. The approach march is used when the enemy's approximate location is known, allowing the force to move with greater speed and less physical security or dispersion. It is like the movement to contact, and may be used as a technique to conduct a movement to contact. The approach march terminates in a march objective, such as an attack position, assembly area, or assault position. It can be used to transition to an attack. An approach march employs security forces (advance, flank, and rear) based upon the threat situation.

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Chapter 9
Direct Fire Planning and Control

Suppressing or destroying the enemy with direct fires is fundamental to success in the SBCT weapons troop role in combat. Direct fire is inherent in maneuver (ADRP 3-0). The SBCT weapons troop commander effectively plans to focus, distribute, and shift the overwhelming mass of his direct fire capability at critical locations and times to succeed in combat. Efficient and effective fire control means that the troop acquires the enemy and masses the effects of direct fires to achieve decisive results. This chapter provides information about the principles of direct fire control, the fire control process, and direct fire planning.

SECTION I – FIRE CONTROL TECHNIQUES

9-1. Commanders and leaders continuously apply the steps of the fire control process to successfully bring direct fires against an enemy force. At the heart of this process are two critical actions: rapid, accurate target acquisition and the massing of fire to achieve decisive effects on the target. *Target acquisition* is the detection, identification, and location of a target in sufficient detail to permit the effective employment of weapons. Massing of fires is defined by the terminal effect on the enemy, not by the number of systems or rounds fired (DOD Dictionary).

9-2. Massing entails focusing fires at critical points and then distributing the fires for optimum effect. Firing at multiple targets in depth prevents the enemy from dealing with any single threat and maneuvering from massing his fires against it.

FIRE CONTROL PROCESS

9-3. The following discussion examines target acquisition and massing of fires using these basic steps of the fire control process:

- Identify probable enemy locations and determine the enemy scheme of maneuver.
- Determine where and how to mass fires.
- Orient forces to speed target acquisition.
- Shift or redistribute fires.

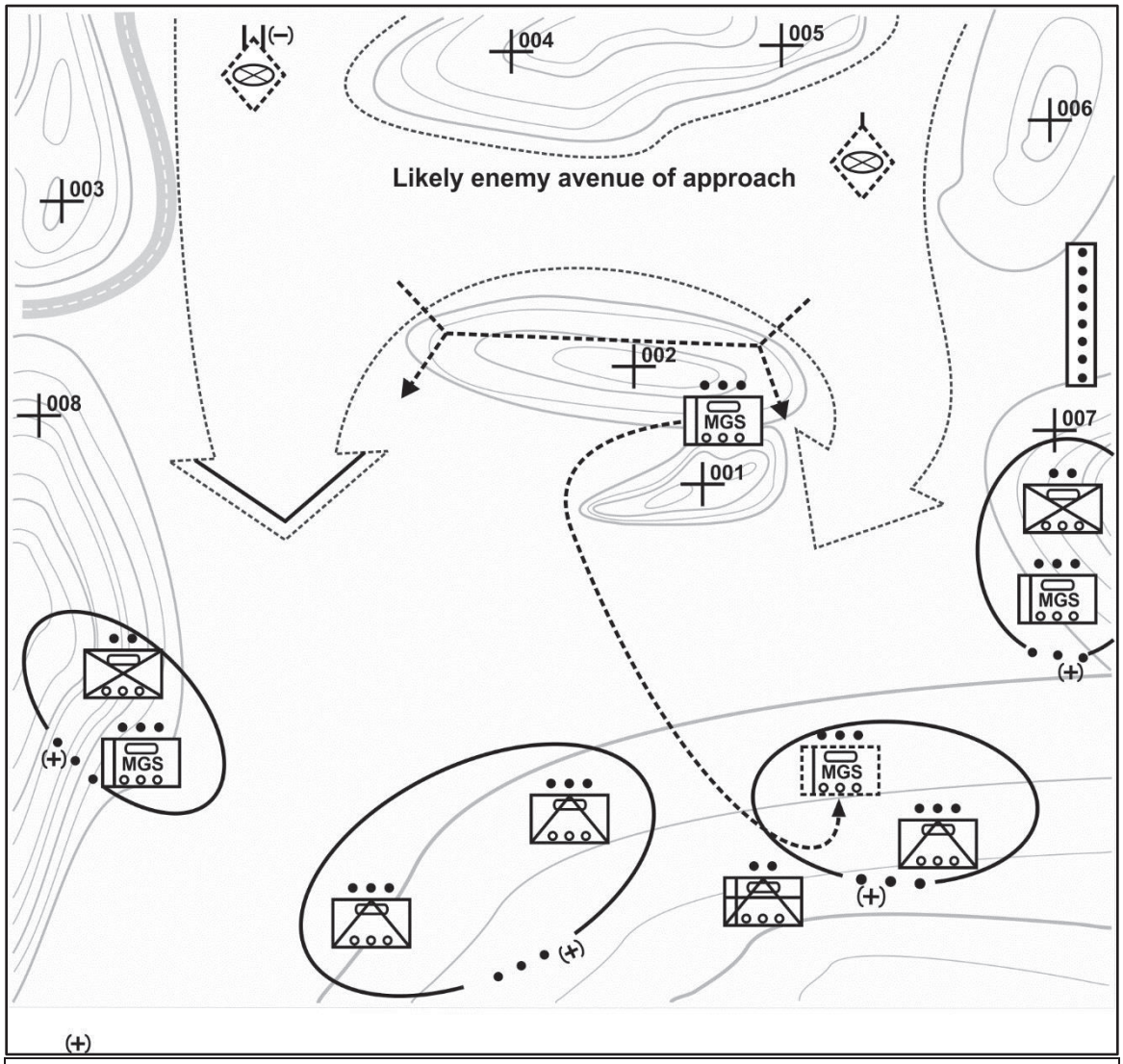
IDENTIFY PROBABLE ENEMY LOCATIONS AND DETERMINE THE ENEMY SCHEME OF MANEUVER

9-4. The commander and subordinate leaders plan and execute direct fires based on their estimate of the situation. An essential part of this estimate is the analysis of the terrain and the enemy force, which aids the commander in visualizing how the enemy will attack or defend a particular piece of terrain. (See figure 9-1, page 9-2.) A defending enemy's defensive positions or an attacking enemy's support positions are normally driven by intervisibility lines. Typically, there are limited points on a piece of terrain that provide both good fields of fire and adequate cover for a defender. Similarly, an attacking enemy has only a limited selection of avenues of approach that provides adequate cover and concealment.

9-5. Coupled with available information and intelligence, an understanding of the effects of a specific piece of terrain on maneuver assists the commander in identifying probable enemy locations and likely avenues of approach both before and during the fight. The commander may use any or all of the following products or techniques in developing and updating the analysis:

- An enemy situational template based on the analysis of terrain and enemy.

- A spot report or contact report on enemy locations and activities.
- Reconnaissance of the AO.



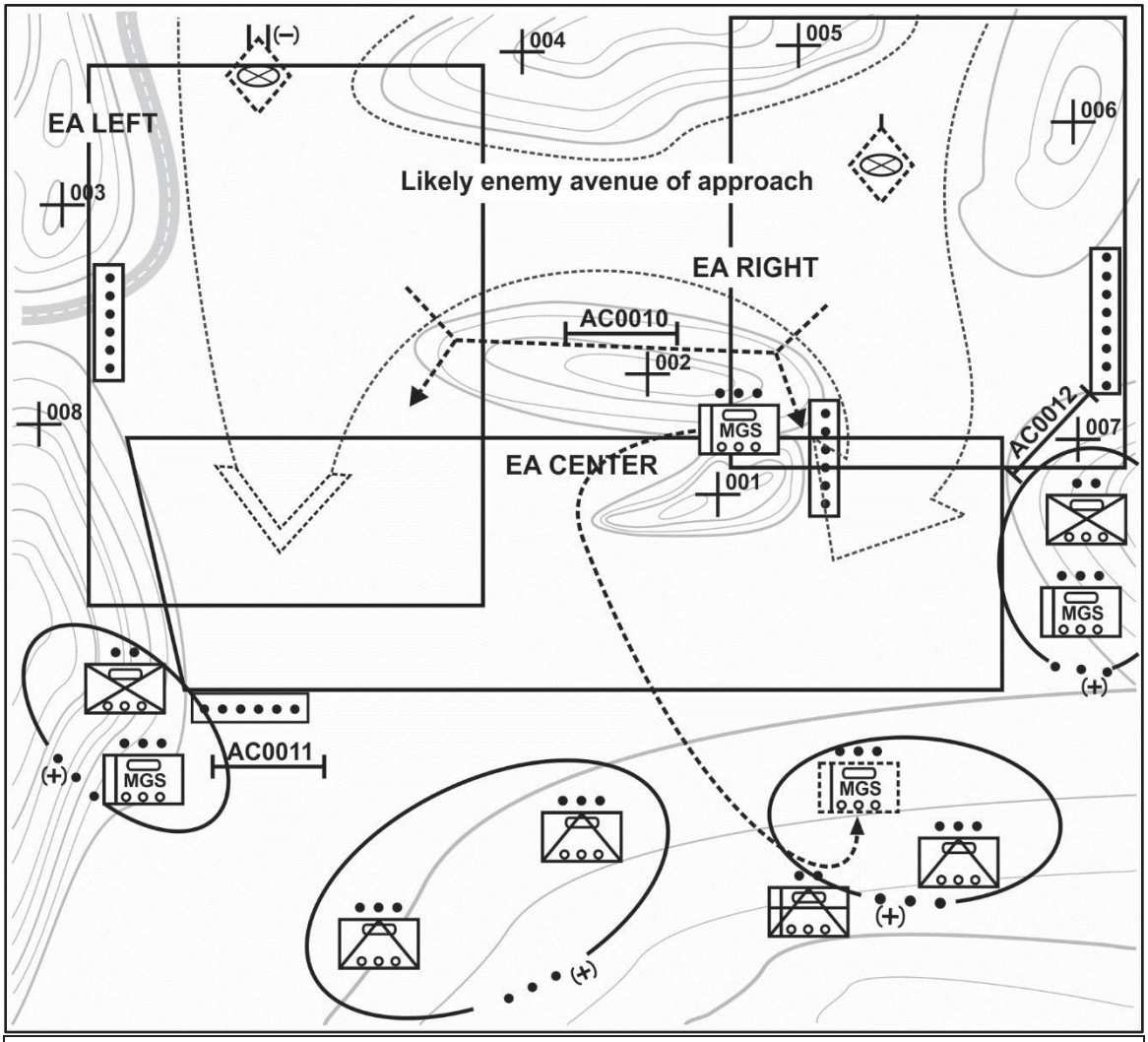
Legend: MGS = mobile gun system

Figure 9-1. Example of identifying probable enemy locations and determining enemy scheme of maneuver

DETERMINE WHERE AND HOW TO MASS FIRES

9-6. To achieve decisive effects, friendly forces need to mass their fires. Effective massing requires the commander both to direct the fires of subordinate elements and to distribute the effects of the fires. Based on his estimate of the situation and his concept of the operation, the commander identifies points where he wants to, or must, concentrate the unit's fires (see figure 9-2). Most often, these are locations he has identified as probable enemy positions or points along likely avenues of approach where the unit can mass direct fires. Because subordinate elements may not initially be oriented on the point where the commander wants to mass fires, he may issue a fire command to the fires. At the same time, the commander uses direct fire control measures and effectively distributes the fires of his elements, which are now focused on the same point.

9-7. To achieve the greatest mass effects the weapons troop commander balances the differences of the maximum effective ranges of the ATGM and MGS. Placing these weapon systems at equal distance from one another in firing position prevents a maximum effect of all fired munitions striking their targets simultaneously. Therefore weapon systems with shorter maximum effective engagement ranges should be in positions forward of ones with longer maximum effective engagement ranges. The weapons troop leadership should closely examine SDZ to ensure that firing positions are within safe distance of the engagement area.



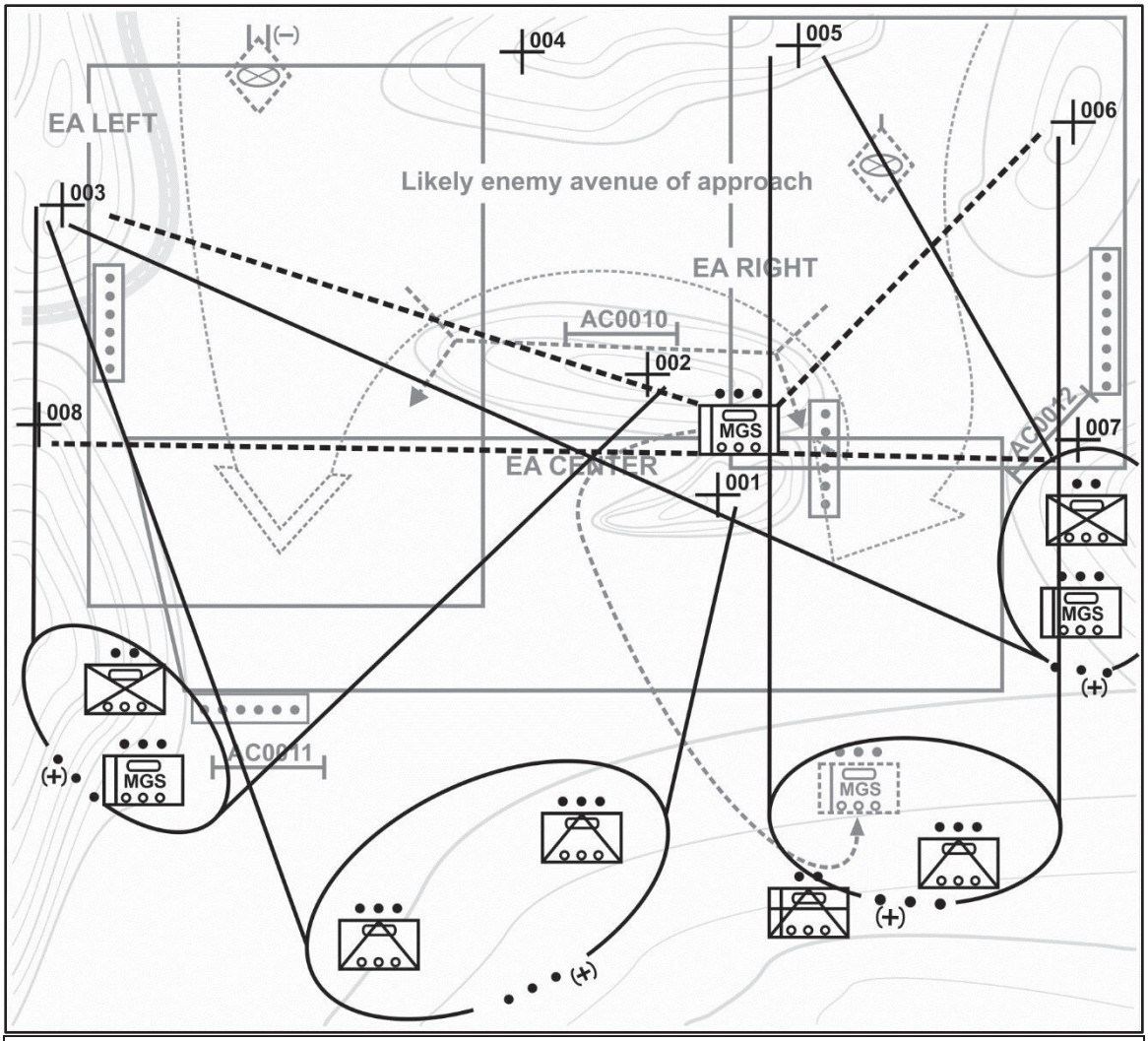
Legend: EA = engagement area, MGS = mobile gun system

Figure 9-2. Example of determining where and how to mass fires

ORIENT FORCES TO SPEED TARGET ACQUISITION

9-8. To effectively engage the enemy with direct fires, friendly forces need to acquire enemy elements rapidly and accurately. Orienting friendly forces on probable enemy locations and on likely avenues of approach will speed target acquisition (see figure 9-3, page 9-4). Conversely, failure to orient subordinate elements results in slower acquisition; this greatly increases the likelihood that enemy forces will be able to engage first. The clock direction orientation method, which is prescribed in most unit SOPs, is good for achieving all-around security; however, it does not ensure that friendly forces are most effectively oriented to detect the enemy. To achieve this critical orientation, the commander typically designates TRPs on or near probable enemy locations and avenues of approach. He orients his subordinate elements using directions of

fire or sectors of fire. Normally, the gunners on crew-served weapons scan the designated direction, sector of fire, or area while other crewmen observe alternate sectors of fire or areas to provide all-around security.



Legend: EA = engagement area, MGS = mobile gun system

Figure 9-3. Example of orienting forces to speed target acquisition

SHIFT AND REDISTRIBUTE FIRES

9-9. As the engagement proceeds, leaders shift fires to direct and redistribute the effects based on their evolving estimate of the situation. SA becomes an essential part of the fire control process at this point. The commander and subordinate leaders apply the same techniques and considerations, to include fire control measures that they used earlier to direct and distribute fires. A variety of situations dictate shifting of fires, to include the following:

- Appearance of an enemy force posing a greater threat than the one currently being engaged.
- Extensive attrition of the enemy force being engaged, creating the possibility of target overkill.
- Attrition of friendly elements that are engaging the enemy force.
- Change in the ammunition status of the friendly elements that are engaging the enemy force.
- Maneuver of enemy or friendly forces resulting in terrain masking.
- Increased fratricide and friendly fire risk as a maneuvering friendly element closes with the enemy force being engaged.

PRINCIPLES OF DIRECT FIRE

9-10. Effective fire control requires a unit to acquire the enemy and mass the effects of fires rapidly to achieve decisive results in a close fight. When planning and executing direct fires, the commander and subordinate leaders need to know how to apply several fundamental principles. The purpose of the principles of direct fire is not to restrict the actions of subordinates. Applied correctly, they help the SBCT weapons troop to accomplish its primary goal in any direct fire engagement; that is, both to acquire first and shoot first. These principles give subordinates the freedom to act quickly upon acquisition of the enemy. This discussion focuses on the following principles:

- Mass the effects of fire.
- Destroy the greatest threat first.
- Avoid target overkill.
- Employ the best weapon for specific target.
- Minimize exposure.
- Plan and implement fratricide and friendly fire avoidance measures.
- Plan for limited visibility conditions.
- Plan for degraded capabilities.

MASS THE EFFECTS OF FIRE

9-11. The SBCT weapons troop masses its fires to achieve decisive results. Massing entails focusing fires at critical points and distributing the effects. Random application of fires is unlikely to have a decisive effect. For example, concentrating the SBCT weapons troop fires at a single target may ensure its destruction or suppression; however, that fire control technique will probably not achieve a decisive effect on the enemy formation or position.

DESTROY THE GREATEST THREAT FIRST

9-12. The order in which the SBCT weapons troop engages enemy forces is in direct relation to the danger the enemy presents. The threat posed by the enemy depends on his weapons, range, and positioning. Presented with multiple targets, a unit will, in most situations, initially concentrate fires to destroy the greatest threat, and then distribute fires over the remainder of the enemy force.

AVOID TARGET OVERKILL

9-13. The weapons troop uses only the amount of fire to achieve the necessary effect. Target overkill wastes ammunition and diverts weapons that are better employed acquiring and engaging other targets. The idea of having every weapon engaging a different target is tempered by the requirement to destroy the greatest threats first.

EMPLOY THE BEST WEAPON FOR SPECIFIC TARGET

9-14. Using the appropriate weapon for the target increases the probability of rapid enemy destruction or suppression; at the same time, it saves ammunition. The SBCT weapons troop has many munitions with which to engage the enemy. Target type, range, and exposure are key factors in determining the weapon and ammunition that should be employed, as are weapons and ammunition availability and desired targets effects. Leaders should consider individual crew capabilities when deciding on the employment of weapons. The weapons troop commander arrays his forces based on the terrain, enemy, and desired effects of fires. As an example, when he expects an enemy dismounted assault in restricted terrain, the commander would employ MGS using bee-hive rounds and switch to M240C COAX and .50 cal after the main gun fires.

MINIMIZE EXPOSURE

9-15. Units increase their survivability by exposing themselves to the enemy only to the extent necessary to engage him effectively. Natural or man-made defilade provides the best cover from lethal direct fire munitions. MGS and ATGM minimize their exposure by constantly seeking effective available cover, attempting to engage the enemy from the flank, remaining dispersed, firing from multiple positions, and limiting engagement times.

PLAN AND IMPLEMENT FRATRICIDE AVOIDANCE MEASURES

9-16. The commander needs to be proactive in reducing the risk of fratricide and friendly fire, and noncombatant casualties. He has numerous tools to assist him in this effort: identification training for combat vehicles and aircraft, the unit's weapons safety posture, the weapons control status (WCS), recognition markings, and a common operational picture to include range cards, sector sketches, and rehearsals. Knowledge and employment of applicable ROE are the primary means of preventing noncombatant casualties.

Note. Because it is difficult to distinguish between friendly and enemy Infantry Soldiers, the commander constantly monitors the position of friendly Infantry squads.

PLAN FOR LIMITED VISIBILITY CONDITIONS

9-17. At night, the optical viewing sights on the ATGM and MGS allow the crews to engage enemy forces at nearly the same ranges that apply during the day. Obscurants such as dense fog, heavy smoke, and blowing sand can reduce the capabilities of thermal and IR equipment. The commander should therefore develop contingency plans for such extreme limited visibility conditions. Although decreased acquisition capabilities have minimal effect on area fire, point target engagements will likely occur at decreased ranges. Typically, firing positions, whether offensive or defensive, are adjusted closer to the area or point where the commander intends to concentrate fires.

PLAN FOR DEGRADED CAPABILITIES

9-18. Leaders initially develop plans based on their units' maximum capabilities; they make backup plans for implementation in the event of casualties or weapon damage or failure. While leaders cannot anticipate or plan for every situation, they should develop plans for what they view as the most probable occurrences. Building redundancy into these plans, such as having two systems observe the same sector of fire, is an invaluable asset when the situation (and the number of available systems) permits. Designating alternate sectors of fire provides a means of shifting fires if adjacent elements are knocked out of action.

SECTION II – DIRECT FIRE PLANNING

9-19. The SBCT weapons troop commander plans direct fires as part of the TLPs. The commander considers essential steps, such as where and how the weapons troop can and will mass fires, as he develops his concept of the operations.

OVERVIEW

9-20. Leaders plan direct fires and distribute and control their fire. Determining where and how the SBCT weapons troop can mass fires is an essential step in this process. Based on where and how they want to direct and distribute fires, leaders can establish the weapons ready postures for their elements and triggers for initiating fires. During mission preparation, leaders plan and conduct rehearsals of direct fires (and of the fire control process) based on the estimate of the situation.

9-21. The commander plans direct fires in conjunction with development of his estimate of the situation and completion of the plan. Determining where and how the SBCT weapons troop can and will mass fires are essential steps as the commander develops his concept of the operation. After identifying probable enemy locations, the commander determines points or areas where he can concentrate combat power. His visualization of where and how the enemy will attack or defend assists him in determining the volume of fires he focuses at particular points to have a decisive effect. If he intends to mass the fires of more than one subordinate element, the commander establishes the means for distributing fires effectively.

9-22. Based on where and how they want to concentrate and distribute fires, the commander and subordinate leaders can then establish the weapons-ready postures for SBCT weapons troop elements and triggers for initiating fires. The commander evaluates the risk of fratricide and friendly fire and establishes controls to prevent it; these measures include the designation of recognition markings, WCS, and weapons safety posture.

9-23. After determining where and how they will mass and distribute fires, the commander and subordinate leaders then orient elements so they can rapidly and accurately acquire the enemy. They can war-game the selected COA or concept of the operation to determine probable requirements for refocusing and redistributing fires and to establish other required controls. During mission preparation, the commander plans and conducts rehearsals of direct fires (and of the fire control process) based on his estimate of the situation.

9-24. The commander and his subordinate leaders continue to apply planning procedures and considerations throughout execution. They adjust direct fires based on a continuously updated estimate of the situation, combining SA with the latest available intelligence. When necessary, they apply effective direct fire SOPs, which are covered in the following discussion.

STANDARD OPERATING PROCEDURES

9-25. A well-rehearsed direct fire SOP ensures quick, predictable actions by all members of the SBCT weapons troop. The commander bases the various elements of the SOP on the capabilities of his force and on anticipated conditions and situations. SOP elements should include standard means for focusing fires, distributing their effects, orienting forces, and preventing fratricide and friendly fire. The commander should adjust the direct fire SOP whenever changes to anticipated and actual METT-TC factors become apparent.

9-26. If the commander does not issue any other instructions, the SBCT weapons troop begins the engagement using the SOP. The commander can subsequently use a fire command to direct or redistribute fires. The following paragraphs discuss specific SOP provisions for focusing fires, distributing fires, orienting forces, and preventing fratricide and friendly fire.

FOCUSING FIRES

9-27. TRPs are a common means of focusing fires. One technique is to establish a standard respective position for TRPs in relation to friendly elements and then to consistently number the TRPs, such as from left to right. This allows leaders to quickly determine and communicate the location of the TRPs.

DISTRIBUTING FIRES

9-28. Two useful means of distributing the SBCT weapons troop fires are engagement priorities and target array. One technique is to assign an engagement priority, by type of enemy vehicle or weapon, for each type of friendly weapons system. The target array technique can assist in distribution by assigning specific friendly elements to engage enemy elements of similar capabilities.

ORIENTING FORCES

9-29. A standard means of orienting friendly forces is to assign a primary direction of fire, using a TRP, to orient each element on a probable enemy position or likely avenue of approach. To provide all-around security, the SOP can supplement the primary direction of fire with sectors of fire using a friendly-based quadrant. The following example SOP elements illustrate the use of these techniques:

- The center (front) platoon's primary direction of fire is TRP 2 (center) until otherwise specified; the platoon is responsible for the front two quadrants.
- The left flank platoon's primary direction of fire is TRP 1 (left) until otherwise specified; the platoon is responsible for the left two friendly quadrants (overlapping with the center platoon).
- The right flank platoon's primary direction of fire is TRP 3 (right) until otherwise specified; the platoon is responsible for the right two friendly quadrants (overlapping with the center platoon).

AVOIDING FRATRICIDE AND FRIENDLY FIRE

9-30. A primary means of minimizing fratricide and friendly fire risk is to establish a standard WCS of WEAPONS TIGHT, which requires positive enemy identification before engagement. The SOP dictates ways of identifying friendly rifle squads and other dismounted elements. Techniques include using arm bands, available chemical reactive heating pads, or an IR light source or detonating a smoke grenade of a designated color at the appropriate time. Minimizing the risk of fratricide and friendly fire in the SBCT weapons troop can be accomplished through JCR/BFT (if equipped); however, this does not remove the SBCT weapons troop commander's responsibility to plan for fratricide and friendly fire avoidance.

9-31. Finally, the SOP addresses the most critical requirement of fratricide and friendly fire prevention—maintaining SA. It directs subordinate leaders to inform the commander, adjacent elements, and subordinates whenever a friendly force is moving or preparing to move.

PLATOON MOVEMENT COMMAND (DEFENSIVE ENGAGEMENTS)

9-32. The platoon movement command is used while engaging from a defensive BP using weapon systems platforms. It allows the platoon leader to coordinate the movement of the platoon from the defilade to an enfilade position and back to the defilade at the end of the engagement. This is key to an area defense in depth or transitioning platoons to secondary or alternate positions. It ensures the platoon's firepower is maximized in the EA and assists in promoting shock. The commander uses these terms to quickly maneuver his platoons. An example of this element includes:

- TOP HAT, TOP HAT – Tells the platoon to move from their defilade position to the enfilade.
- LOW SKY, LOW SKY – Tells the platoon to move from their enfilade position back down to the defilade.

SECTION III – DIRECT FIRE CONTROL

9-33. The small unit commander communicates to his subordinates the manner, method, and time to initiate, shift, and mass fires, and when to disengage by using direct fire control measures. The commander should control his unit's fires so he can direct the engagement of enemy systems to gain the greatest effect. The commander uses IPB and reconnaissance to determine the most advantageous way to use direct fire control measures to mass the effects on the enemy and reduce fratricide and friendly fire from direct fire systems. (Refer to ATP 2-01.3 for more information.)

FIRE CONTROL MEASURES

9-34. Fire control measures are the means by which the commander or subordinate leaders control fires. Application of these concepts, procedures, and techniques assists the unit in acquiring the enemy, focusing fires on him, distributing the effects of the fires, and preventing fratricide and friendly fire. At the same time, no single measure is sufficient to effectively control fires. At the company/team level, fire control measures are effective only if the entire unit has a common understanding of what they mean and how to employ them. The following focuses on the various fire control measures employed by the SBCT weapons troop. Table 9-1 lists the control measures; it is organized by whether they are terrain-based or threat-based. (Refer to FM 3-90-1 for more information.)

Table 9-1. Common fire control measures

TERRAIN-BASED FIRE CONTROL MEASURES	*THREAT-BASED FIRE CONTROL MEASURES*
Target reference point (TRP)	Rules of engagement (ROE)
Engagement area (EA)	Weapons ready posture
Sector of fire	Weapons safety posture
Direction of fire	Weapons control status (WCS)
Terrain-based quadrant	Engagement priorities
Friendly-based quadrant	Trigger
Maximum engagement line (MEL); Restrictive fire line (RFL); Final protective line (FPL)	Engagement techniques; Fire patterns; Target array

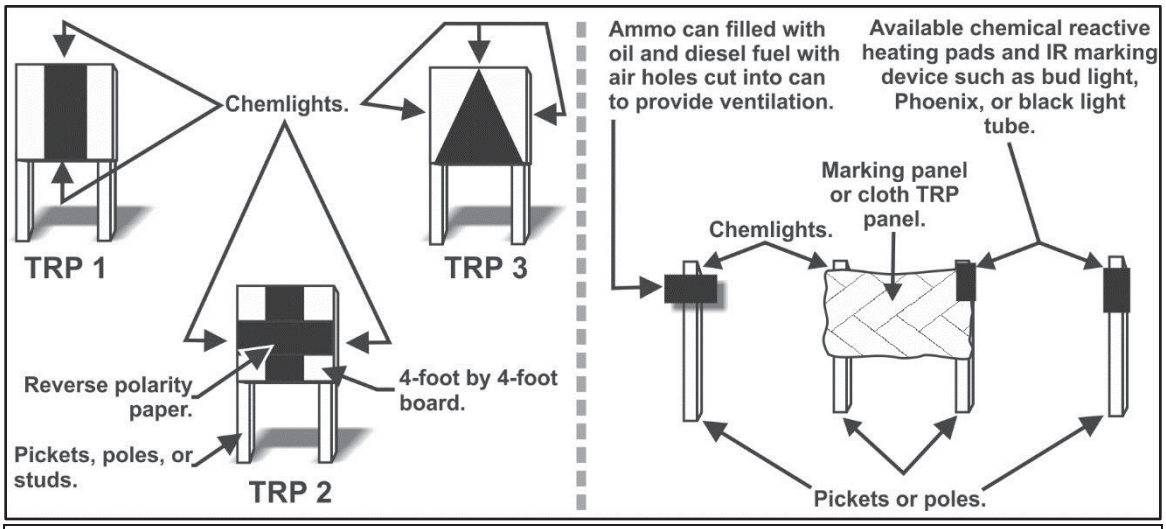
TERRAIN-BASED FIRE CONTROL MEASURES

9-35. The SBCT weapons troop commander uses terrain-based fire control measures to direct and control fires on a particular point, line, or area rather than on a specific enemy element. The following paragraphs describe the TTP associated with this type of control measure.

Target Reference Point

9-36. A TRP is a recognizable point on the ground that leaders use to orient friendly forces, and to concentrate and control direct fires. When leaders designate TRPs as indirect fire targets, they can use the TRPs when calling for and adjusting indirect fires. Leaders designate TRPs at probable enemy locations and along likely avenues of approach. These points can be natural or man-made. A TRP can be an established site (such as a hill or a building), or an impromptu feature designated as a TRP on the spot (such as a burning enemy vehicle or smoke generated by an artillery round). Friendly units can construct markers to serve as TRPs (see figure 9-4). Ideally, TRPs should be visible in three observation modes (unaided, passive-IR, and thermal) so that all forces can see them. Examples of TRPs include the following features and objects:

- Prominent hill mass.
- Distinctive building.
- Observable enemy position.
- Destroyed vehicle.
- Ground-burst illumination.
- Smoke round for immediate engagements only; this is the least preferred method.



Legend: Ammo = ammunition, IR = infrared, TRP = target reference point

Figure 9-4. Examples of constructed TRP markers

Engagement Area

9-37. This fire control measure is an area along an enemy avenue of approach where the commander intends to mass the fires of available weapons to destroy an enemy force. The size and shape of the EA are determined by the degree of relatively unobstructed intervisibility available to the unit's weapons systems in their firing positions and by the maximum range of those weapons. Typically, commanders delineate responsibility within the EA by assigning each platoon a sector of fire or direction of fire.

Sector of Fire

9-38. A sector of fire is a defined area that must be covered by direct fire. Leaders assign sectors of fire to subordinate elements, crew-served weapons, and individual Soldiers to ensure coverage of an area of responsibility. They may limit the sector of fire of an element or weapon to prevent accidental engagement of an adjacent unit. In assigning sectors of fire, commanders and subordinate leaders consider the number and types of weapons available. They consider acquisition system type and field of view in determining the width of a sector of fire. For example, while unaided vision has a wide field of view, its ability to detect and identify targets at range and in limited visibility conditions is restricted. Conversely, most fire control acquisitions systems have greater detection and identification ranges than the unaided eye, but their field of view is narrow. The means of designating sectors of fire include the following:

- Target reference points.
- Clock direction.
- Terrain-based quadrants.
- Friendly-based quadrants.
- Azimuth or cardinal direction.

Direction of Fire

9-39. A direction of fire is an orientation or point used to assign responsibility for a particular location in the AO that needs to be covered by direct fire. Leaders designate directions of fire for the purpose of acquisition or engagement by subordinate elements, crew-served weapons, or individual Soldiers. Direction of fire is most commonly employed when assigning sectors of fire would be difficult or impossible because of limited time or insufficient reference points. Means of designating a direction of fire include the following:

- Closest TRP.
- Clock direction.
- Azimuth or cardinal direction.
- Tracer on target.
- Infrared laser pointer.

QUADRANTS

9-40. Quadrants are subdivisions of an area created by superimposing an imaginary pair of perpendicular axes over the terrain to create four separate areas of fire. Quadrants can be based on the terrain, on friendly forces, or on the enemy formation.

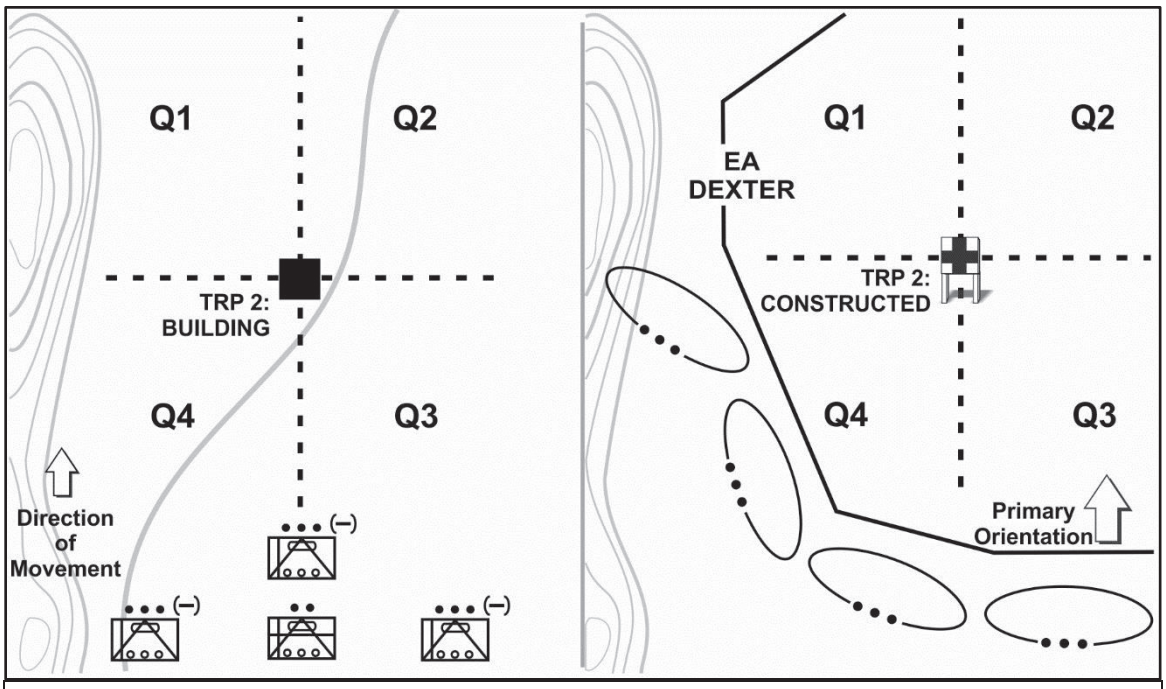
Note. The technique in which quadrants are based on the enemy formation is usually referred to as the target array; it is covered in the discussion of threat-based fire control measures.

9-41. The method of quadrant numbering is established in the unit SOP. However, take care to avoid confusion when quadrants based on terrain, friendly forces, and the enemy formations are used simultaneously.

Terrain-Based Quadrant

9-42. A terrain-based quadrant entails use of a constructed TRP to designate the center point of the axes that divide the area into four quadrants. This technique can be employed in both offensive and defensive tasks. In the offense, the commander designates the center of the quadrant using a feature or by creating a reference point (for example, using a ground-burst illumination round, a smoke-marking round, or a fire ignited by incendiary or tracer rounds). The axes delineating the quadrants run parallel and perpendicular to the direction of movement. In the defense, the commander designates the center of the quadrant using a constructed TRP.

9-43. In the examples shown in figure 9-5 and figure 9-6, page 9-12, quadrants are marked using the letter "Q" and a number (Q1 to Q4); quadrant numbers are in the same relative positions as on military map sheets (from Q1 as the upper left-hand quadrant clockwise to Q4 as the lower left-hand quadrant).



Legend: EA = engagement area, Q = quadrant, TRP = target reference point

Figure 9-5. Terrain based quadrant examples

Friendly-Based Quadrant

9-44. The friendly-based quadrant technique entails superimposing quadrants over the unit's formation. The center point is based on the center of the formation, and the axes run parallel and perpendicular to the general direction of travel. For rapid orientation, the friendly quadrant technique may be better than the clock direction method. This is because the target may look different as seen from different locations. Figure 9-6 illustrates use of friendly-based quadrants.

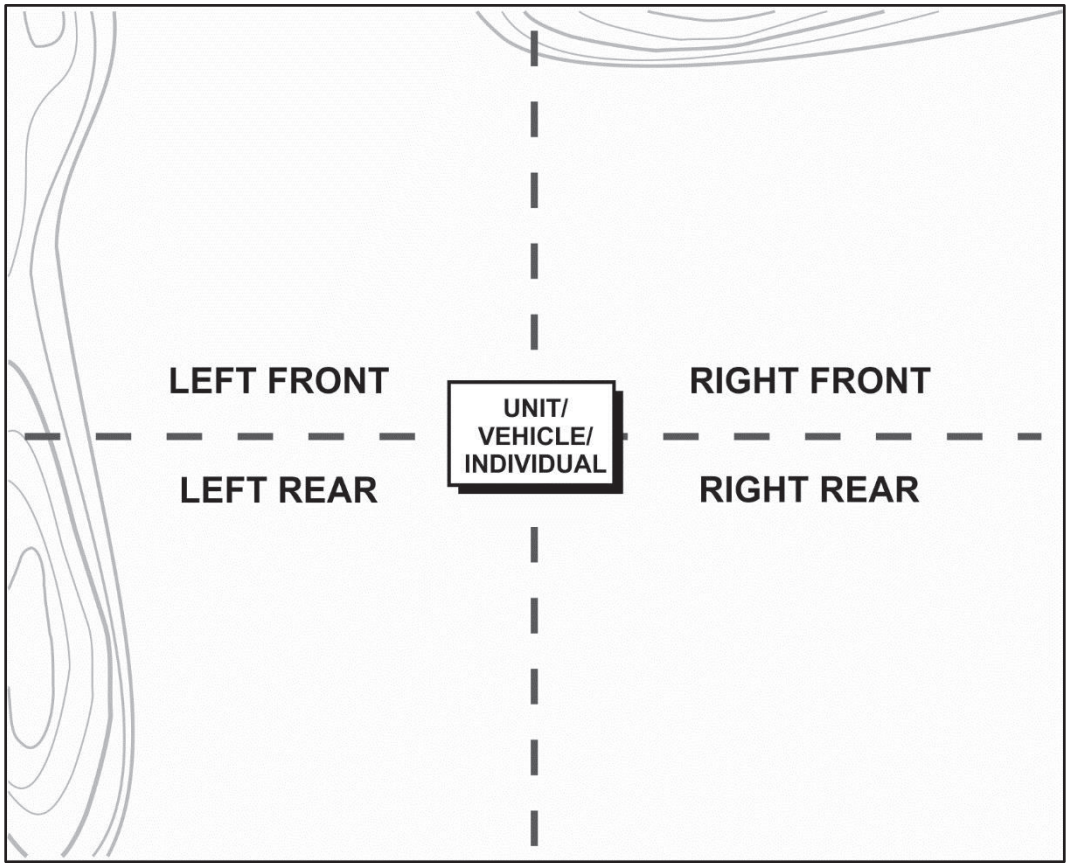


Figure 9-6. Friendly-based quadrant examples

Maximum Engagement Line

9-45. A maximum engagement line is the linear depiction of the farthest limit of effective fire for a weapon or unit. This line is determined by either the weapon's or unit's maximum effective range and by the effects of terrain. (For example, slope, vegetation, structures, and other features provide cover and concealment that may prevent the weapon from engaging to the maximum effective range.) A maximum engagement line serves several purposes. The commander can use it to prevent crews from engaging beyond the maximum effective range, to define criteria for the establishment of triggers, and to delineate the maximum extent of area of operations on the sector sketch.

Restrictive Fire Line

9-46. A RFL is a linear fire control measure beyond which engagement is prohibited without coordination. In the offense, the commander can designate an RFL to prevent a base of fire element from firing into the area where an assaulting element is maneuvering. This technique is particularly important when armored vehicles support the maneuver of Infantry squads. In the defense, the commander may establish an RFL to prevent the unit from engaging a friendly rifle squad positioned in restricted terrain on the flank of an avenue of approach.

Final Protective Line

9-47. The final protective line (FPL) is a line of fire established where an enemy assault is to be checked by the interlocking fires of all available weapons. The unit reinforces this line with protective obstacles and with FPF whenever possible. Initiation of the FPF is the signal for elements, crews, and individual Soldiers to shift fires to their assigned portion of the FPL. They spare no ammunition in repelling the enemy assault, a particular concern for machine guns and other automatic weapons.

THREAT-BASED FIRE CONTROL MEASURES

9-48. The SBCT weapons troop commander uses threat-based fire control measures to concentrate and control fires by directing the unit to engage a specific enemy element rather than to fire on a point or area. The following paragraphs describe the TTP associated with this type of control measure.

Rules of Engagement

9-49. ROE are directives issued by competent military authority that delineate the circumstances and limitations under which United States forces will initiate and/or continue combat engagement with other forces encountered (JP 1-04). Rules of engagement always recognize the inherent right of self-defense. These rules vary between operations and may change during an operation. Adherence to them ensures Soldiers act consistently with international law, national policy, and military regulations.

9-50. For an example of company/team level ROE, during a cordon and search mission, the command may establish a WCS of WEAPONS TIGHT for the main gun. The commander could do this because higher command directives explicitly restrict the use of the main gun as an explosive breach technique.

Weapons-Ready Posture

9-51. Weapons-ready posture is the selected ammunition and indexed range for vehicle, individual, and crew-served weapons. It is a means by which leaders use their estimate of the situation to specify the ammunition and range for the most probable anticipated engagement. Ammunition selection depends on the target type, but the leader may adjust it based on engagement priorities, desired effects, and effective range. Range selection depends on the anticipated engagement range; it is affected by terrain intervisibility, weather, and light conditions. Within the SBCT weapons troop, weapons-ready posture affects the types and quantities of ammunition loaded in ready boxes, stowed in ready racks, and carried by rifle squads. The following considerations apply:

Examples of weapons-ready posture–

- An ATGM may carry TOW II-B missile loaded in its tube to engage enemy Armor elements or hardened positions. They would store TOW II-RC (Arrow) in the ready to engage Armor elements upon identification.
- An MGS vehicle might battle carry HEP round if operating in an urban environment. They may battle carry HEAT if they are traversing between areas where enemy armored personnel vehicles or hardened positions are likely in order to be flexible in the engagement.
- In cases that enemy may engage at long range with tanks or armored vehicles, and in close proximity with dismounts the MGS may not battle carry a round in order to select the best round for the engagement they do encounter.

Weapons-Safety Posture

9-52. Weapons-safety posture is an ammunition handling instruction that enables the commander to control the safety of his unit's weapons precisely. Leaders' supervision of the weapons-safety posture, and Soldiers' adherence to it, minimizes the risk of accidental discharge and fratricide and friendly fire. Table 9-2, page 9 14, outlines procedures and considerations for the SBCT weapons troop when using the four weapons safety postures, listed in ascending order of restrictiveness:

- AMMUNITION LOADED.
- AMMUNITION LOCKED.
- AMMUNITION PREPARED.
- WEAPONS CLEARED.

9-53. When setting and adjusting the weapons-safety posture, the commander weighs the desire to prevent accidental discharges against the requirement for immediate action based on the enemy threat. If the threat of direct contact is high, for example, the commander could establish the weapons safety posture as AMMUNITION LOADED. If the requirement for action is less immediate, he might lower the posture to AMMUNITION LOCKED or AMMUNITION PREPARED. The commander can designate different weapons safety postures for different elements of the unit.

Table 9-2. Weapons safety posture levels

WEAPONS SAFETY POSTURE	*VEHICLE (MGS/ATGM)*
AMMUNITION LOADED	50. cal (caliber) machine gun ammunition on feed tray. M240C/B: Machine gun ammunition on feed tray; bolt locked to rear. 105mm: Round loaded into the breech. Tube launched, optically tracked, wire guided (TOW) Missiles: ETS raised, 2 x TOWs inserted in launcher and locked, MISSILE lamp not illuminated, trigger is not enabled. M6 Grenades: switch guard on the Fire Control Unit (FCU) is closed LAUNCHER POWER switch is set to OFF
AMMUNITION LOCKED	50. cal machine gun ammunition on feed tray; bold locked forward. M240C/B: TOW not locked, machine gun ammunition on feed tray; bolt locked forward. 105mm: Round loaded into breech TOW Missiles: Elevated TOW System (ETS) raised, 2 x TOWs inserted in launcher and locked, MISSILE lamp illuminated, trigger enabled, M240 unloaded and stowed, all hatches closed, Stryker Antenna Protection System (SAPS) lowered. M6 Grenades: switch guard on the FCU is closed LAUNCHER POWER switch is set to ON.

Table 9-2. Weapons safety posture levels (continued)

WEAPONS SAFETY POSTURE	*VEHICLE (MGS/ATGM)*
AMMUNITION PREPARED	MGS: 50. cal machine gun ammunition boxes filled. M240C/B: Removed from shipping container, prepped for loading and returned to ammo can. 105mm: Carousel and Replenisher filled TOW Missiles: Removed from shipping container, prepped and placed in one of 10 stowage racks, and end caps not removed. M6 Grenades: Grenades removed from shipping container, prepped and returned to container.
WEAPONS CLEARED	MGS: 50. cal machine gun cleared with bolt locked to the rear. M240C/B: Ammunition removed from weapon, returned to ammo can, and weapon cleared. 105mm: Main gun breech clear. TOW Missiles: 2 x TOW missile removed from ETS, end caps replaced and placed in one of 10 stowage racks. MAST and LAUNCHING EQPT (equipment) guards are down. LAUNCHING EQPT UMBILICAL INSERTED and LAUNCHING EQPT TRIGGER ENABLED lamps are extinguished, M6 Grenades: Grenades removed from launchers and stowed. GRENADES FIRE switch guard down, GRENADES switch set to DISABLE, GRENADES ENABLED lamp extinguished.

Weapons Control Status

9-54. The three levels of WCS outline the conditions, based on target identification criteria, under which friendly elements can engage. The commander sets and adjusts the WCS based on friendly and enemy disposition, and the clarity of the situation. In general, the higher the probability of fratricide and friendly fire, the more restrictive the WCS. The three levels, in descending order of restrictiveness, are as follows:

- WEAPONS HOLD. Engage only if engaged or ordered to engage.
- WEAPONS TIGHT. Engage only targets that are positively identified as enemy.
- WEAPONS FREE. Engage any targets that are not positively identified as friendly.

9-55. As an example, the commander may establish the weapons control status as WEAPONS HOLD when friendly forces are conducting a passage of lines. By maintaining situational understanding of his own elements and adjacent friendly forces, however, he may lower the WCS. In such a case, the commander may set a WEAPONS FREE status when he knows there are no friendly elements near the engagement. This permits his elements to engage targets at extended ranges even though it is difficult to distinguish targets accurately at ranges beyond 2000 meters under combat conditions. Another consideration is that the WCS is extremely important for forces using combat identification systems. Establishing the WCS as WEAPONS FREE permits leaders to engage an unknown target when they fail to get a friendly response.

Engagement Priorities

9-56. Engagement priorities provide platoon and company/team level direct/indirect fire distribution examples that combine engagement priorities (targeting by composition) and fire patterns/target arrays (targeting by disposition). This can serve one or more of the following critical fire control functions:

9-57. Prioritize high payoff targets. In concert with his concept of the operation, the commander determines which target types provide the greatest payoff. He can then set these as a unit engagement priority. (For example, he may decide that destroying enemy engineer assets is the best way to prevent the enemy from breaching an obstacle.)

9-58. Employ the best weapons for the target. Establishing engagement priorities for specific friendly systems increases the effectiveness with which the unit employs its weapons. As an example, the engagement priority for the ATGM could be enemy tanks first using TOW 2A (Aero) missiles, then enemy armored personnel carriers using the HEAT round from the 105mm main on the MGS or TOW 2B missiles. This provides the least amount of exposure time to the threat of the enemy fire.

9-59. Distribute the unit's fires. Establishing different priorities for similar friendly systems helps to prevent overkill and achieve effective distribution of fires. (For example, the commander may designate the enemy's tanks as the initial priority for the ATGM platoon, while making the enemy's Infantry and personnel carriers the priority for MGS platoon.) This would decrease the chances of units engaging against the same enemy targets, while ignoring the dangers posed by the other enemy vehicles.

Trigger

9-60. A trigger is a specific set of conditions that dictates initiation of fires. Often referred to as engagement criteria, a trigger specifies the circumstances in which subordinate elements should engage. The circumstances can be based on a friendly or enemy event. (For example, the trigger for a friendly platoon to initiate engagement could be three or more enemy combat vehicles passing or crossing a given point or line.) This line can be any natural or man-made linear feature (such as a road, ridge line, or stream). It may be a line perpendicular to the unit's orientation, delineated by one or more reference points.

Engagement Techniques

9-61. Engagement techniques are effects-oriented fire distribution measures. The following engagement techniques, the most common in SBCT weapons troop operations, are covered in this discussion:

- Point fire.
- Area fire.
- Simultaneous.
- Alternating fire.
- Observed fire.
- Sequential fire.
- Time of suppression.
- Reconnaissance by fire.

Point Fire

9-62. Point fire entails concentrating the effects of a unit's fire against a specific, identified target such as a vehicle, machine gun bunker, or ATGM position. When leaders direct point fire, all of the unit's weapons engage the target, firing until it is destroyed or the required time of suppression has expired. Employing converging fires from dispersed positions makes point fire more effective because the target is engaged from multiple directions. The unit may initiate an engagement using point fire against the most dangerous threat, and then revert to area fire against other, less threatening point targets.

Note. Use of point fire is fairly rare because a unit seldom encounters a single, clearly identified enemy weapon.

Area Fire

9-63. Area fire involves distributing the effects of a unit's fire over an area in which enemy positions are numerous or are not obvious. If the area is large, leaders assign sectors of fire to subordinate elements using a terrain-based distribution method such as the quadrant technique. Typically, the primary purpose of the area fire is suppression; however, sustaining effective suppression requires judicious control of the rate of fire.

Simultaneous Fire

9-64. Units employ simultaneous fire to rapidly mass the effects of their fires or to gain fire superiority. (For example, a unit may initiate an SBF with simultaneous fire, and then revert to alternating or sequential fire to maintain suppression.) Simultaneous fire is employed to negate the low probability of the hit and kill of certain antiarmor weapons. The ATGM and MGS platoon may fire all of its vehicles at once on an enemy column to reduce the enemy's ability to return fire on a single vehicle position.

Alternating Fire

9-65. In alternating fire, pairs of elements continuously engage the same point or area target one at a time. Alternating fire permits the unit to maintain suppression for a longer duration than does volley fire; it also forces the enemy to acquire and engage alternating points of fire. For example, a MGS platoon may alternate fires of two sections to maintain suppression on a target while an infantry squad moves to its assault position.

Observed Fire

9-66. Observed fire is usually used when the SBCT weapons troop is in protected defensive positions with engagement ranges in excess of 2500 meters. The commander or platoon leader directs one element or section to engage. The remaining elements or sections observe fires and prepare to engage on order in case the engaging element consistently misses its targets, experiences a malfunction, or runs low on ammunition. Observed fire allows for mutual observation and assistance while protecting the location of the observing elements.

Sequential Fire

9-67. Sequential fire entails the subordinate elements of a unit engaging the same point or area target one after another in an arranged sequence. Sequential fire can help to prevent the waste of ammunition. Sequential fire permits elements that have already fired to pass on intelligence they have learned from the engagement. An example would be an MGS who missed a flank shot on enemy armored fighting vehicle, communicates its position to an ATGM that fires a TOW IIB missile.

Time of Suppression

9-68. Time of suppression is the period, specified by the commander, during which an enemy position or force must be suppressed. Suppression time is typically dependent on the time it will take a supported element to maneuver. Usually, a unit suppresses an enemy position using the sustained rate of fire of its automatic weapons. In planning for sustained suppression, leaders needs to consider several factors: the estimated time of suppression, the size of the area being suppressed, the type of enemy force to be suppressed, range to the target, rates of fire, and available ammunition quantities.

Reconnaissance by Fire

9-69. Reconnaissance by fire is the process of engaging possible enemy locations to elicit a tactical response (such as return fire or movement). This response permits the commander and subordinate leaders to acquire the target and then to mass fires against the enemy element. Typically, the commander directs a subordinate element to conduct the reconnaissance by fire. For example, he may direct an overwatching MGS platoon to conduct the reconnaissance by fire against a probable enemy position hidden in dense vegetation authorizing use of canister rounds, COAX, and fires from browning .50 cal.

Fire Patterns

9-70. Fire patterns are a threat-based measure designed to distribute the fires of a unit simultaneously between multiple, similar targets. Platoons use those most often to distribute fires across an enemy formation.

Leaders designate and adjust fire patterns based on terrain and the anticipated enemy formation. The basic fire patterns, illustrated in figure 9-8, page 9-18, are—

- Frontal.
- Cross.
- Depth.

Frontal Fire

9-71. Leaders may initiate frontal fire when targets are arrayed in front of the unit in a lateral configuration. Weapons systems engage targets to their respective fronts. For example, the left flank weapon engages the left-most target; the right flank weapon engages the right-most target. As weapons systems destroy targets, weapons shift fires toward the center of the enemy formation from near too far.

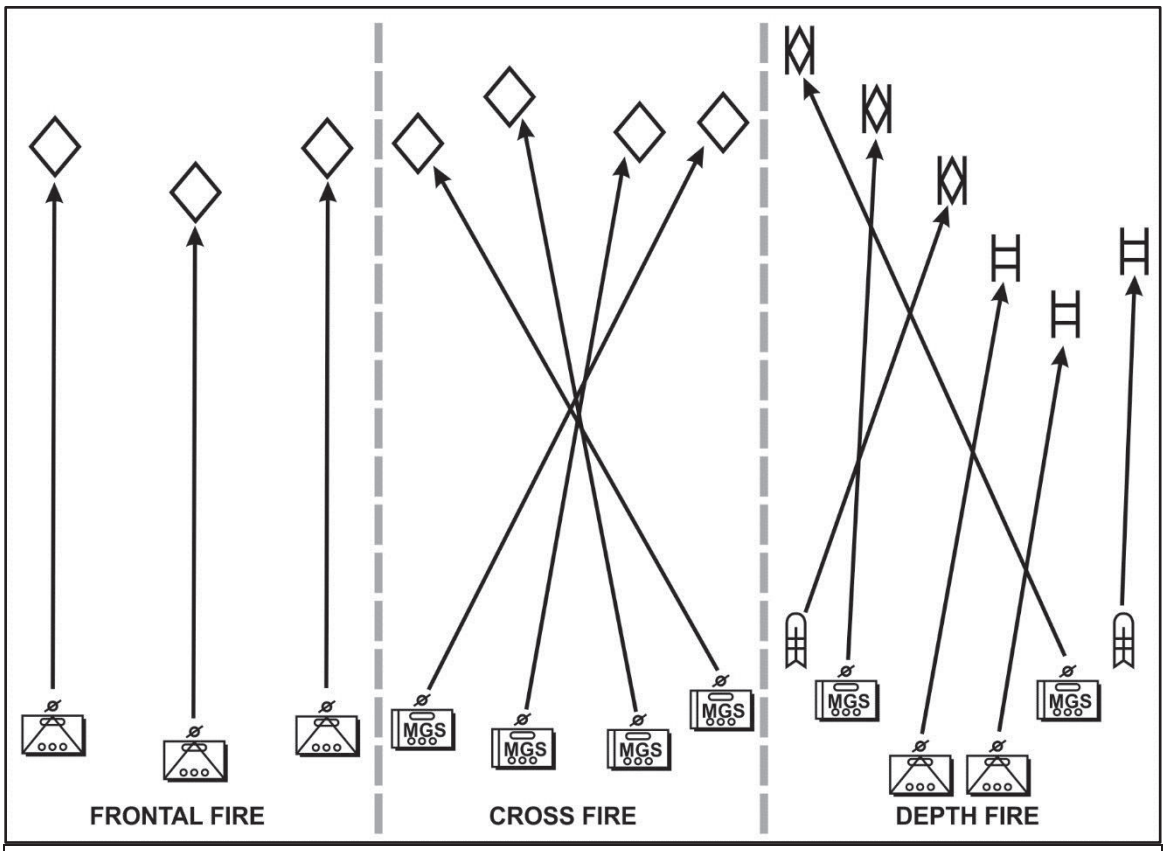
Cross Fire

9-72. Leaders initiate cross fire when targets are arrayed laterally across the unit's front in a manner that permits diagonal fires at the enemy's flank, or when obstructions prevent unit weapons from firing frontally. Right flank weapons engage the left-most targets; left flank weapons engage the right-most targets. Firing diagonally across an engagement area provides more flank shots, thus increasing the chance of kills. It reduces the possibility of the enemy detecting friendly elements should the enemy continue to move forward. As friendly elements destroy targets, weapons shift fires toward the center of the enemy formation.

Note. ATGM do not use cross fire patterns due to wires on TOW missiles.

Depth Fire

9-73. Leaders initiate depth fire when enemy targets disperse in depth, perpendicular to the unit. Center weapons engage the closest targets; flank weapons engage deeper targets. As the unit destroys targets, weapons shift fires toward the center of the enemy formation. Mixing ATGM and MGS fires provides the greatest opportunity for depth. (See figure 9-7.)

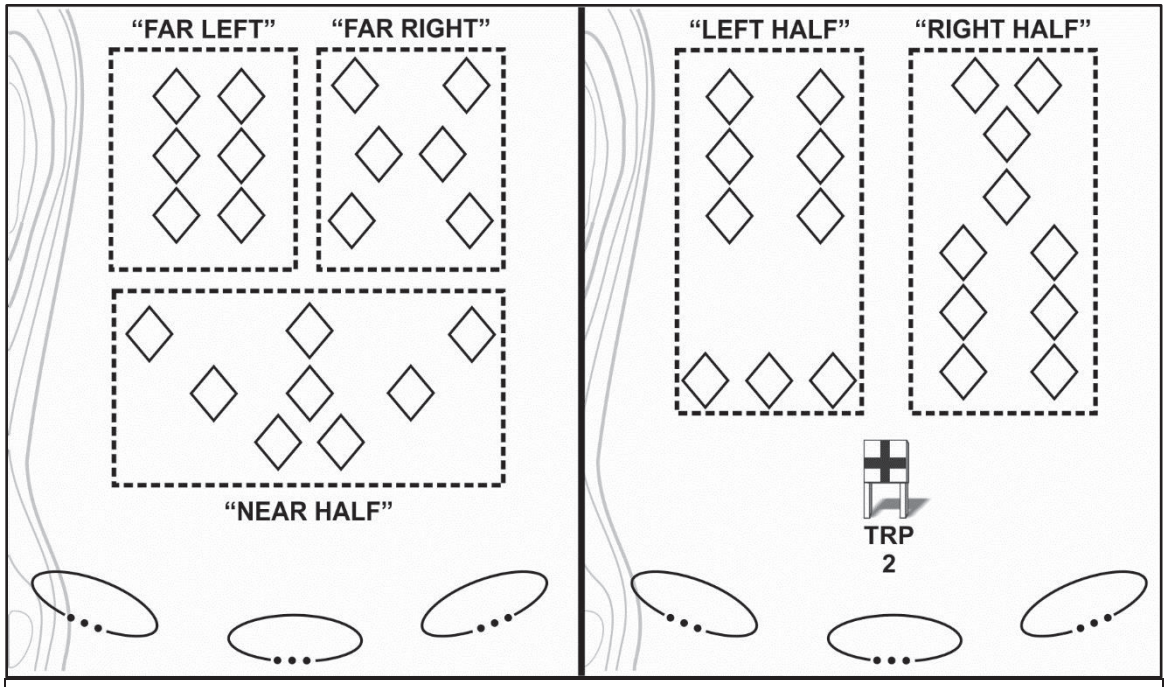


Legend: MGS = mobile gun system

Figure 9-7. Fire pattern examples

Target Array

9-74. Target array enables the commander to distribute fires when the enemy force is concentrated and terrain-based controls are inadequate. Forces create this threat-based distribution measure by superimposing a quadrant pattern on the enemy formation. Soldiers center the pattern on the enemy formation, with the axes running parallel and perpendicular to the enemy's direction of travel. The target array fire control measure is effective against an enemy with a well-structured organization and standardized doctrine. However, it may prove less effective against an enemy that presents few organized formations, or does not follow strict prescribed tactics. Leaders describe quadrants using the quadrants' relative locations. The examples in figure 9-8, page 9-20, illustrate the target array technique.



Legend: TRP = target reference point

Figure 9-8. Target array examples

FIRE COMMANDS

9-75. Fire commands are oral orders issued by leaders to direct and distribute fires when necessary to achieve decisive effects against the enemy. They allow leaders to rapidly and concisely articulate their firing instructions using a standard format. Unit fire commands (refer to ATTP 3-21.9 for more information on fire commands) include these elements, which are discussed below:

- Alert.
- Weapon or ammunition (optional).
- Target description.
- Orientation.
- Range (optional).
- Control (optional).
- Execution.

ALERT

9-76. The alert specifies the elements that are directed to fire. It does not require the leader initiating the command to identify him. Examples of the alert element (call signs and code words based on unit SOP) include the following:

- HELLCATS – All subordinate elements.
- RED – First platoon only.
- THIRD – Third squad only.

WEAPON OR AMMUNITION (OPTIONAL)

9-77. This element identifies the weapon and ammunition to be employed by the alerted elements. Leaders may designate the type and number of rounds to limit expenditure of ammunition. Examples of this element include the following:

- HEP, HEAT, canister, SABOT
- TOW 2A.
- TOW 2B Aero.
- TOW 2BB.
- M240B. (ATGM)
- COAX (MGS)

TARGET DESCRIPTION

9-78. Target description designates which threat elements are to be engaged. Leaders may use the description to focus fires or achieve distribution. Examples of target description include the following:

- Three tanks.
- Two personnel carriers.
- Troops
- Bunker.
- Wall, Window.

ORIENTATION (DIRECTION)

9-79. This element identifies the location of the target. Examples of orientation include the following:

- Closest TRP (such as TRP 3).
- Clock direction (such as ONE O'CLOCK).
- Terrain quadrant (such as QUADRANT ONE).
- Friendly quadrant (such as LEFT FRONT).
- Target array (such as FRONT HALF).
- Laser pointer (such as ON MY POINTER).

RANGE (OPTIONAL)

9-80. The range element identifies the distance to the target. Announcing range is not necessary for TOWs.

CONTROL

9-81. The weapons troop commander may use this element to direct desired target effects, distribution methods, or engagement techniques. Subordinate leaders may include the control element to supplement the commander's instructions and achieve effective distribution. Examples of control include the following:

- Target array (such as FRONT HALF).
- Fire pattern (such as FRONTAL, DEEP CROSS).
- Terrain quadrant (such as QUADRANT ONE).
- Engagement priorities (such as ENGAGE TANKS THEN ATGMS).
- Engagement technique (such as VOLLEY, AREA).

9-82. The three levels of weapons control status outline the conditions, based on target identification criteria, under which friendly elements may engage. The commander sets and adjusts the weapons control status based on friendly and threat disposition and the clarity of the situation. In general, the higher the probability of fratricide, the more restrictive the weapons control status. The three levels, in descending order of restrictiveness, are:

- **Weapons Hold.** Engage only if engaged or ordered to engage.
- **Weapons Tight**. Engage only targets that are positively identified as threat.
- **Weapons Free**. Engage any targets that are not positively identified as friendly.

9-83. As an example, the commander may establish the weapons control status as "Weapons Hold" when friendly forces are conducting a passage of lines. By maintaining situational understanding of his own elements and adjacent friendly forces however, he may be able to lower the weapons control status. In such a case, the commander may be able to set a "Weapons Free" status when he knows no friendly elements are near the engagement. This permits his elements to engage targets at extended ranges. A further consideration

is the weapons control status is extremely important for forces using combat identification systems; establishing the weapons control status as "Weapons Free" permits leaders to engage an unknown target when they fail to get a friendly response.

EXECUTION

9-84. The execution element specifies when fires will be initiated. The commander may wish to engage immediately, delay initiation, or delegate authority to engage. Examples of execution include the following:

- FIRE.
- AT MY COMMAND...FIRE.
- AT YOUR COMMAND.
- AT PHASE LINE BLUE.

9-85. The following is an example of fire commands for an ATGM crew:

- Vehicle commander, driver, or loader identifies target: TWO TANKS IN THE OPEN, CLOSER TANK FIRST.
- Gunner: IDENTIFIED, TRACKING (implies track gates are locked).
- Loader: CLEAR (implies backblast area clear, hatch closed, and round loaded).
- Gunner: READY (implies umbilical is inserted and trigger enabled).
- Vehicle commander: FIRE (implies vehicle commander identified target and is prepared to send report to higher headquarters).
- Gunner: ON THE WAY (fires round one).
- Vehicle commander: one of three possible responses (first two are to the crew and to higher headquarters/adjacent crews, last one is crew internal).
- TARGET DESTROYED.
- OBSTRUCTION (dust or debris limiting bomb damage assessment and observation).

9-86. FIRE ROUND TWO (implies target not destroyed or a miss).

Appendix A

Weapons Reference Data

An antiarmor leader must understand the capabilities of his TOW system to employ it appropriately. The current and future TOW missiles capabilities are provided in the following paragraphs.

CURRENT TOW MISSILES

A-1. The TOW missiles in the current inventory are the 2A, 2B, 2B Aero, and BB. The designation, maximum arm distance, and maximum range are listed in table A-1. (Refer to TM 9-1425-923-10 and TM 9-1410-470-23 for more information.)

Table A-1. TOW characteristics

Type	*Designation*	*Maximum Safe Arm Distance (meters)*	*Maximum Range (meters)*
TOW 2A	BGM-71E	65	3750
TOW 2B	BGM-71F	200	3750
TOW 2B Aero	BGM-71F Aero	200	4500* most conditions
TOW BB	BGM-71H	65	3750**

Legend:

TOW = tube-launched, optically tracked, wire-guided (missile), BB = bunker buster.

* TOW 2B Aero maximum range is 4200 meters in extreme cold.

** The maximum range recommended for engaging a bunker aperture with a TOW BB is 3000 meters due to the small profile and low aimpoint.

A-2. The flight time and range of each missile is provided in figures A-1 and A-2.

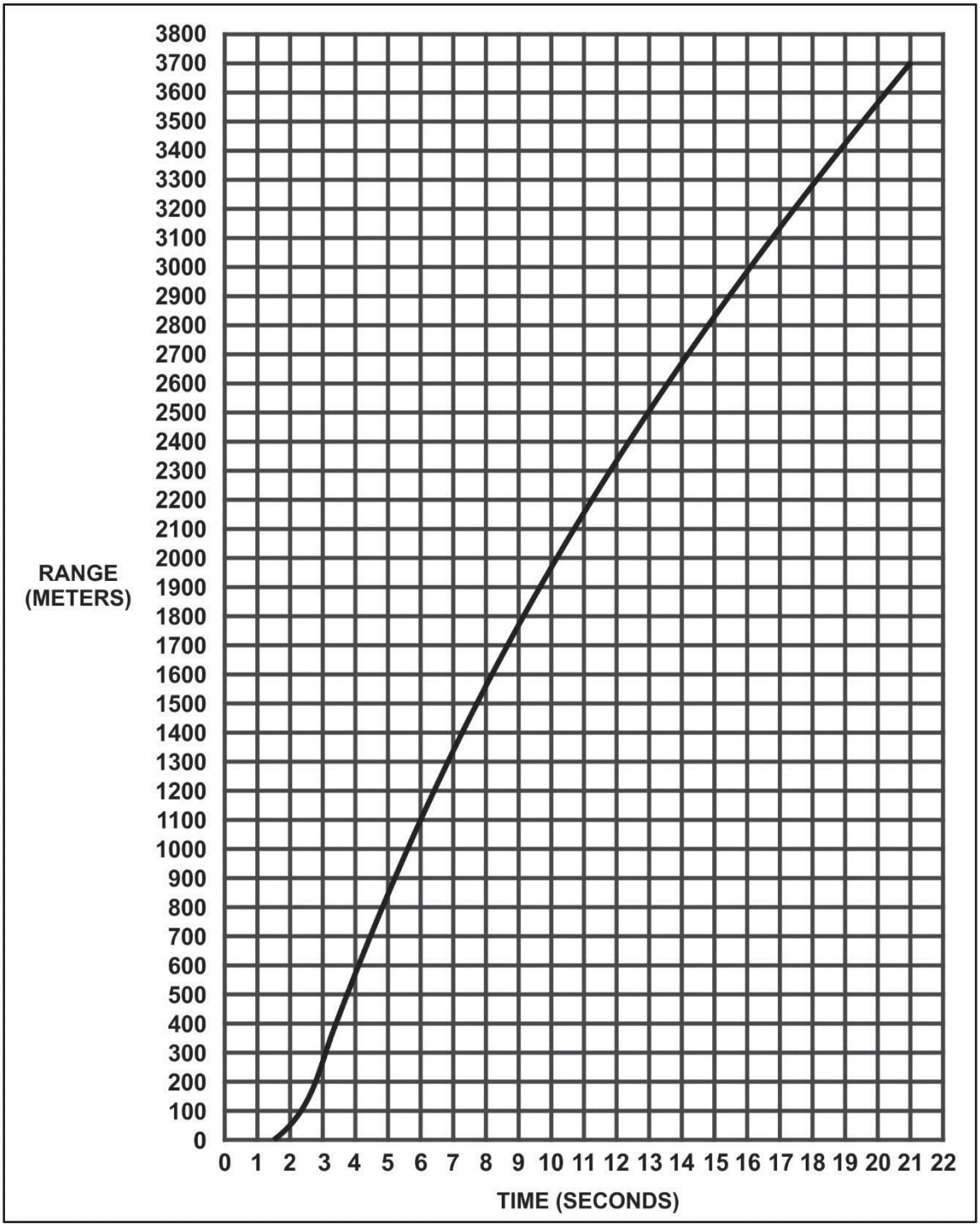


Figure A-1. TOW 2A, 2B, and BB missile flight time versus range

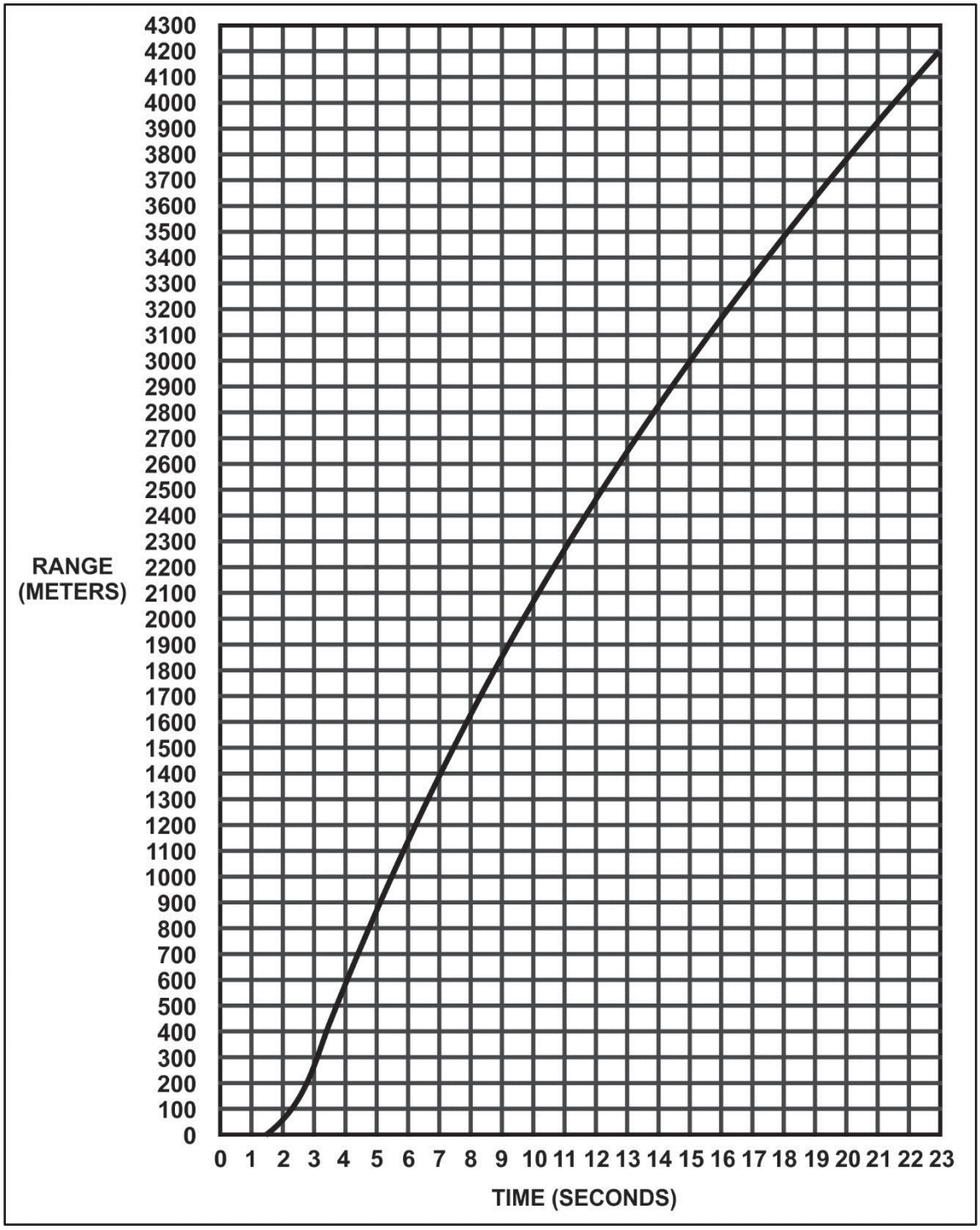


Figure A-2. TOW 2B Aero missile flight time versus range

A-3. The range of TOWs is reduced by head wind.

A-4. The target set for each missile is in table A-2, page A-4.

Table A-2. TOW target set

Type	*Primary*	*Secondary*
TOW 2A	Armor	Light armor and typical urban structures
TOW 2B	Armor	Urban structures
TOW 2B Aero	Armor	Urban structures
TOW BB	Urban structures	Light armored vehicles
Legend: TOW = tube-launched, optically tracked, wire-guided (missile), BB = bunker buster		

A-5. The TOW 2A was developed to defeat enemy armor with explosive reactive armor. The missile has a tandem warhead to achieve increased lethality. The precursor warhead in the tip of its extended probe detonates the explosive reactive armor. The primary warhead then penetrates the base armor. The TOW 2A is a line-of-sight missile.

A-6. The TOW 2B is a top attack missile that uses a fly-over shoot-down mode to destroy armored targets. This missile penetrates the more vulnerable top of an armored vehicle. This permits the attack of targets in defile or protected by berms. The TOW 2B has a dual sensor that senses the mass of iron and a laser measuring device which ranges down to the ground and identifies when the profile changes relative to known target profiles below the missile. In fly-over shoot-down mode, the gunner aims at the target. The missile flight path is 2.25 meters above the target. The gunner has the option to change to line-of-sight mode when engaging targets under cover or when engaging targets such as buildings or bunkers. The missile is more effective against buildings after being flown through a door or window. The TOW 2B is not effective as a breaching weapon.

A-7. The TOW 2B Aero is a variant of the TOW 2B. The TOW 2B Aero has an aerodynamic nose and additional wire to provide the extended range for this missile.

A-8. The TOW 2B and TOW 2B Aero have variants of missiles with counter active protection system capability. These variants were developed to defeat the active protection systems on target vehicles.

A-9. When using the TOW 2B or 2B Aero, prevent fratricide by ensuring the missile flight path is at least ten meters above friendly vehicles to prevent detonation on friendly vehicles. When using the TOW 2B or 2B Aero, prevent overkill by ensuring the missile flight path is at least 10 meters above dead vehicles to prevent detonation on dead vehicles.

A-10. Do not fire any member of the TOW 2B family of missiles over friendly vehicles or personnel, or over vehicles that have been destroyed by friendly fire. This may cause the missile to detonate on friendly or dead vehicles.

A-11. TOW limitations are listed below: (Refer to TC 3-22.32 and FM 3-22.34 for more information.)

- Firing over water.
- Firing over power lines.
- Firing through area fires.
- Firing in windy conditions.
- Firing from buildings.

RADIO FREQUENCY MISSILES

A-12. In 2010, the Army began accepting a new version of TOW missiles. These missiles use wireless radio frequency (RF) for guidance. Missiles with radio frequency are designated TOW RF. These missiles eliminate TOW wires in the AO, eliminate firing limitations over water and power lines and through fires, and adjust the synchronization of indirect fires.

A-13. The TOW RF missiles will be TOW 2A RF, TOW 2B Aero RF, and TOW BB RF. The TOW 2B Aero RF variant was the first missile accepted.

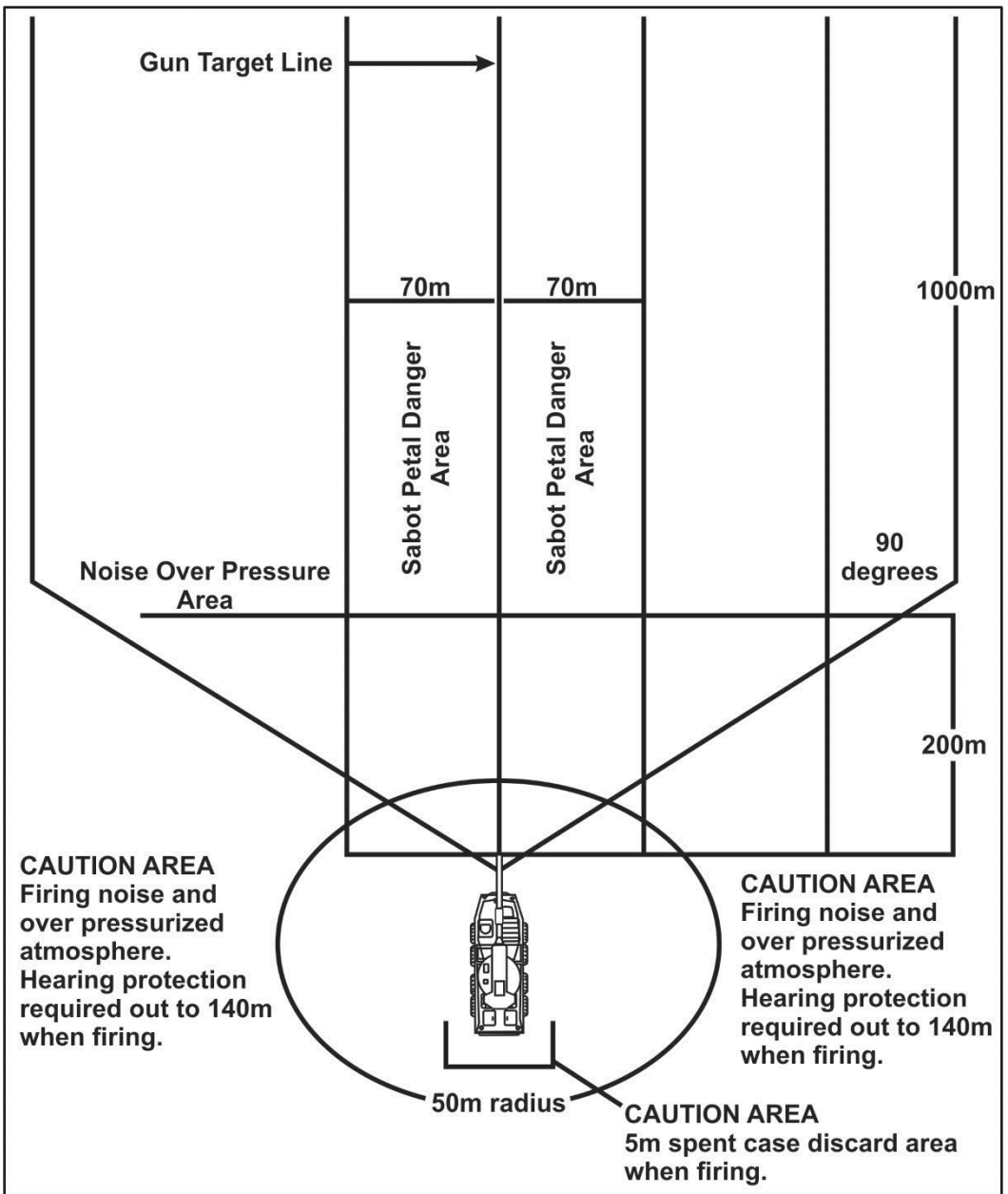
A-14. No launcher modifications are required to fire a RF missile. Current launchers can fire TOW and TOW RF missiles. TOW RF missiles have the same maximum safe arm and maximum range as TOW missiles.

MGS WEAPONS CONSIDERATIONS

A-15. Numerous factors related to vehicles and equipment affects the MGS platoon's planning in the urban environment. These factors include the following aspects:

- The preferred main gun rounds in urban operations are HEAT-T and high explosive plastic tracer. These rounds outperform sabot rounds against bunkers and buildings.
- HEAT-T ammunition arms approximately 60 feet from the gun muzzle. It loses most of its effectiveness against urban targets at ranges of less than 25 to 30 meters.
- High explosive plastic tracer is used primarily against troops (where blast concussion and fragmentation are desired), field fortifications, bunkers, buildings, and crew-served weapon emplacements.
- The 1040 canister round, used in an antipersonnel role, enables the MGS to defeat a squad of enemy infantry in the open. The canister round can also be used in an antimaterial role to defeat technical trucks and surfaced laid obstacles such as concertina wire.
- The M240 coaxial machine gun can effectively deliver suppressive fires against enemy personnel and against enemy positions that are behind light cover. If the unit is equipped with the M240 dismount kit, troops can dismount the machine gun and use it in a ground role.
- When buttoned up, the MGS crew has limited visibility to the sides and rear, and no visibility to the top. Figure A-3, page A-6, illustrate the dead space associated with MGS operations in an urban environment. When buttoned up, dismounted Infantry provide local security to the side, top, and rear of the MGS.
- An elevation of +15 degrees is also required to provide effective fires to support Infantry assaults on high ground at ranges up to 1000 meters for machine guns, and 2000 meters for the main gun. This capability is crucial when MGS platforms are unable to maneuver on designated Infantry axis of attack, and must support Infantry at a distance.
- Depression to -5 degrees is needed when MGS is used to mass fires in low ground EAs during defensive operations.

A-16. SABOT petals endanger accompanying Infantry elements. They create a hazard area extending 70 meters on each side of the gun target line, out to a range of 1 kilometer.



SABOT, HEAT, HEP and canister rounds will not be fired over friendly troops, unless troops are provided with proper protection.

Troops could be struck by discarding SABOT petals, or fragments of the projectile body of HE rounds. Additionally, failure of the full frontal impact switch may cause premature detonation of a HEAT M456A2 round.

The danger area for SABOT petal discard extends to 1,000 meters from the muzzle action of the 105mm main gun, and 70 meters on either side of the gun target line.

Legend: HEP = high-explosive plastic, HEAT = high-explosive antitank, m = meter

Figure A-3. Diagram of surface danger zone

Note. In the urban environment, the .50-caliber machine gun and the 7.62-mm M240 machine gun provides high-volume, long-range, automatic fires for the suppression or destruction of targets. They provide FPF along fixed lines and can be used to penetrate light structures; the .50-caliber machine gun is most effective in this role. Tracers from both machine guns are likely to start fires.

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Appendix B

TOW Employment in Restrictive Terrain

A thorough METT-TC analysis is necessary to choose the best employment option for the TOW. Antiarmor leaders must know when and how to effectively employ the TOW in restrictive terrain.

RESTRICTIVE TERRAIN

B-1. Restrictive terrain is defined as terrain that hinders movement to some degree. Units may have difficulty maintaining optimum speed or combat formation. Antiarmor leaders must recognize TOW system limitations and take advantage of the TOW system's capabilities in restrictive terrain. The types of terrain described below are examples of the types of restrictive terrain in which friendly forces operate. Often the categories blend together (such as forests and steep hills).

FORESTS AND JUNGLES

B-2. The degree and type of vegetation affects mounted movement, altering formations and speeds. Typically, armored vehicles will take advantage of roads or trails to move through these areas as quickly as possible. The ability to mass antiarmor fires on a slowed, contained enemy armored force may outweigh the degraded effectiveness of wire-guided missiles in this environment. (Refer to FM 90-5 for more information.)

EUROPEAN MODEL FORESTS

B-3. These forests are well tended, free of underbrush or secondary growth, and often hilly. Unopposed armored forces can traverse these forests rapidly because of a large number of good trails. If armored vehicles are forced off the trails, the thickness and spacing of trees and the degree of slope determine how freely they can maneuver. The lack of undergrowth often allows visibility to several hundred meters.

CUT OVER OR PRIMEVAL FORESTS AND JUNGLES

B-4. These forests have thick patches of vegetation and poor trail networks. Armored vehicles can travel through these forests if the ground is dry and not too steep, but such jungle busting is slow and visibility and engagement ranges are short, often measured in the tens of meters. TOW employment is seriously degraded unless fire lanes are cut through the underbrush.

HILLS AND MOUNTAIN RANGES

B-5. The degree of slope and vegetation affect the mounted movement, altering formations and speeds. Do not drive an ATGM vehicle up a hill greater than 60 percent grade or on a side slope greater than 30 percent grade. (Refer to ATP 3-90.97 for more information.)

B-6. Forested hills usually force armored vehicles to move on trails, which canalizes mounted movement. This restriction allows carefully positioned TOW systems to engage enemy vehicles unable to maneuver out of an EA. However, because tree growth and underbrush restrict visibility and engagement ranges, antiarmor leaders carefully place the TOW systems for a maximum range as possible.

B-7. Bare hills and mountains, where steep terrain and lack of roads again canalize maneuver, often allow engagement out to maximum TOW ranges. However, if an antiarmor unit emplaces TOW systems in obvious positions, a mounted enemy can suppress them with direct and indirect fires. To avoid obvious positions, an antiarmor unit may emplace TOW systems in locations that sacrifice standoff. This increases their protection from the preplanned enemy suppressive direct and indirect fires and allows them to gain surprise. Enemy utilizing caves and overhangs to avoid indirect fire and attack aircraft may be engaged by TOWs firing up into those positions.

SWAMPS AND WETLANDS

B-8. Swamps stop mounted movement except on any hard surfaced, such as elevated roads that pass through them. Flood plains and moors can support lightly armored vehicles, but this type of terrain is often trafficable only during dry periods. In northern Europe, terrain broken by drainage ditches and dikes is common; this type of terrain prevents armored vehicles from moving off roads. Clear weather and good visibility provide the antiarmor unit with better observation. However, better visibility also aids the enemy in suppressing obvious TOW system firing positions.

URBAN AREAS AND VILLAGES

B-9. The world is becoming increasingly urbanized, and antiarmor units will likely find themselves employed during urban operations. This environment obviously affects TOW system employment. (Refer to chapter 2 and 3 of this publication for more information.)

MANEUVER

B-10. Infantry forces are normally employed on restrictive terrain that makes TOW employment more challenging. The TOW must be moved and positioned on terrain that supports the Infantry, but it can be positioned apart from Infantry positions. The SBCT weapons troop or ATGM platoon can be moved on a separate axis of advance with task-organized Infantry to provide security. Timing of the attack is critical. This is complicated because the main attack force usually moves from the attack position to the objective on foot while the antiarmor unit moves by vehicle to its supporting position.

PROTECTION

B-11. In restrictive terrain, the antiarmor unit requires protection from close assault since it has limited self-defense capabilities. Only after conducting a detailed analysis of the mission variables of METT-TC does the commander or platoon leader decide how to move the SBCT weapons troop and its elements. Options include:

- Attaching an ATGM or MGS platoon to an Infantry company.
- Attaching an SBCT Infantry rifle platoon to the SBCT weapons troop.
- Attaching an SBCT Infantry rifle squad to an ATGM or MGS platoon.

GUIDELINES FOR TOW EMPLOYMENT

B-12. The basics of TOW employment outlined in chapters 1 through 5 of this publication, and direct fire planning and control described in chapter 6 of this publication, still apply when antiarmor units operate in restrictive terrain. However, commanders and leaders must look at these basics from a different perspective; certain principles may be more important than others, depending on the situation. Leaders can best employ the TOW missile in ambush scenarios where antiarmor units fire from unobtrusive positions to surprise the enemy and where TOW, Infantry fires, and indirect fires are closely coordinated. Finally, commanders must realize employing the TOW in restrictive terrain is less than ideal, and they should do so only if the results of a detailed METT-TC analysis dictate it. The seven principles of TOW employment have been modified for consideration in restrictive terrain.

MUTUAL SUPPORT

B-13. Mutual support is vital when terrain inhibits the engagement range. Instead of massing the TOW missile fires from the SBCT weapons troop into an EA, leaders may have to mass fires with other Infantry weapons systems (MGS, M2, MK19, Javelin, and AT4) and indirect fires.

SECURITY

B-14. Shorter engagement ranges and ample concealment make ATGM vehicles employing TOWs more vulnerable to enemy infantry. Therefore, the antiarmor unit should be positioned so Infantry can protect it. If the Infantry is not available, the ATGM must self-protect. The ATGM and MGS platoon and vehicles cannot sustain self-protection for an extended period or during limited visibility. Rotations of active crews conducting local security and rest plan in extending the amount of time.

FLANK SHOT ENGAGEMENT

B-15. The feasibility of flank shots often determines whether TOW systems should be employed, especially in restrictive terrain. Flank shots provide the largest view of the target and come from an unexpected direction. Enemy armored vehicles are better protected on the frontal slope since crew orientation is primarily to the front, and it is difficult to traverse a turret in most restrictive terrain. An enemy tank gunner or commander will fire his main gun or coaxial machine gun as a reaction to the flash of a TOW missile launch. The TOW gunner could lose focus on, and control of, the missile after seeing the enemy return fire. Leaders should strive for flank shots in restrictive terrain.

B-16. Simultaneous fire is used to rapidly mass the effects of fires or to gain immediate fires superiority over an enemy. It is also used to negate a low probability of hit given the terrain and expected engagement ranges. Other weapon systems may be employed to complement the TOW to gain immediate fire superiority.

STANDOFF

B-17. Standoff in restrictive terrain may be difficult to obtain. The shorter engagement ranges in restrictive terrain reduce standoff. Shorter ranges also result in a shorter travel time from missile launch to impact as well as arming distance.

COVER AND CONCEALMENT

B-18. Cover and concealment are especially important for TOW firing positions in restrictive terrain. Although antiarmor units try to fight from prepared positions, engineers may not be available to modify the terrain. Therefore, antiarmor units must often employ TOW missiles from hasty positions. In restrictive terrain, antiarmor units use the existing terrain for cover and concealment.

EMPLOYMENT IN DEPTH

B-19. Restrictive terrain limits TOW employment in depth. Depth in restricted terrain is achieved by focusing on where or how to destroy the enemy, not where to locate the system. One method is to emplace TOW systems so they each can fire into an EA from different locations, rear and flanks, at the same time. Strict direct fire control measures must be implemented to reduce the risk of fratricide. Another method to achieve depth is to designate different weapons systems, such as the MGS, M2, MK19, Javelin, and AT4, and to engage different enemy targets throughout an EA or an AO.

EMPLOYMENT AS PART OF A COMBINED ARMS TEAM

B-20. This is especially important in restrictive terrain. Assets such as TOW, MGS, M2, MK19, Javelin, AT4, mines and other obstacles, small arms or machine guns, M203 grenade launchers, and indirect fires must be skillfully blended to achieve the desired effect on the enemy. Antiarmor systems alone will not be sufficient. Leaders must position all assets so rounds impact on the appropriate portions of the enemy formation. Integration of indirect fires into massed direct ATGM fires enhances the effect of a unit's engagements. Mortar and artillery fires can damage TOW wires, causing missiles to miss targets. Leaders must ensure adequate fire control measures are implemented to prevent indirect fires from falling between the antiarmor unit and the targets during TOW engagements.

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Appendix C

Weapons Troop Fictional Scenario

The following Appendix illustrates a fictional vignette as a discussion vehicle illustrating one of many ways the SBCT weapons troop participates in operations. This scenario will describe reconnaissance, security, offense, defense, and sustainment tasks as well as some enabling operations. The intent of this fictional scenario is to show application and describe challenges commanders and leaders within the SBCT will encounter. For simplicity and brevity, the vignette presented describes only select planning considerations, guidance, graphics, and warfighting functions that apply to each section. Actual mission analysis and planning require more detail than what is in the examples below.

SECTION I – OVERVIEW OF THE SCENARIO

C-1. In this vignette, the SBCT is augmented with enabling forces and support conducts operations against hybrid enemy forces to occupy the area of operations and establish the conditions to begin stability operations.

SITUATION

C-2. The scenario occurs in Atropia. In the republic of Atropia, there are three major factions competing for control: the U.S.- and NATO-friendly elected civilian government, the military, and the resistance organization comprised of the ethnic- and religious-minority population that is under-represented in the elected government. The civilian government is generally corrupt, has been unable to provide adequate basic services to the general population, and has used the military and internal security apparatuses to retain control of the country, oppress its minority population, and stifle dissent.

C-3. After repeated failures to pay the military's salaries despite lavish spending on government officials during the same period, the military staged a coup to seize power. However, the military's rule has proven to be as brutal and inefficient as the government it replaced. The military has imprisoned or executed members of the civilian government and political opponents of the military regime, and continued the policy of oppression of the country's ethnic and religious minority populations. Refugees have begun to arrive in neighboring countries, threatening to destabilize and bankrupt their governments, and potentially widen the conflict into a regional war.

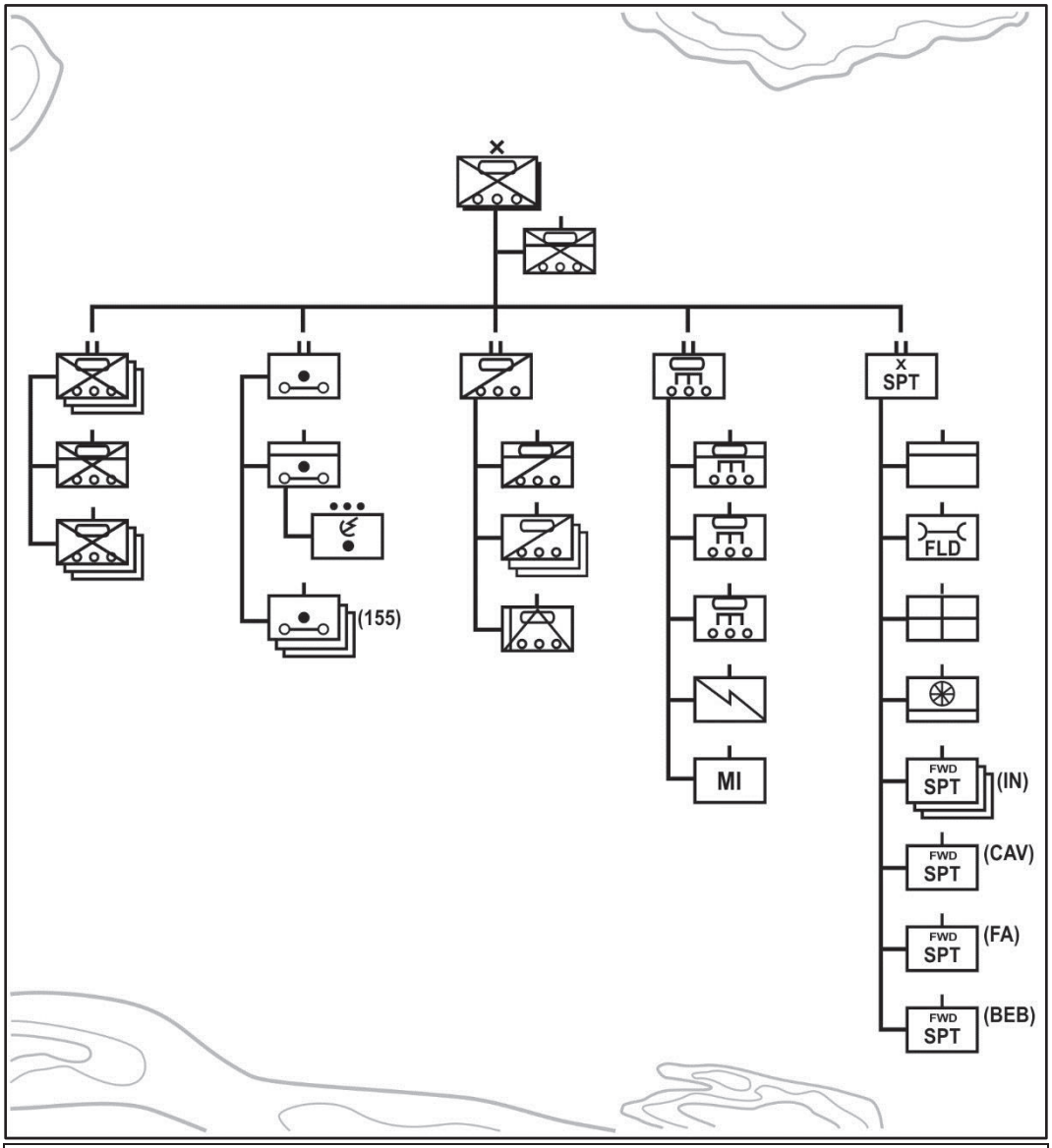
C-4. Internally, an armed militia has arisen within the ethnic and religious minority in response to the sudden cessation of government-sponsored oppression. Their goal is to take advantage of the instability surrounding the military's consolidation of power to advance their political agenda. As the military began its campaign of oppression and atrocities against the minority populations, the resistance movement has grown into an active, armed rebellion that is reportedly responsible for acts of terrorism, strikes against military regime forces, violent reprisals against majority populations, and attacks on foreign nationals. The resistance has also begun publicly broadcasting anti-U.S. and NATO rhetoric, threatening action against foreigners in their country, and pledging to attack targets in other countries if the international community takes any action opposing their cause.

C-5. Fueled by media coverage of the civil war and the atrocities being committed in (country) and mounting political pressure to intervene to stabilize the region, the U.S. and NATO have decided to deploy ground forces to restore the legitimate elected government, secure any weapons of mass destruction, end the atrocities being committed against the civilian population, and ensure national and regional stability. The

scenario begins at the Aerial Port of Debarkation (APOD) in the neighboring Portas where the SBCT has arrived, assembled, and is planning and preparing for operations.

WEAPONS TROOP TASK ORGANIZATION

C-1. Within this scenario, the weapons troop is assigned to the SBCT's Cavalry squadron. (See figure C-1.) A medic team with an MEV, a fire support team with an FSV, and a contact team with wrecker have been attached to the weapons troop.



Legend: BEB = brigade engineer battalion, CAV = cavalry, FA = field artillery, FLD = field, FWD = forward, IN = infantry, MI = military intelligence, MP = military police, PSYOP =, SPT = support, TACP = tactical air control party

Figure C-1. SBCT task organization

ENEMY FORCES

C-2. The enemy is a mix of elements comprised of military forces, paramilitary/local militia, irregular/insurgent, and criminal elements. These elements can act independently, collaborate for a common goal or objective for a limited amount of time or gain, and frequently engage each other as a part of their competition for political power and resources.

Regular Military Forces

C-3. Atropia is a former trading partner of the Soviet Union. They acquired most of their military equipment from the former Soviet Union and continue to trade with Russia for weapons and war materiel. Most of their military is modeled after the Russian military and they use a derivative of Russian tactics. They are a mostly motorized force, but have some mechanized formations that include the T-72 main battle tank, the Boyevaya Mashina Pekhoty (BMP)-2 armored fighting vehicle, and the Bronetransporter (BTR)-80 wheeled infantry carrier vehicle. The Army has struggled to maintain their equipment and vehicles due to budget limitations, however, their equipment is still functional. Their Infantry soldiers are armed with AK-47s and Pulemyot Kalashnikova *(*PKMs), RPG-7s or RPG-14s, and 82mm mortars. They have some self-propelled 2S1 122mm artillery and ZSU-23s for air defense. The army has also been known to use complex obstacles (such as the mine-wire obstacle) in the defense.

C-4. Atropia does have a non-persistent chemical weapons capability and have indicated a willingness to use them under certain, currently unspecified conditions. They also possess the capability to develop biological weapons, and the necessary delivery systems to employ them.

Paramilitary

C-5. The military regime does have a paramilitary force composed primarily of former police officers, private security contractors, and mercenaries. They have a various array of weapons and capabilities. Some units have acquired anti-armor weapons, and possess the capability to construct IEDs capable of disabling or destroying light and medium vehicles.

Irregular and Insurgent forces

C-6. The republic of Atropia liberation forces has access to a limited number—but wide variety—of weapon systems. They have captured a large cache of former U.S. weaponry that includes small arms, and limited quantities of recoilless rifles and AT-4s. The resistance has acquired Russian-made equipment from the military and deposed national government that includes mostly small arms and RPG-7s, but did include some SA-7 Man Portable Air Defense (MANPADs). They have modified various civilian trucks to be equipped with heavy machine guns. Due to their limited ability to confront conventional forces directly, the resistance frequently constructs and employs IEDs capable of disabling or destroying light and medium vehicles. They have also employed IEDs against non-military targets for political gain.

C-7. The insurgent groups have also stepped in to fill some civil service roles that became vacant following the coup. However, these services (such as small schools, food banks, medical clinics, and transportation) are available only to populations that support them in an effort to maintain and bolster popular support. They also have a very capable and media-savvy propaganda machine that heavily leverages digital communications when possible. They also have the capability to conduct some cyber warfare, but have mostly been limited to low-impact attacks on military regime networks.

Criminal

C-8. There are criminal elements continuing to operate in Atropia. These groups typically try to avoid detection by the main belligerents, and are generally motivated by profit over politics. They will interact with the country's main political factions, particularly if it is advantageous to their operations, and are willing to work for or with multiple opposing parties simultaneously. They will avoid direct and open confrontation whenever possible, but are willing to use force to defend or pursue their interests.

C-9. Atropia's criminal organizations have resorted to kidnapping, trafficking people, cybercrime, pirating, smuggling, and identity theft in addition to more traditional crime such as armed robbery, arson, extortion, racketeering, murder-for-hire, and illegal gambling, typically establishing fronts to avoid detection and law

enforcement interference. These groups also impose a tax on local citizens for highlighting the government's inability to maintain law and order.

C-10. The criminal elements tap into well-established smuggling networks to acquire their equipment. Most of their equipment is available on the black market, but they have acquired some weapons and equipment from the deposed government's stockpiles and by importing equipment from neighboring countries. Some of their equipment includes former US small arms, recoilless rifles, and AT-4s. They also have Russian-made small arms, machine guns, and RPG-7s. They primarily utilize civilian light trucks, and have modified a very limited number with heavy machine guns, preferring stealth to open confrontation. They have the capability to make IEDs, and have used them to pursue generally criminal objectives or impede governmental forces' ability to apprehend them.

SECTION II – RECONNAISSANCE

C-11. The reconnaissance phase of the SBCT operation begins with the SBCT weapons troop commander receiving the WARNORD from the Cavalry squadron. He receives a brief overview of the area of operation and the following tentative mission statements:

SBCT Mission: XX conducts movement to contact from LD to phase line XX to determine the enemy's composition, disposition, and set the conditions for subsequent operations in the AO.

CAV SQDN: XX conducts zone reconnaissance of the AO to facilitate the SBCT's follow on deliberate operations. O/O locate and engage hostile forces within capabilities to retain freedom of maneuver.

C-12. The SBCT commander keeps the SBCT weapons troop pure to support the Cavalry squadron reconnaissance mission. He has authorized the squadron commander to task organize the SBCT weapons troop across the squadron at his discretion. The Cavalry squadron commander splits the weapons troop by task organizing one platoon weapons platoon (+) to each Cavalry troop. The remainder of the SBCT weapons troop follow and support the squadron behind C troop in the order of march.

PLAN

C-13. To meet the squadron commander's intent, the SBCT weapons troop commander task organizes his six platoons into mixed-platform weapons platoons. He then assigns a four-vehicle weapons platoon to each Cavalry troop (see figure C-2).

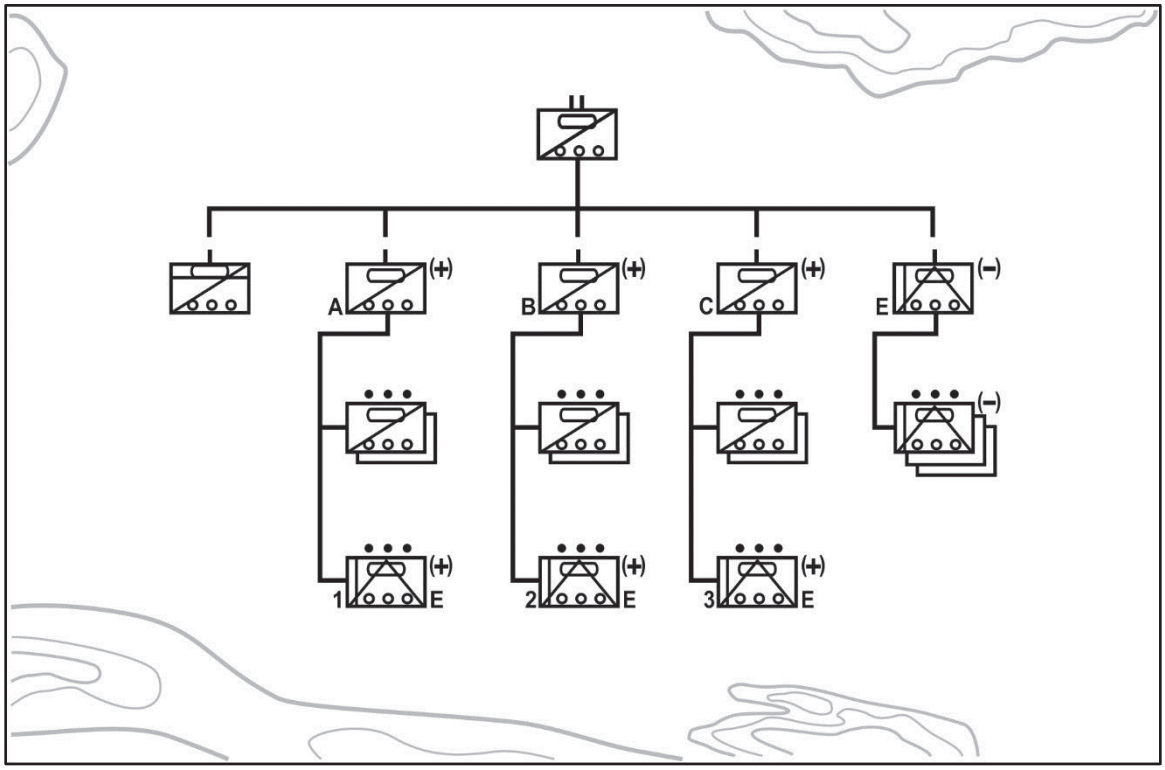


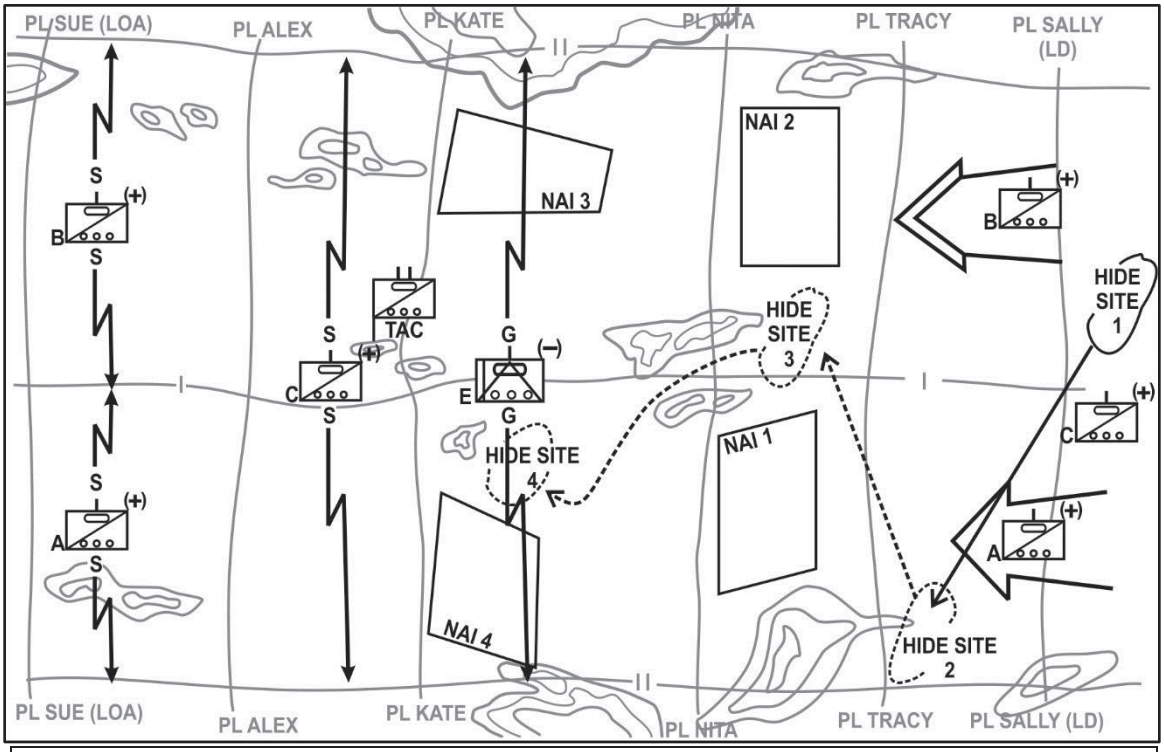
Figure C-2. SBCT Cavalry squadron task organization

C-14. The weapons platoons attached to the Cavalry troop are immediately sent to link up with their supported units and integrate themselves into their troop leading procedures. The weapons troop commander attaches weapons platoons (+) to SBCT Cavalry troops in accordance with the habitual relationships (See chapter one for more information). He maximizes preparation time by linking up his reassigned platoons with their supported units immediately following the approval of the task organization.

C-15. The Cavalry squadron commander determines the SBCT weapons troop's commitment decision criteria, engagement criteria, and how he envisions employing the SBCT weapons troop to support the Squadron's zone reconnaissance. He specifies that the SBCT weapons troop will focus on the destruction of enemy armored vehicles that cannot be destroyed or defeated by indirect fires due to tactical (METT-TC) considerations or because a direct fire engagement is more practical or effective. The squadron commander plans to commit the SBCT weapons troop if the weapons platoons attached to the Cavalry troops are insufficient to defeat the threat in their individual sectors.

C-16. The Cavalry squadron commander directs the SBCT weapons troop to maintain a tactical position between the TAC and at least one terrain feature behind the attached weapons platoons. The squadron commander's intent is to prevent the premature commitment of the SBCT weapons troop, maximize the combat power available in the SBCT weapons troop by reducing exposure to enemy effects, and allow the weapons troop to mass and engage from a position of tactical advantage.

C-17. The weapons troop commander develops his plan based on warfighting functions and the commander's guidance. His plan considers: maximizing freedom of maneuver to allow rapid response, limit exposure, maintain element of surprise, and keep effective mission command to adjust to changing conditions. The weapons troop commander then conducts the necessary analysis and develops his plan (see figure C-3, page C-6).



Legend: LD = line of deployment, LOA = limit of advance, NAI = named area of interest, PL = phase line, TAC = tactical command post

Figure C-3. Squadron and weapons troop zone reconnaissance

PREPARE

C-18. The weapons troop prepares by conducting rehearsals. These rehearsals include: battle handover, occupying a fighting position, target engagement, displacing from a fighting position, movement techniques, movement formations, hide site occupation procedures, engagement area SOPs, battle drills, MEDEVAC and CASEVAC, and vehicle recovery. The Weapons Troop also rehearses its communications primary, alternate, contingency, and emergency plan and contingency plans.

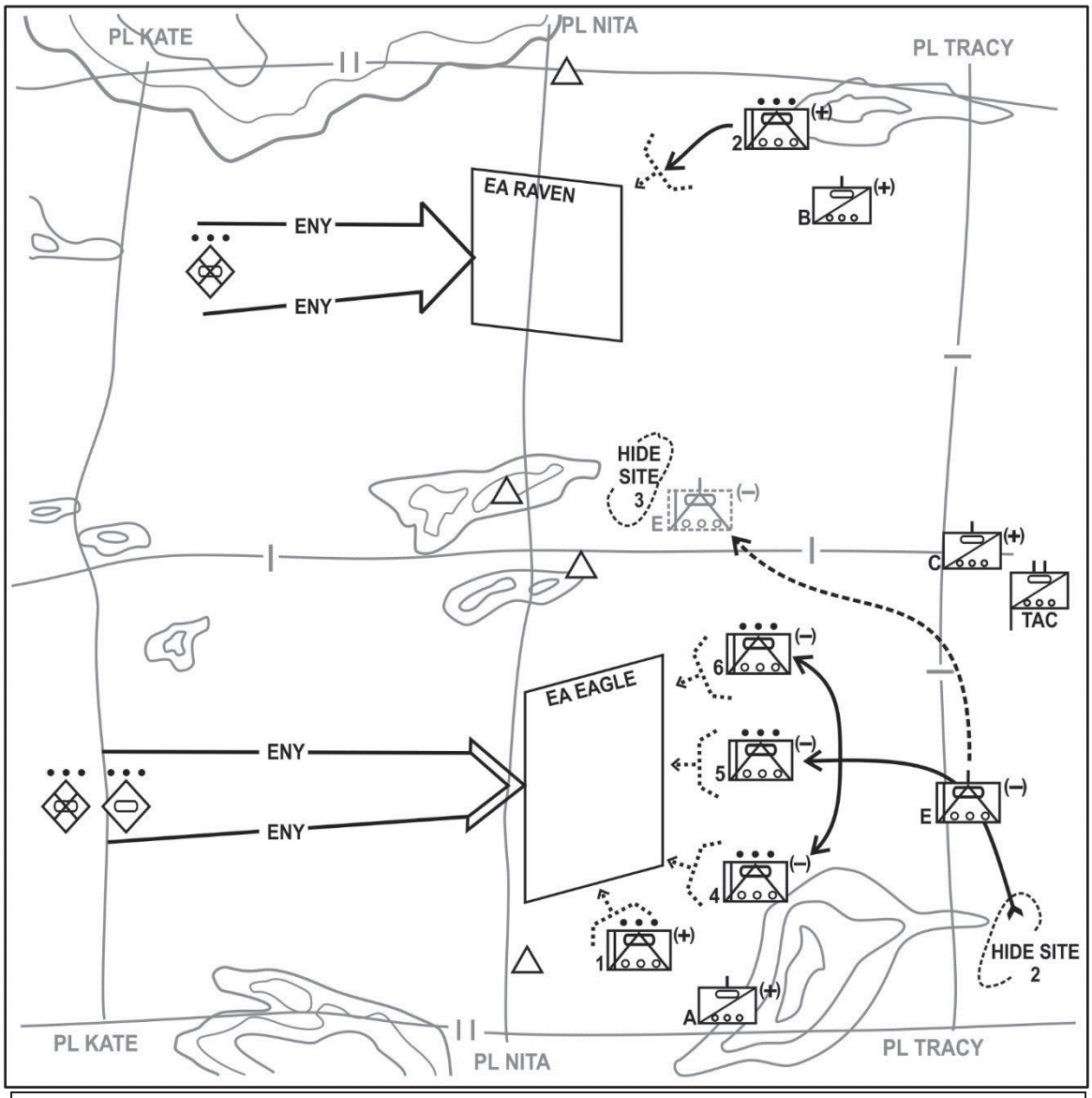
C-19. The troop also conducts pre-combat checks and inspections by platoons to ensure the unit remains secure. During the precombat checks and PCI, the troop leadership pays special attention to special equipment, including PAS-13s and binoculars.

C-20. Finally, the troop conducts a 'short count' to start their vehicles simultaneously. Each platoon moves into the order of movement specified by the commander as: fourth platoon in the lead, then the commander, fifth platoon, headquarters, and sixth platoon. Once the troop has moved into its marching order, the platoons adjust into their specified formations: troop column, lead platoon wedge, following platoons in staggered column.

C-21. The troop commander makes the final necessary coordination between the Cavalry troops and squadron to ensure synchronization. The weapons troop then moves into its first hide site. The squadron commander waits until the sun has set before initiating the zone reconnaissance. Once conditions are set, the squadron commander directs the Cavalry troops cross the LD. The weapons troop stands by for the Cavalry troops to attain their planned distances forward.

EXECUTE

C-22. The Cavalry troops begin their zone reconnaissance to PL Sue (LOA [limit of advance]). They move forward stealthily and deliberately towards PL Tracy. They encounter enemy reconnaissance elements consisting of observation posts (OPs) and supporting BRDMs and technical trucks. A and B troops with their attached weapons platoons (+) engage and defeat the enemy's reconnaissance elements and pursue them towards PL Nita. C Troop continues to move behind A and B troops, providing depth to the zone reconnaissance and ensuring that no enemy reconnaissance elements have passed A and B Troops' zone reconnaissance efforts. The Weapons troop remains in Hide Site 1 (see figure C-4).



Legend: EA = engagement area, ENY = enemy, PL = phase line, TAC = tactical command post

Figure C-4. Target handoff with A and B troops

C-23. A and B troops cross PL Tracy and the weapons troop moves rapidly to Hide Site 2 in accordance with the squadron scheme of maneuver. A and B troops identify elements of an enemy mechanized Infantry company in the vicinity of PL Nita. A troop observes a tank platoon and a mechanized Infantry platoon in its zone, and B troop identifies a mechanized Infantry platoon in its path. Both troops report the contact to

squadron. The squadron commander identifies that the enemy in A troop's sector exceeds that troop's ability to engage. He contacts the weapons troop commander and instructs him to engage to destroy the enemy platoons in EA Eagle.

C-24. The weapons troop commander coordinates with the A troop commander to incorporate first weapons troop platoon into the engagement area plan. They agree to position first platoon to the southeast of BP Hammer. The weapons troop commander and A troop commander also discuss the current locations of A troop's elements and OPs to ensure an accurate picture to prevent fratricide. The weapons troop commander plans his engagement to avoid placing any A troop elements within the SDZ's of the weapons systems firing into EA Eagle. He then shares his plan with the A troop commander to confirm that all A Troop elements are outside of the EA Eagle SDZs. Once the A troop commander has confirmed his elements' locations are clear of EA Eagle, he indicates to the weapons troop commander that he can begin the engagement.

C-25. The weapons troop commander issues his orders to his platoon leaders, orienting his forces on line around EA Eagle. He positions his vehicle and the fire support officer's vehicle behind the weapons troop's battle position. He then orders his platoon to occupy their platoon battle positions and assume a hull-down posture. Once in position, the commander conducts a leader's reconnaissance of the EA to confirm his engagement area SOP and template, and make any necessary fire control measure or positioning adjustments. Once satisfied that his template with a near-to-far frontal fire pattern will work, he gives his final instructions to his four platoon leaders who prepare accordingly.

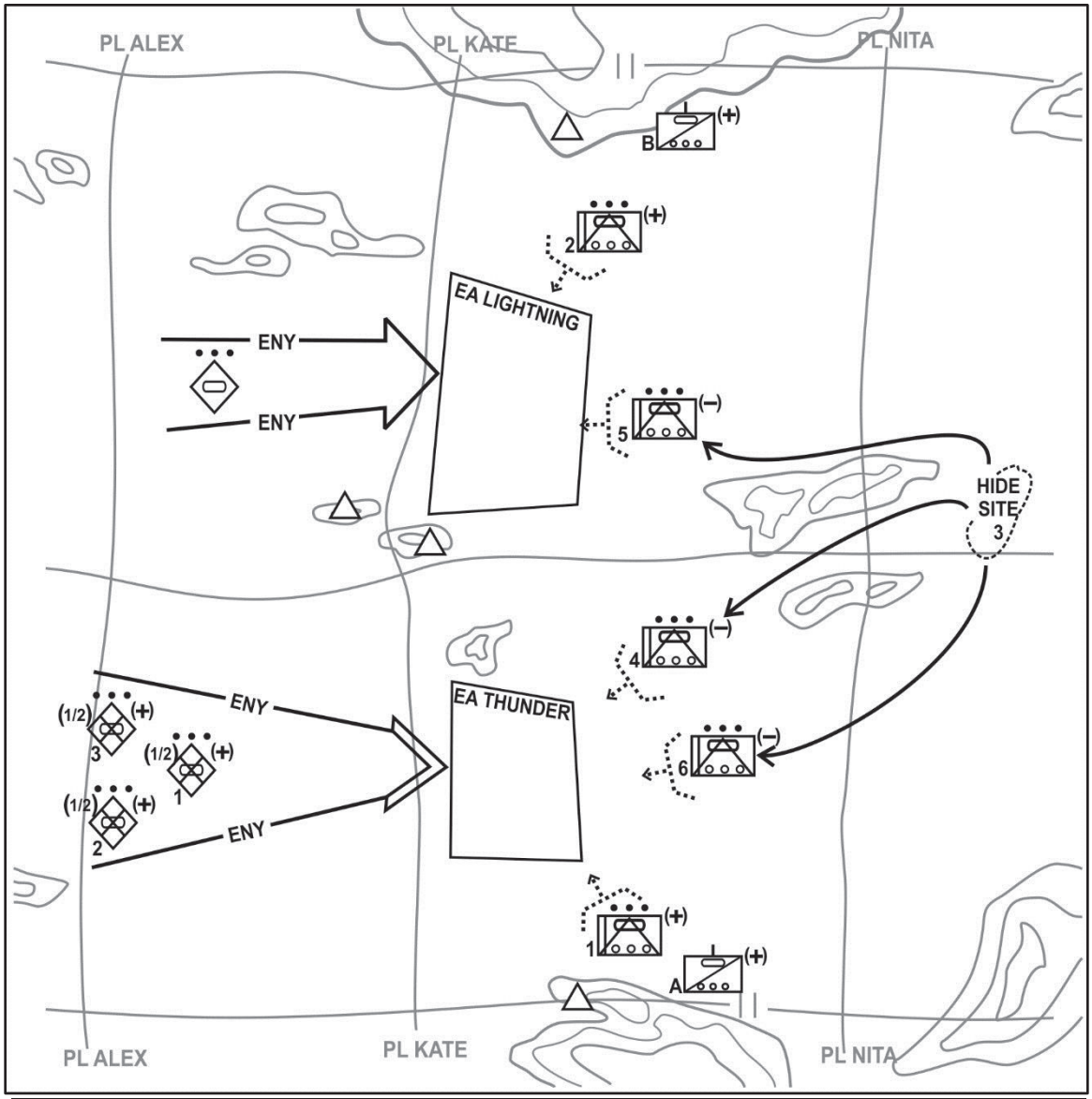
C-26. As the approaching enemy enters EA Eagle, the weapons troop commander initiates his engagement. The ATGM in 4th, 5th, and 6th platoons engage the three enemy tanks. One MGS from 4th, 5th, and 6th platoons fire their main guns aiming at the tanks' flanks in an attempt to immobilize the enemy to prevent them from focusing on the ATGMs. The second MGS in 4th, 5th, and 6th platoons exposes itself only as much as necessary to provide observation of effects, battle damage assessment, decide whether to re-engage if necessary, and report that information to the weapons troop commander. 1st platoon provides redundancy to the engagement, fighting in two ATGM/MGS pairs, and ensuring they remain in a hull down position throughout the initial volley.

C-27. 4th, 5th, and 6th platoons destroy three enemy tanks with TOW missiles and do not sustain any losses. However, the mechanized Infantry platoon attempts to bypass the troop's position to the south, and moves into 1st platoon's sector of EA Eagle. The weapons troop commander identifies the maneuver and orders first platoon to engage. 1st platoon utilizes two MGSs for the attack with the ATGMs providing redundancy on the two targeted BMPs if needed. The MGSs engage and destroy the BMPs using two HEAT rounds each. The remaining BMP withdraws from the engagement and successfully breaks contact by heading west. The weapons troop commander assesses that the enemy was unable to accurately identify all of the weapons troop's battle positions during the engagement.

C-28. As soon as 1st platoon's engagement is complete, the weapons troop commander contacts the A troop commander and returns control of first platoon back over to him. He instructs the troop to move rapidly to Hide Site 3, where they begin reloading operations while in a covered and concealed location, and prepare to assist B troop if necessary. 2nd platoon—attached to B troop—successfully engages the approaching mechanized Infantry platoon utilizing two volleys from their MGSs. In that engagement, the first volley results in only one destroyed enemy vehicle. The BMPs identify the MGS positions, maneuver to engage, and initiate direct fires on the identified MGS positions. The MGSs then re-engage from their alternate positions, and destroy the remaining two BMPs before they can adjust and reacquire them.

PHASE III

C-29. As the Cavalry squadron continues zone reconnaissance, it confirms a mechanized Infantry company (+). This company approaches A troop's sector in company wedge with three mechanized infantry platoons. Each platoon is composed of one tank and two BMPs. To the north, the enemy approaches east into B troop's sector with a tank platoon composed of three tanks. Both A and B Troops report their contacts to the squadron commander. The squadron commander orders the weapons troop to engage and destroy the enemy. The weapons troop commander assesses the relative strengths of the enemy in each sector. He decides to split his formation and engage simultaneously. He assigns 5th platoon to B Troop, adding an extra ATGM vehicle to permit a single-volley engagement of the opposing tank platoon. The weapons troop commander moves into position to engage the enemy in EA Thunder. (See figure C-5.)



Legend: EA = engagement area, ENY = enemy, PL = phase line

Figure C-5. Counterreconnaissance engagement

C-30. The weapons troop commander coordinates with both A and B Troop commanders to facilitate the attachment of 2nd platoon to B troop, and first platoon back to the weapons troop. Once the B troop commander confirms radio contact with fifth platoon's platoon leader, he returns to coordinating actions in EA Lightning with 2nd (+) and 5th (-) weapons troop platoons. The A troop commander updates the weapons troop commander on the disposition of his reconnaissance forces and OPs. He also verifies the weapons troop commander's engagement plan for EA Thunder. The weapons troop commander verifies receipt of first platoon from A troop, and assumes mission command of the platoon for the duration of the engagement.

C-31. In B troop's sector, the weapons troop platoons engage the enemy tanks. The ATGM in 5th platoon targets the closest tank on the south side of the enemy's formation. The ATGMs in 2nd platoon target the remaining two tanks. The MGSs target the same vehicles as their ATGM partner with the intent to distract the enemy from concentrating on the ATGMs, and to achieve mobility kills that improve the probability of a successful TOW missile engagement. The second MGS in 5th platoon provides observation of effects, battle

damage assessment, determines whether to re-engage if necessary, and reports that information to the B troop commander. B troop's engagement with second and fifth weapons platoons disables two tanks before all three are destroyed by the ATGMs' TOW missiles almost simultaneously to the MGSs' 105mm HEAT round strikes.

C-32. In A troop's sector, 1st platoon targets the enemy's southernmost platoon, 6th platoon targets the lead enemy platoon, and 4th platoon targets the northernmost enemy platoon. 1st and 4th platoons use a depth fire pattern where the ATGMs target the furthest vehicles and the MGSs target the closer vehicles. In first platoon, only one ATGM engages, while the other provides observation of effects, battle damage assessment, and reports that information to the weapons troop commander. Each vehicle ensures that they will have an unobstructed view of their target vehicles at the time fires are initiated, and that friendly munitions will not impede other friendly munitions, such as the TOW missiles and their guidewires. The platoons also designate alternate vehicle fighting positions in case re-engagement is necessary.

C-33. The weapons troop commander initiates the engagement with a troop fire command. All three weapons platoons engage simultaneously. Three of the six MGSs fail to destroy their targets with the first round, and they engage a second time from their alternate positions, successfully destroying their targets. The firing ATGM in first platoon experiences a temporary malfunction with its TOW missile launcher. However, the targeted BMP has begun withdrawing to the west, and quickly begins to pass 2500 meters in range from first platoon's MGSs. The Weapons Troop commander instructs first platoon to continue the engagement with its second ATGM, which engages and destroys the withdrawing BMP with a TOW missile at a range of 2900 meters. The weapons troop commander reports the engagement's results to the Squadron commander.

C-34. At the completion of the engagement, the weapons troop commander returns mission command of first platoon to A troop, and coordinates with the B troop commander to receive 5th platoon. Once the weapons troop commander has successfully made contact with 5th platoon leader, he provides link up instructions to the platoon. The weapons troop returns to Hide Site 3, and conducts rearming and resupply operations as necessary. The weapons troop then continues to follow and support the squadron's zone reconnaissance, moving to Hide Site 4 once the Cavalry troops pass PL Alex.

C-35. The Cavalry squadron completes its zone reconnaissance to PL Sue (LOA), and transitions to a guard. The Cavalry troops establish their observation posts, arrayed in depth, while the weapons troop remains in Hide Site 4 and completes resupply operations.

SECTION III – GUARD

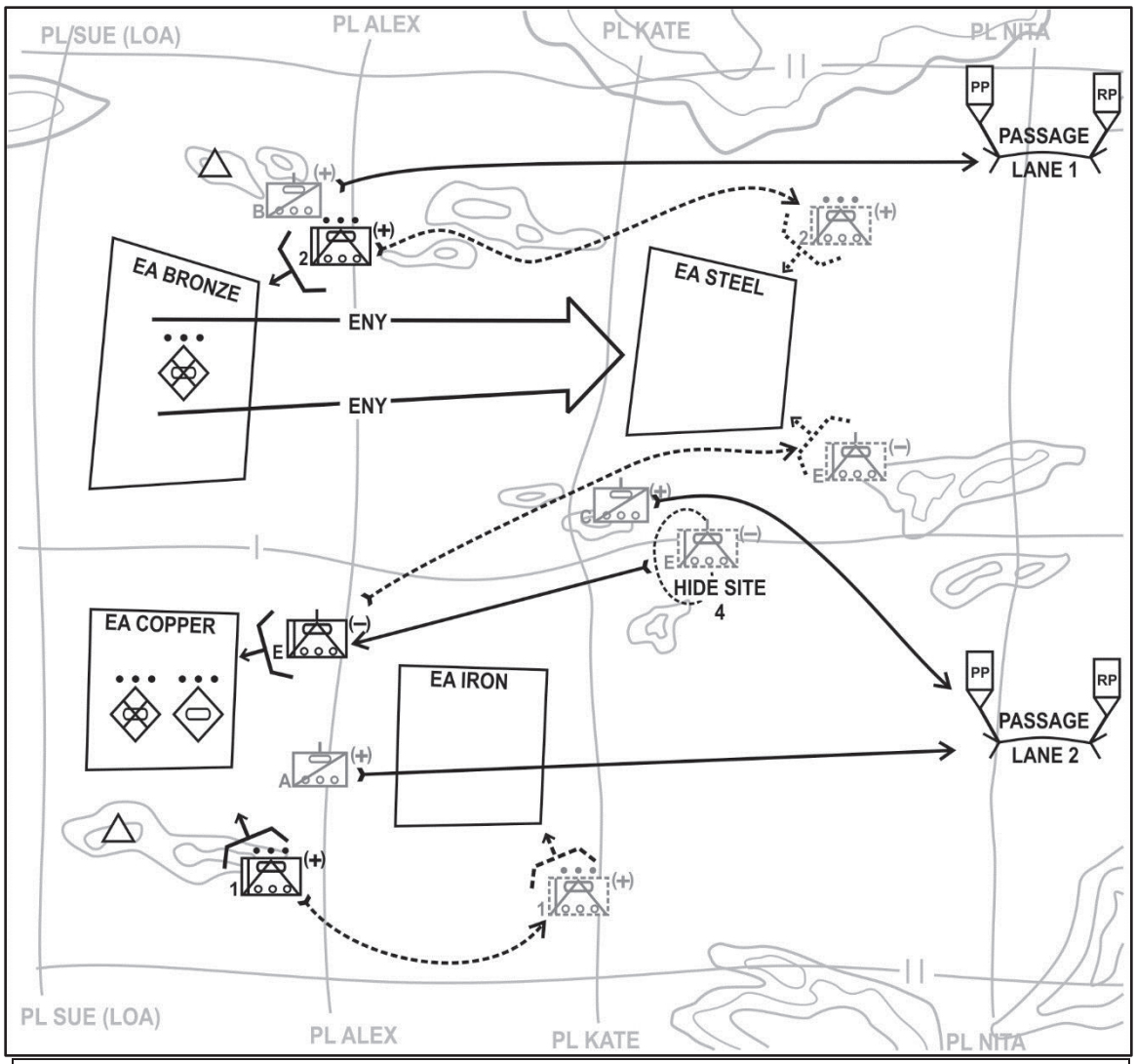
C-36. The Cavalry squadron completes its zone reconnaissance to PL Sue (LOA), and transitions to a guard. The Cavalry troops establish their observation posts, arrayed in depth, while the weapons troop remains in Hide Site 4 and completes resupply operations. The brigade commander directs the squadron to guard the brigade as the Infantry battalions complete their offensive missions from the previous tactical phase, transition to the defense in anticipation of an enemy attack, and construct their battle positions.

C-37. The squadron commander retains the same task organization as the zone reconnaissance phase. He provides the weapons troop commander discretion to utilize hide sites throughout the squadron's AO between PL Sue and PL Nita, so long as they remain in supporting distance of the Cavalry troops.

PLAN

C-38. The weapons troop commander contacts the squadron S-2 to obtain the most recent intelligence update. Based on the S-2's intelligence assessment, the weapons troop commander determines that the enemy's most likely course of action is to neutralize the weapons troop by identifying the weapons troop's hide site and deny the use of that area.

C-39. The weapons troop commander also assesses that the enemy will likely conduct its own reconnaissance prior to attacking with a battalion task force. He predicts that the enemy's attack will lead with two mechanized Infantry company teams in an attempt to defeat reconnaissance units. This attack is an attempt by the enemy to force weapons troop platoons to reveal their positions and engage them. Once the weapons platoon's positions are identified, the enemy will fix and isolate each weapons platoon. (See figure C-6.)



Legend: EA = engagement area, ENY = enemy, PL = phase line, PP = passage point, RP = release point

Figure C-6. Squadron guard plan

C-40. The weapons troop commander identifies the enemy's anticipated avenues of approach, plans advantageous engagement areas to destroy the enemy, and covered and concealed routes to and from those engagement areas. He selects and plans four EAs: Bronze, Steel, Copper, and Iron. The EAs are arrayed in depth in both A and B troop sectors, with two EAs per Cavalry troop sector. He assigns direct fire control measures (DFCMs) and indirect fires in accordance with the troop EA SOP and template.

C-41. The commander also selects platoon hide sites for 4th, 5th, and 6th platoons, and the headquarters section to facilitate dispersion. He also plans for alternate hide sites, displacement criteria, and all necessary routes for rapid movement of platoons in the event of compromise. 4th, 5th, and 6th platoons are then moved to Hide Sites 441, 451, and 461 respectively. The troop headquarters remains at Hide Site 4. 4th, 5th, and 6th platoons alternate hide sites are Hide Sites 442, 452, and 462 respectively. The troop headquarters alternate hide site is Hide Site 41. The commander then tasks the platoons with providing bottom-up refinement of the selected positions, and making recommendations on an additional alternate hide site for their platoons.

C-42. The troop FSO plans indirect fires in accordance with the weapons troop commander's intent for fires and the troop EA SOP and template. He also plans for the use of any enabling forces or additional assets that the troop may receive during the course of the operation, such as attack aviation, fixed-wing aircraft, artillery,

or Cavalry troop mortar sections. He does this despite not having any pre-planned assets given to the troop by higher headquarters, but to be prepared to utilize any assets that he may receive as the situation develops.

C-43. Finally, the weapons troop commander plans operations that delay the enemy to allow the retrograde of reconnaissance forces once the enemy's main attack is identified. He also plans for the rearward passage of lines (RPOL) of the weapons troop, and coordinates directly with the infantry companies in whose sectors the RPOL will occur.

PREPARE

C-44. As the weapons troop begins preparations for the guard mission, the troop's leaders continue to maintain situation awareness of friendly forces' disposition along the screen line, and the depth of the squadron's positions. They also maintain awareness of the infantry battalions' positions, with particular attention paid to the units involved with the RPOL and passage lanes.

C-45. As the reconnaissance forces conduct their counter-reconnaissance mission, the weapons troop leadership monitors their reports and actions. Particular attention is paid to the composition and disposition of enemy forces engaged and any information that might indicate an enemy course of action. The weapons troop commander also monitors the employment of the weapons troop platoons attached to the Cavalry troops by the troop commanders.

C-46. The weapons troop continues to conduct TLPs in accordance with the troop SOP. In addition to the standard tasks, the commander includes rehearsals of: conduct of the EAs, survivability moves in the event elements or the entire troop are compromised by enemy reconnaissance forces, massing the troop at an anticipated EA from dispersed hide sites, consolidation and reorganization after an engagement, displacement to subsequent positions, the passing of the Cavalry troops upon collapsing the screen line, the weapons troop's RPOL, and potential contingencies.

C-47. The weapons troop commander also conducts a leader's reconnaissance of his anticipated EAs to the extent possible to confirm DFCMs and fires targets, and adjusts them as necessary. Once he has completed his reconnaissance and finalized his plans, he coordinates with squadron and the Cavalry troops to ensure a common operating picture and that friendly elements will be clear of the SDZs at each EA within commander-determined acceptable levels of risk.

EXECUTE

C-48. The Cavalry squadron completes its zone reconnaissance to PL Sue (LOA), and transitions to a guard. The Cavalry troops establish their observation posts, arrayed in depth, while the weapons troop remains in Hide Site 4 and completes resupply operations.

C-49. A and B troops identify a battalion-sized element moving into the Squadron's sector. A and B troops identify a mechanized Infantry company/team with two tank platoons in each of their sectors. In both sectors, the mechanized Infantry company/team lead the attack. One enemy company approaches EA Bronze, and one company approaches EA Copper. Both are arrayed in a company wedge formation. A and B troops report the approaching enemy forces to the squadron headquarters.

C-50. Based on the Cavalry troops' reports, the squadron commander decides to employ the weapons troop to destroy the enemy in A troop's sector first, and then the enemy in B troop's sector at EA Steel. He also orders the squadron to begin collapsing the screen line. A and B troops conduct a reconnaissance handover with C Troop, and utilize their weapons troop platoons to cover the Cavalry troops' displacement. The weapons troop's 2nd platoon (attached to B troop) covers B troop's displacement by delaying the enemy at EA Bronze while the weapons troop engages at EA Copper along with 1st platoon. Once the enemy is destroyed in EA Copper, the weapons troop moves to EA Steel, and destroys the enemy forces in that engagement area along with 2nd platoon. The squadron commander then contacts his troop commanders and directs the course of action.

C-51. The weapons troop commander issues his orders to his platoon leaders to occupy their positions at EA Copper, and the troop begins its movement. The weapons troop commander contacts the A troop commander to finalize the engagement plan, and to obtain temporary mission command of the weapons troop's 1st platoon. 1st platoon moves into its designated battle position, while 4th, 5th, and 6th platoons mass at the troop

battle position and occupy their platoon battle positions. Once the troop is set in their positions facing EA Copper, they conduct a radio rehearsal.

C-52. The enemy's mechanized Infantry company teams and tank platoons enter EA Bronze and EA Copper. The weapons troop engages the enemy in EA Copper, and 2nd platoon engages the enemy in EA Bronze. In EA Bronze, 2nd platoon destroys two enemy tanks and two enemy BMPs with its two ATGMs and two MGSs. They then displace towards EA Steel. In EA Copper, the weapons troop engages the enemy with a simultaneous volley from all four platoons. They destroy three enemy tanks and six enemy BMPs, but fifth platoon has one ATGM catastrophically destroyed by an enemy tank.

C-53. The squadron commander directs the weapons troop to move to EA Steel to engage the approaching enemy in B troop's sector, support the weapons troop's 2nd platoon, and facilitate B troop's retrograde. Three enemy tanks and three BMPs continue moving through A troop's sector. The squadron commander instructs the C troop commander to send the weapons troop's 3rd platoon (attached to C troop) to support the weapons troop's 1st platoon at EA Iron. The squadron commander also orders C troop to conduct its RPOL through the SBCT's defensive positions and rejoin the squadron. The weapons troop commander leaves his troop XO with 1st platoon to control the engagement at EA Iron utilizing 1st and 3rd platoons, and moves the troop with 4th, 5th, and 6th platoons to EA Steel.

C-54. The Troop XO engages the enemy in EA Iron with 1st and 3rd platoons and utilizing the EA SOP template. They destroy three enemy tanks and three enemy BMPs, but one ATGM and one MGS in 1st platoon are destroyed by direct fire. The first platoon sergeant manages to recover one wounded soldier from the MGS, and places him inside his ATGM for evacuation. Upon completion of the engagement in EA Iron, the weapons troop XO contacts the weapons troop commander and provides a situation report. The weapons troop commander gives the order to conduct the RPOL with 1st and 3rd platoons, and then moves out to RP E1.

C-55. Once the weapons troop has occupied its battle positions over-watching EA Steel and conducts its link up with 2nd platoon, the enemy enters EA Steel. Once the enemy is inside EA Steel, the weapons troop commander initiates his fires, and destroys three enemy tanks and six enemy BMPs. One ATGM—the platoon sergeant's ATGM—in 2nd platoon is destroyed by an enemy BMP. The second senior section sergeant is able to recover one soldier from the platoon sergeant's ATGM and places him on his MGS. Also, the platoon leader's MGS from 6th platoon is destroyed, and the 6th platoon sergeant assumes leadership of the platoon. The C troop commander contacts the squadron commander and weapons troop commander to inform them that he has completed his RPOL.

C-56. While conducting the engagement, the weapons troop commander also identifies the next enemy battalion task force in the enemy brigade's formation. He reports this information to the squadron commander, and receives confirmation to begin conducting the rearward passage of lines.

C-57. The weapons troop moves to RP E1 and consolidates in low ground. The troop first sergeant works with the medics and platoon sergeants to transfer the casualty to the troop MEV. The remainder of the troop reloads and refuels as time permits, and the troop quickly moves out towards the RPOL passage lane.

C-58. Once the weapons troop links up with the stationary Infantry unit, it begins its rearward passage of lines through the passage lane. Once released on the far side of the SBCT Infantry rifle company's battle positions at the passage lane release point, the weapons troop begins its transition to supporting the SBCT's defense. This includes attaching 2nd and 3rd platoons to the SBCT's main effort, 1st SBCT Infantry battalion, and placing the weapons troop with 1st, 4th, 5th, and 6th platoons in reserve.

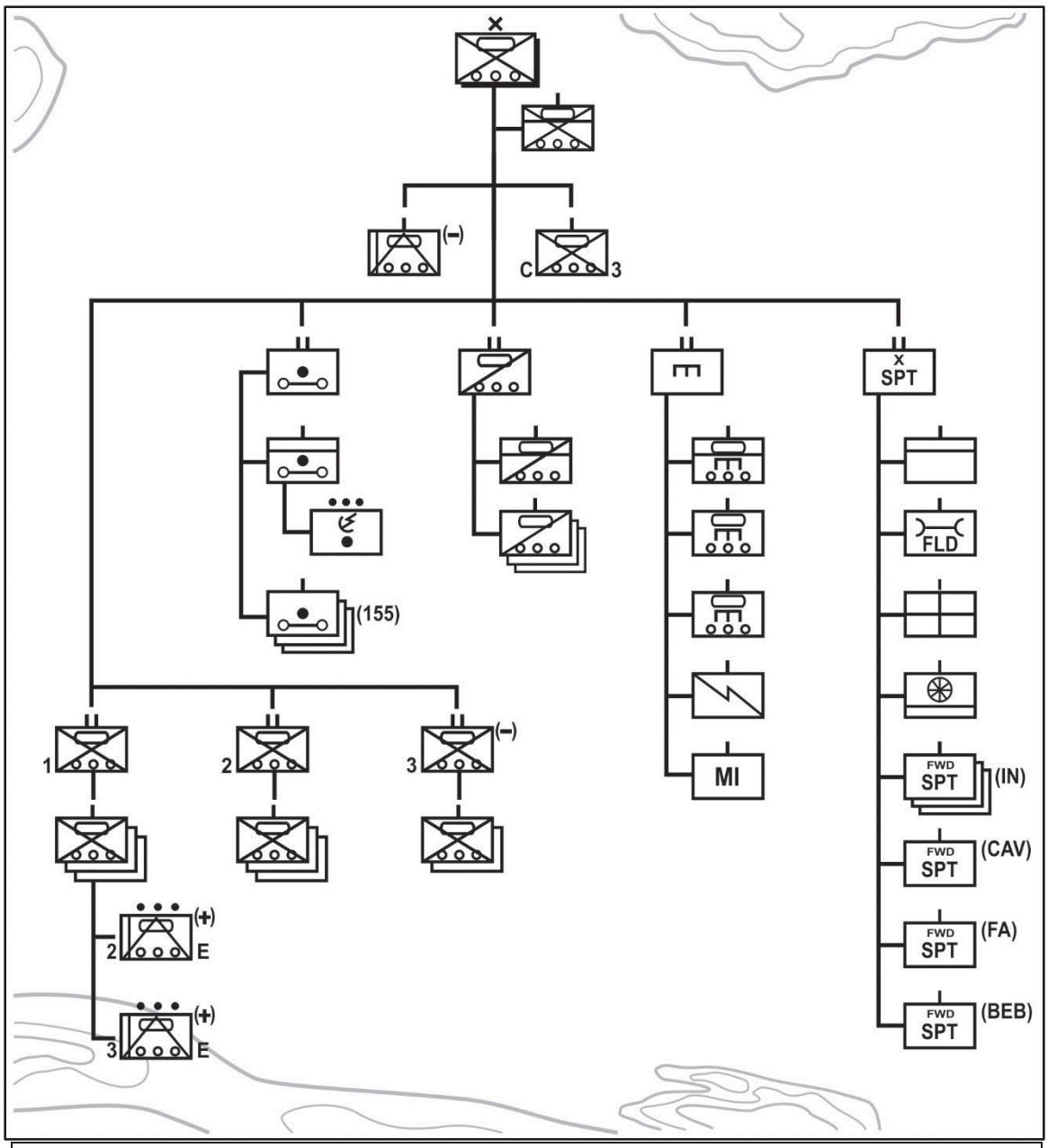
SECTION IV - DEFENSE

C-59. The SBCT plans a defense in depth to defeat the enemy attack. It arrays its three SBCT Infantry battalions on line across the width of the SBCT area of operation with each battalion preparing multiple engagement areas in depth. The first SBCT Infantry battalion occupies the center position with the second Infantry battalion on its left (north) and the third Infantry battalion on its right (south).

C-60. The SBCT S-2 assesses that the enemy will attack at two points with a battalion task force. Those two task forces will attempt to achieve to penetrate the defensive position. Whichever task force achieves the greatest degree of success will be the avenue of approach for the enemy's assault force, comprised of another

battalion task force. The assault force will be followed by the enemy's exploitation force once the assault force has defeated the friendly battalion opposing it. The SBCT S-2 predicts that the enemy is most likely to use the avenue of approach through the first SBCT Infantry battalion's sector, as it provides the best avenue of approach for a high tempo attack.

C-61. The SBCT commander splits the weapons troop. He designates the first Infantry battalion as the SBCT's main effort. He assigns two weapons platoons (2nd and 3rd) to the first SBCT Infantry battalion, and places the weapons troop with four platoons, and one SBCT Infantry rifle company from the 3rd SBCT Infantry battalion in the SBCT reserve. The weapons troop ensures 2nd and 3rd platoons link up with the SBCT Infantry battalion, and occupies TAA Eagle and begins planning for operations. (See figure C-7.)



Legend: BEB = brigade engineer battalion, CAV = cavalry, FA = field artillery, FLD = field maintenance company, FWD = forward, IN = Infantry, MI = military intelligence, MP = military police, SPT = support

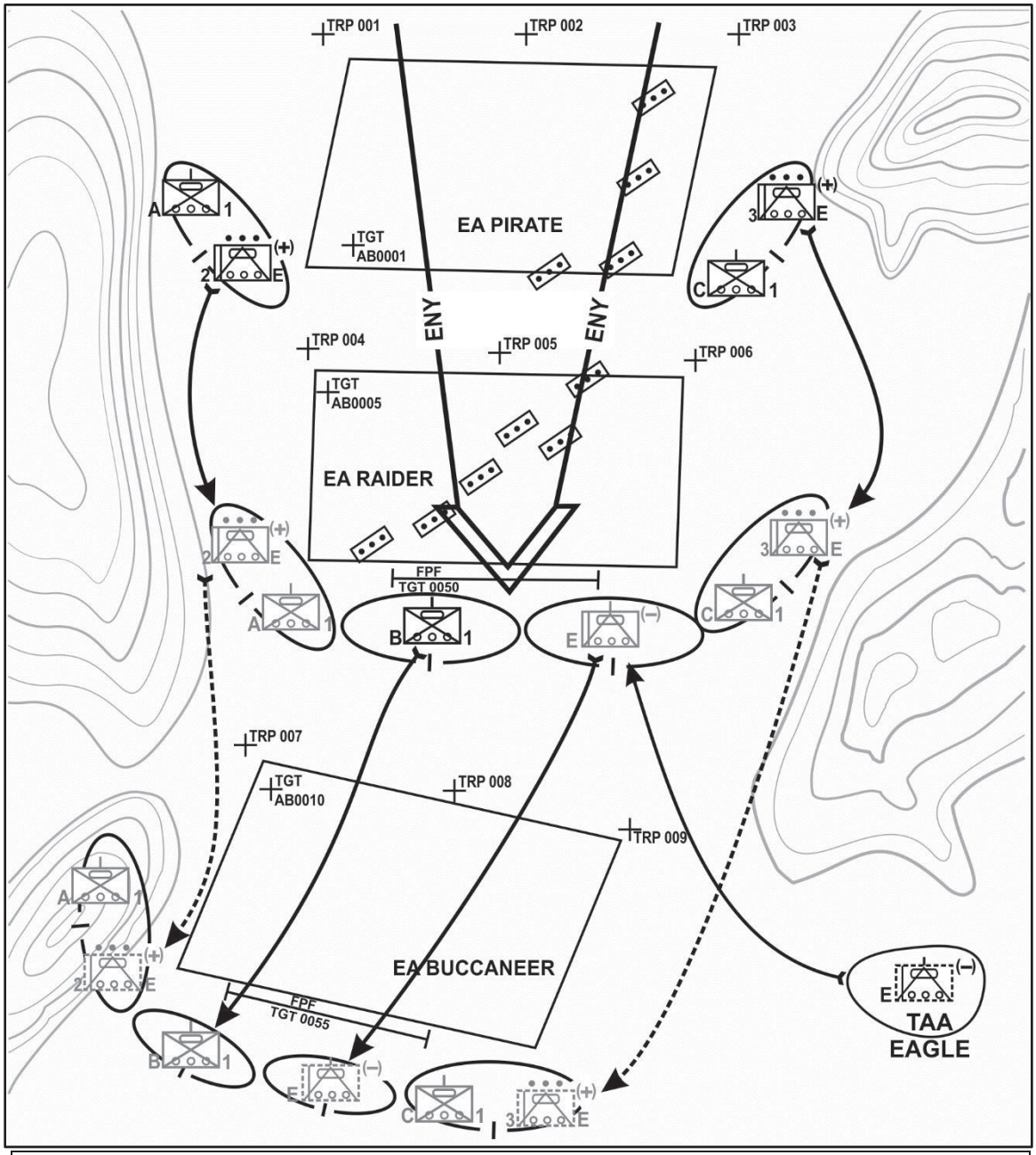
Figure C-7. SBCT task organization for a defense

PLAN

C-62. The 1st SBCT Infantry battalion plans three engagement areas in its sector to destroy the enemy. They are arrayed in depth sequentially from east to west. The SBCT Infantry battalion commander places A and C companies in battle positions oriented on EA Pirate. He places B company oriented on EA Raider. The commander plans to utilize the weapons troop by placing it into position to the right (south) of B company at EA Raider should the SBCT commander commit the weapons troop to his sector. He also plans a battle position for the weapons troop at EA Buccaneer for the final planned engagement area in the battalion defense in depth.

C-63. The SBCT Infantry battalion plans to employ obstacles. In EA Pirate, obstacles are planned to delay and turn the enemy to the north towards elevated, severely restricted terrain. In EA Raider, obstacles are planned to fix and turn the enemy to the north towards elevated, severely restricted terrain, and prevent the enemy from bypassing the battalion's positions to the south. The battalion plans to employ FASCAM and Modular Pack Mine Systems (MOPMS) to close the passage lanes for A and C companies as part of their retrograde operations in support of the defense in depth.

C-64. The battalion plans to employ artillery and mortar fires. In EA Pirate, fires will disrupt the enemy advance and delay the enemy to allow A and C companies to retrograde to subsequent positions. In EA Raider and EA Buccaneer, fires will fix the enemy to allow friendly forces to destroy them. Fires also will be employed in EA Raider to delay the enemy to allow the battalion to retrograde if necessary to EA Buccaneer. (See figure C-8.)



Legend: EA = engagement area, ENY = enemy, FPF = final protective fire, TAA = troop assembly area, TGT = target, TRP = target reference point

Figure C-8. SBCT area defense indepth

C-65. Much of the weapons troop commander's planning for the defense occurs concurrently with the planning for the execution of the guard mission. He plans for the operation by: task organizing with 1st platoon composed of four ATGMs, 4th platoon composed of three MGS, and 5th and 6th platoons composed of one ATGM and two MGS, coordinating with all three SBCT Infantry battalions to integrate into their tactical plans within the SBCT commander's intent, plans direct fires and direct fire control measures, coordinates all plans with the respective supported SBCT Infantry battalion, coordinates weapons troop logistics with SBCT Infantry battalions, selects the platoon battle positions at each engagement area, selects the location of

TAA Eagle in accordance with the SBCT commander's intent and in coordination with the brigade staff, designates his high value and high payoff target lists, develops his attack guidance, and executes TLPs in accordance with the troop SOP.

PREPARE

C-66. As the weapons troop begins preparations for the defense. The troop's leaders continue to maintain situation awareness of friendly forces' disposition along the defensive line. They also maintain awareness of the enemy's composition, disposition, and actions as their attack begins.

C-67. The weapons troop continues to conduct TLPs in accordance with the troop SOP. In addition to the standard tasks, the commander includes rehearsals of: conduct of the EAs, survivability moves in the event elements or the entire troop are compromised by enemy reconnaissance forces, massing the troop at an anticipated EA from dispersed hide sites, consolidation and reorganization after an engagement, displacement to subsequent positions, link ups with supported units, routes to and from battle positions, displacements and retrogrades from battle positions, and potential contingencies.

C-68. The weapons troop commander also conducts a leader's reconnaissance of his anticipated EAs to the extent possible to confirm DFCMs and fires targets, and adjusts them as necessary. He also familiarizes himself with each engagement area, paying particular attention to obstacles, dead space, and fires target locations. The weapons troop is not responsible for the construction or security of any obstacles or any engagement area beyond the requirements that facilitate or enable the weapons troop's engagements, such as battle position marking. Finally, the weapons troop commander ensures his plan is coordinated and synchronized with the supported unit.

C-69. The weapons troop conducts resupply, refuel, and rearm operations as necessary in TAA Eagle as the SBCT defense begins. This operation is conducted as rapidly as possible, and requires that the logistics assets supporting the weapons troop are in TAA Eagle no later than when the weapons troop arrives. Any last minute changes are made, disseminated, and rehearsed as necessary and to the limit of available resources with the necessary leaders and greatest level of leader participation possible given ongoing logistics operations. As soon as logistics operations are complete, the weapons troop immediately resumes the highest readiness condition in anticipation of a rapid commitment.

EXECUTE

C-70. As the weapons troop completes its resupply, refueling, and rearming operations, the SBCT S-2 assesses that the enemy identified in EA Pirate is the advance guard of the enemy's main attack. The SBCT Commander then commits the weapons troop to support the 1st SBCT Infantry battalion at EA Raider while the 1st SBCT Infantry battalion conducts its initial engagement at EA Pirate. Immediately, the weapons troop moves from TAA Eagle to the defilade positions behind the troop battle position at EA Raider.

C-71. At EA Pirate, A and C companies' attached weapons platoons assist their supported units in destroying the enemy. Both platoons are kept behind the company's main battle positions, and are committed to their platoon battle positions only when required to actively engage the approaching enemy. The weapons platoon attached to A company occupies a position on the right (south) flank of the company position. The weapons platoon attached to C company also occupies the right (south) flank of the company position to prevent the enemy from bypassing C company's position and EA Pirate to the south. Both platoons are afforded alternate firing positions, and are able to engage the enemy with two volleys. The first volley assists in the destruction of the approaching enemy, while the second provides suppresses the enemy. This allows the Infantry to mount their Strykers and displace to EA Raider. Once A and C companies have displaced, the battalion fires its final protective fire target (utilizing a high explosive and smoke mix), and the weapons troop platoons bound west towards EA Raider. Once within supporting range of A, B, and C companies, and the weapons troop, they travel expeditiously to their positions supporting actions at EA Raider.

C-72. At EA Raider, the weapons troop arrays its forces in the troop battle position on line with 1st platoon on the left (north), 5th platoon, 6th platoon, and then 4th platoon on the right (south) of the troop's position. When the enemy reaches the engagement area initiation trigger point, the weapons troop commander initiates the troop's fires in accordance with the battalion's plan, requiring the weapons troop to conduct multiple volleys from the same troop battle position. The weapons troop commander chooses to engage the enemy

with one platoon volley at a time, and platoons transitioning between primary and alternate vehicle battle positions. The weapons troop commander controls his fires so that a platoon is always engaging the enemy to reduce the enemy's ability to scan and identify friendly vehicles and positions, and return fire.

C-73. The weapons troop employs its weapons systems against legitimate targets in accordance with the weapons troop commander's attack guidance. The MGS engage engineer and breaching vehicles first, followed by BMPs. The ATGMs focus on enemy heavy armor vehicles with breaching equipment, then heavy armor vehicles, and then engineer and breaching vehicles that are outside the range of the MGS 105mm cannon. The SBCT Infantry battalion and weapons troop's engagement at EA Raider destroys the enemy's fixing force, inflicting an estimated 70% casualties. While the remaining enemy conduct an orderly withdrawal, they are soon passed by additional enemy elements.

C-74. Although the enemy's fixing force has been defeated in EA Raider, the enemy commander commits his assault force to follow and assume the fixing force in an effort to break through the 1st SBCT Infantry battalion's position. Once the SBCT commander determines that the enemy will successfully pass through EA Raider, he instructs the 1st SBCT Infantry battalion commander to direct the battalion to occupy EA Buccaneer. The battalion initiates its final protective fires and begins displacing to its battle positions at EA Buccaneer. B company moves to EA Buccaneer, followed by C company, A company, and then the weapons troop.

C-75. Logistics operations in EA Raider focus primarily on casualty evacuation and vehicle recovery. Platoon sergeants collect, consolidate, and facilitate platoon medic treatment of casualties to the extent possible. They are evacuated to the troop CCP to the extent possible between platoon volleys. However, the evacuation of casualties from the platoon to troop ceases as the troop prepares to retrograde from EA Raider to EA Buccaneer to prevent the troop's retrograde from being delayed or compromised because of casualty transfer operations from platoon to troop.

C-76. Vehicle recovery is mainly conducted by like-vehicles within each platoon. Catastrophically destroyed vehicles are not recovered until after the engagement is concluded and the area secured. Vehicles that are damaged but recoverable, but cannot be recovered within the METT-TC considerations of the existing tactical situation are destroyed to prevent their exploitation by enemy forces. Recovered vehicles are consolidated at the troop maintenance collection point and transferred to higher levels of maintenance in accordance with the battalion or squadron plan, and are evacuated by higher level maintenance recovery vehicles to minimize the number of combat vehicles committed to recovery instead of combat operations.

C-77. The weapons troop occupies its troop battle position at EA Buccaneer on line with 4th platoon on the left (north), 5th platoon, 6th platoon, and then 4th platoon on the right (south) of the troop's position. The troop engages the enemy assault force at EA Buccaneer in accordance with the 1st SBCT Infantry battalion's plan. The attack guidance is for MGS to engage engineer and breaching vehicles first, followed by BMPs. The ATGMs again focus on the enemy's heavy armor vehicles with breaching equipment, then heavy armor vehicles, and then engineer and breaching vehicles that are outside the range of the MGS 105mm cannon. The effects of these synchronized fires is to destroy the enemy assault force in EA Buccaneer.

C-78. The weapons troop conducts its engagements by firing continuous sequential platoon volleys to ensure constant enemy engagement. At the weapons troop commander's discretion, he utilizes troop or multi-platoon volleys to inflict psychological effect on the enemy in addition to inflicting significant casualties. The weapons troop commander uses the technique if platoon volleys are insufficient to prevent the enemy from accurately returning fire, or to destroy company-sized units attempting coordinated actions to adapt and overcome conditions in EA Buccaneer. The seemingly random order of weapons troop platoon engagements enables the weapons troop to conceal its actual composition and disposition. The rapidly conduct volleys also reduce the enemy's ability to gain the initiative at the vehicle level to effectively fight through the engagement area. The result of the engagement is the destruction of 80 percent of the enemy's assault force, with the remainder withdrawing eastward.

C-79. Logistics operations conducted during this phase of the operation are similar to those conducted at EA Raider. However, there is a possibility that during the engagement at EA Buccaneer that units will expend much of their class III and V. The weapons troop employs three methods to address resupply: first, the troop positions caches are each platoon battle position for their use. Second, the troop 1SG or XO conducts an emergency resupply operation to the affected platoon and resupplies them at the rear of their platoon battle

position to reduce the time and number of vehicles disengaged from combat operations. Finally, the weapons troop conducts resupply to platoons based on consumption reported during the retrograde from the previous battle position, and meets the platoon at its battle position when it arrives. This is least preferred because it has the greatest risk to the weapons troop's logistics assets, but may be necessary in certain tactical situations.

C-80. At the conclusion of actions in EA Buccaneer and when directed, the SBCT Infantry battalion and weapons troop begin to consolidate and reorganize. The casualties the weapons Troop sustained during the engagement are evacuated to the CCP, where the First Sergeant oversees the triage, treatment, and further evacuation of personnel. The troop XO brings the troop's logistics forward, and refuels and rearms the troop using the service station method in a covered and concealed position behind the troop's battle positions. Platoons are rotated through the service station logistics one at a time. The weapons troop commander immediately transitions to TLPs for the next mission: offense.

SECTION V- OFFENSE

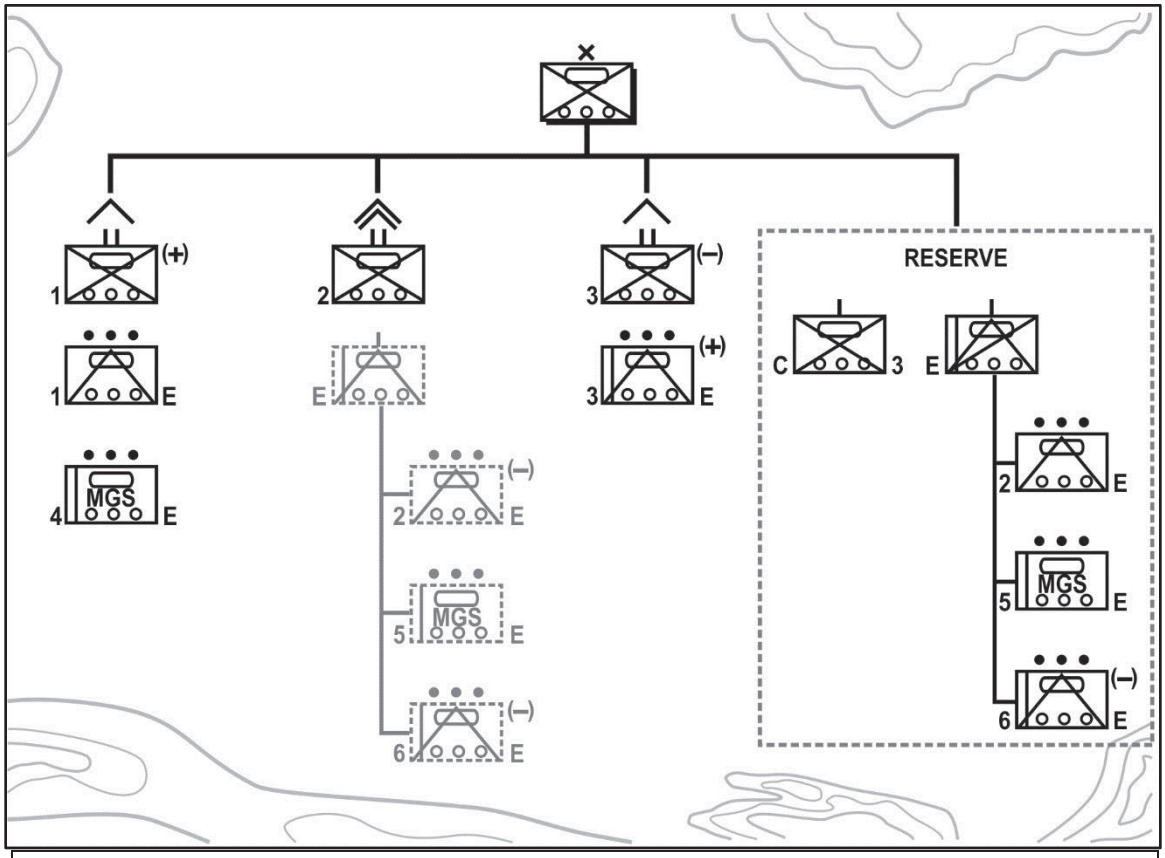
C-81. The SBCT defeated the enemy's attacks and transitions to the offense. The SBCT will seize objectives in its sector to allow follow-on friendly forces to pass through and secure the international border. The SBCT S-2 assesses that they will be opposed by an enemy battalion task force comprised primarily of Armored fighting vehicles, reconnaissance vehicles, and Infantry. The SBCT anticipates that the enemy will defend three choke points: the town of Ujen, the crossroads of highways 1 and 5, and a high bridge over the Low river.

C-82. The terrain in the northern sector of the SBCT's area of operations is mountainous and rocky, but transitions to dense forest with multiple secondary roads and trails. To the south, the terrain is generally flat and open desert with the Low river running from generally north to south near the SBCT's limit of advance. On the east side of the Low river to the south, the dense forest resumes, reducing north-south movement into the SBCT's area of operations on the far side of the river.

PLAN

C-83. The SBCT plans to seize three battalion objectives: OBJs Mouse, Cat, and Dog. First, the Cavalry Squadron will conduct a zone reconnaissance to PL Dodgeball to defeat enemy reconnaissance forces and prevent them from gaining and maintaining contact with friendly assault forces. Then, 1st SBCT Infantry battalion will seize OBJ Mouse to allow 3rd SBCT Infantry battalion to pass PL Baseball and PL Dodgeball, and seize OBJ Cat. 3rd SBCT Infantry battalion's seizure of OBJ Cat will allow 2nd SBCT Infantry battalion—the SBCT's main effort—to seize OBJ Dog after it has conducted a forward passage of lines with 1st SBCT Infantry battalion. Decisive to the SBCT's operation is the seizure of OBJ Dog. Once the objectives are seized, the SBCT will then secure highways 5 and 8 to allow follow-on forces to pass through the SBCT and secure the international border to the east.

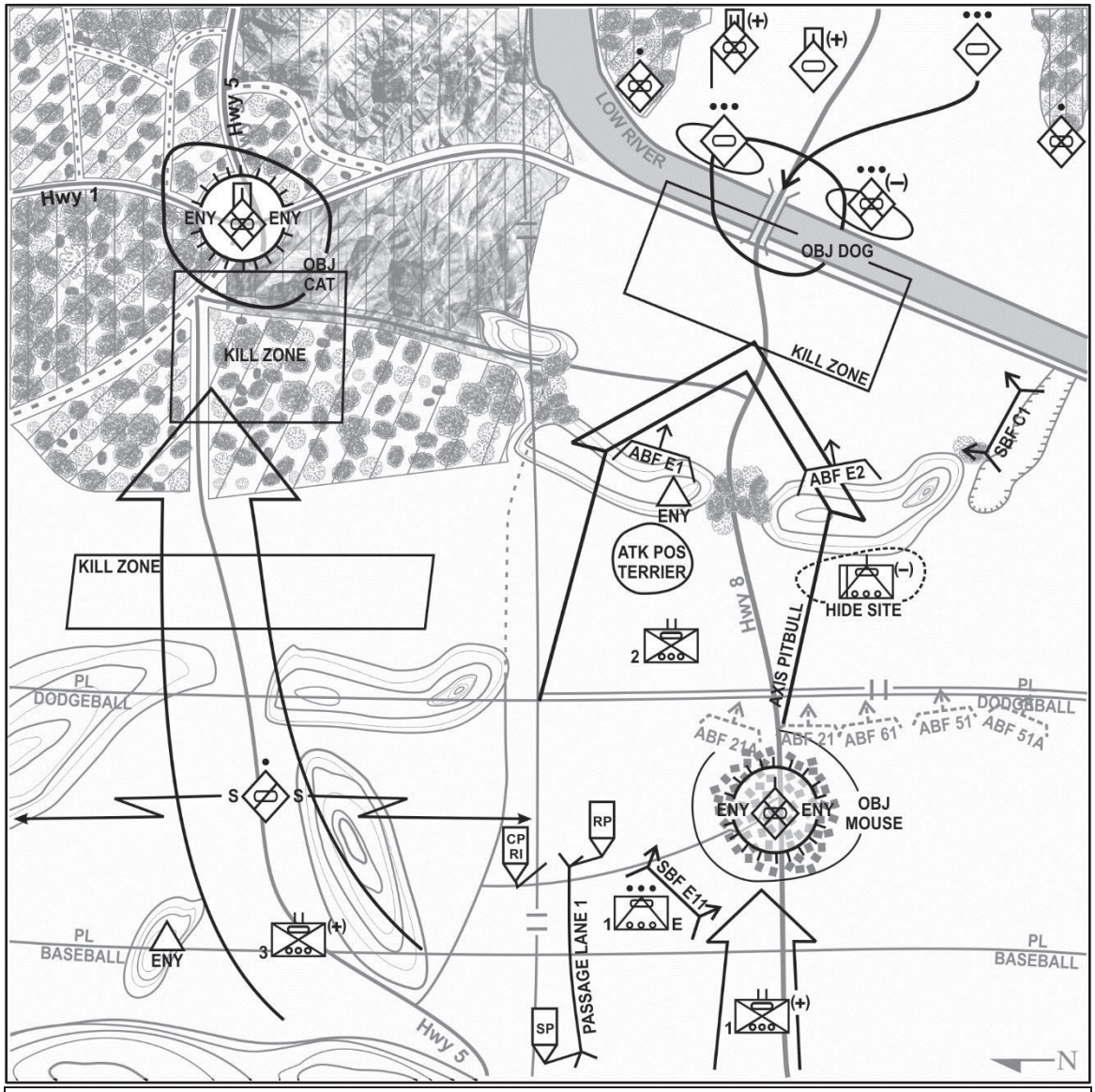
C-84. 3rd weapons platoon will be attached to 3rd SBCT Infantry battalion. 1st platoon (3x ATGM) and 4th platoon (4x MGS) will be attached to 1st SBCT Infantry battalion. The Weapons Troop (with 2nd, 5th, and 6th platoons) and C company from 3rd SBCT Infantry battalion will comprise the SBCT reserve. The SBCT Commander anticipates that he will commit all or part of the reserve to support 2nd SBCT Infantry battalion's attack on OBJ Dog. (See figure C-9.)



Legend: MGS = mobile gun system

Figure C-9. SBCT task organization for offense

C-85. Upon the SBCT's publication of the task organization, the weapons troop immediately sends 1st, 3rd and 4th platoons to their respective supported SBCT Infantry battalions. The weapons troop moves to the SBCT main, and links up with C company of 3rd SBCT Infantry battalion. There, the SBCT Commander informs the weapons troop and C company commanders that he will move with 2nd SBCT Infantry battalion with the SBCT TAC. He instructs the weapons troop to follow 2nd SBCT Infantry battalion and remain in a position to rapidly support the battalion's attack on OBJ Dog. The SBCT Commander also instructs C company to follow 3rd SBCT Infantry battalion until PL Baseball, where it will move to checkpoint R1 and stand by to support 2nd or 3rd SBCT Infantry battalion's attacks, or respond to any contingencies at his discretion. The SBCT Commander's planning priorities for the reserve are to defeat an enemy armored counterattack, support 2nd SBCT Infantry battalion's attack on OBJ Dog, and destroy enemy armored forces that can delay the SBCT's attack. (See figure C-10, page C-22.)



Legend: ABF = attack by fire, ATK POS = attack position, CP = command post, ENY = enemy, HWY = highway, N = north, OBJ = objective, PL = phase line, RP = release point, SBF = support by fire, SP = start point

Figure C-10. Operational plan

C-86. The weapons troop commander begins his TLPs in accordance with the troop SOP. He determines his task organization and movement order of march as: 6th platoon, troop commander and FSO, 2nd platoon, troop headquarters, and 5th platoon. The weapons troop commander then plans the route to OBJ Dog in accordance with the SBCT plan, troop hide sites along the planned route, and coordinates both with 1st and 2nd SBCT Infantry battalions. He coordinates with 1st SBCT Infantry battalion for a FPOL around OBJ Mouse and with the Cavalry squadron at PL Dodgeball.

C-87. The weapons troop commander then plans his execution of the SBCT Commander's priorities. The weapons troop commander plans the engagement priorities and methods for destroying an enemy counterattack. If the counterattack is predominantly conducted by heavy armored vehicles, 6th platoon will establish an attack by fire position (ABF 61) to allow 2nd and 5th platoons to maneuver into firing positions.

2nd platoon will occupy a firing position on one side of 6th platoon (directed by the weapons troop commander based on METT-TC considerations) (ABF 21 and 21A; ABF 21A is an alternate position) to allow maximum weapon system effect on enemy armored vehicles. 5th platoon will occupy according to METT-TC considerations either the remaining unoccupied side of 6th platoon, or the far side of 2nd platoon (ABF 51 and 51A; ABF 51A is an alternate position). 5th platoon's purpose is to facilitate 2nd platoon's engagement and protect the weapons troop's flank. If the counterattack is predominantly composed of light armor vehicles, 6th platoon will set in an attack by fire position that allows 5th platoon to maneuver to a position of advantage to engage the enemy in an attack by fire. 2nd platoon will only be committed if the enemy's composition exceeds the MGS' capacity to destroy them in two volleys or fewer. ABF 61 is planned for the east side of OBJ Mouse, but can be adjusted to react to the specific enemy counterattack.

C-88. The engagement priorities for the ATGMs are armored fighting vehicles and then targets beyond the MGS' 105mm main gun range. The engagement priorities for the MGS are enemy armored personnel carriers, dismounted ATGM systems, and on order close with and destroy enemy armored vehicles, some of whom may initially be beyond 105mm main gun range and require additional movement and maneuver.

C-89. The weapons troop commander then plans the execution of the next reserve priority. He plans to conduct a support by fire in support of 2nd SBCT Infantry battalion's attack. He chooses his primary and alternate support by fire positions and plans his direct fire control measures. The weapons troop commander then coordinates and synchronizes his plan with the 2nd SBCT Infantry battalion to ensure rapid and seamless integration into their operation. He arrays his forces within his support by fire positions with 6th platoon on one flank (SBF 62 and SBF 62A), 2nd platoon in the center of the troop position (SBF 22 and 22A), and 5th platoon on the opposite troop flank (SBF 52 and 52A). The weapons troop commander will occupy troop SBF E2 or SBF E2A based on METT-TC considerations and the 2nd SBCT Infantry battalion's tactical situation at execution of the attack.

C-90. The weapons troop commander plans for the final reserve priority by integrating rehearsals of the react to contact and react to ambush battle drills into the TLPs, and ensuring the supported Infantry battalions have the weapons troop's battle handover report format to streamline engagements. The weapons troop commander also ensures that his positioning within the SBCT's order of movement reduces to the maximum extent possible the risks associated with the SDZs of his primary weapon systems in the event they must be employed when conducting a react to contact or ambush battle drill. He coordinates with the SBCT operations staff to ensure DFCMs are distributed and the weapons troop understand which directions at which times it may engage with each weapon system.

C-91. The weapons troop commander, 1SG, and executive officer plan the weapons troop logistics for the operation. They plan for casualty evacuation, planned and emergency resupply of class III and V, vehicle and equipment maintenance, and vehicle recovery and evacuation. The weapons troop plans to utilize brigade helicopter landing zones (HLZ) along the weapons troop's axis of advance if available or permitted, but also plans ambulance exchange points in accordance with the troop SOP and the SBCT plan.

PREPARE

C-92. The weapons troop prepares for the mission in accordance with its troop leading procedure SOP. In addition to the standard tasks, the commander includes rehearsals of: battle handover of identified enemy targets, movement techniques and formations, troop and platoon battle drills, forward passages of lines, occupation of troop and platoon battle positions, engagement techniques and fire patterns supporting the attacks by fire and supports by fire, link ups with supported units, movements along the axis of advance, and potential contingencies.

C-93. The weapons troop commander maintains situational awareness of the SBCT's plan as it continues to be refined, and the supported SBCT Infantry battalions' plans. The weapons troop 1SG and executive officer oversee resupply and rearmament operations as necessary. The weapons troop executive officer also oversees the planning and execution of all vehicle and equipment maintenance. The weapons troop 1SG checks on the platoons attached to other units as able to ensure maximum combat readiness. When all preparations are complete, the troop continues to execute priorities of work to include additional mission rehearsals as able.

EXECUTE

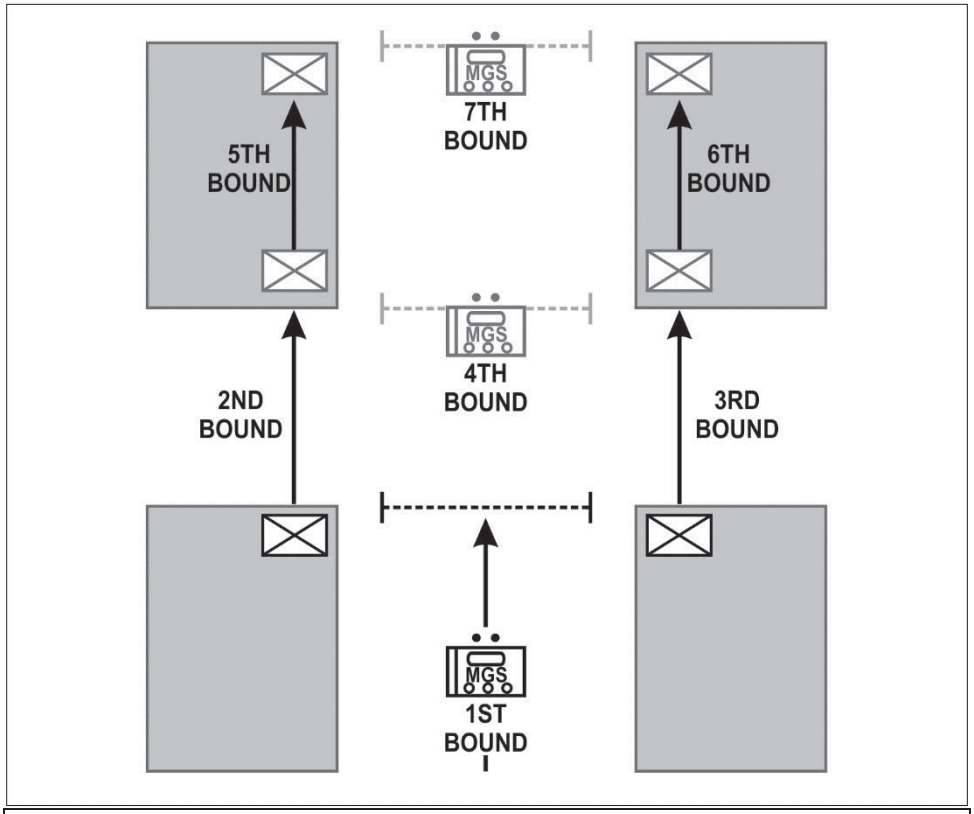
C-94. The SBCT places its units into their formations to conduct the attack, and moves them to the line of departure. 1st SBCT Infantry battalion crosses the line of departure and begins its attack on OBJ Mouse.

ATTACK ON OBJ MOUSE

C-95. 1st SBCT Infantry battalion requests indirect fires to obscure 1st weapons platoon's movement into SBF E11. The SBCT field artillery battalion fires a smoke target that that allows obscure 1st weapons platoon to get into position. Once 1st weapons platoon is in position, 1st SBCT Infantry battalion shifts its indirect fires to suppress identified enemy positions on OBJ Mouse; 1st ATGM platoon (attached to A company) supports the attack to gain a foothold on OBJ Mouse with TOW missile fires from a range of approximately 3000m. 1st SBCT Infantry battalion attacks OBJ Mouse from the west, while 1st ATGM platoon and indirect fires suppress the enemy on OBJ Mouse. 1st SBCT Infantry battalion then establishes local support by fire with A company and 4th MGS platoon. B company attacks to seize a foothold, occupying key buildings along the perimeter of OBJ Mouse. C Company moves from its assault position into Ujen, receives 4th MGS platoon from A company, seizing key structures along the axis of advance. C company's attacks enable A company to seize the fortified buildings in the center of the town. Once C company has reached its limit of advance, A company attaches 1st ATGM platoon to B company, then receives 4th MGS platoon, and passes C company. A company seizes the fortified buildings in the center of Ujen. Meanwhile, B company maintains security on the west side of the town to ensure routes into the town remain secure.

Movement to Town Center

C-96. C company advances with 1st and 2nd platoons on line, and 3rd platoon following in support. 1st and 2nd platoons each have one section of MGS from 4th MGS platoon. The MGSs move between squads and successive bound towards the company objective. The MGS destroys light armored vehicles, fortified enemy positions, breach structures, and provide near side security when crossing of linear danger areas to facilitate the advance. Once the company objective is secured, 4th MGS platoon transitions from C company to A company for the battalion's main attack. (See figure C-11.)



Legend: MGS = mobile gun system

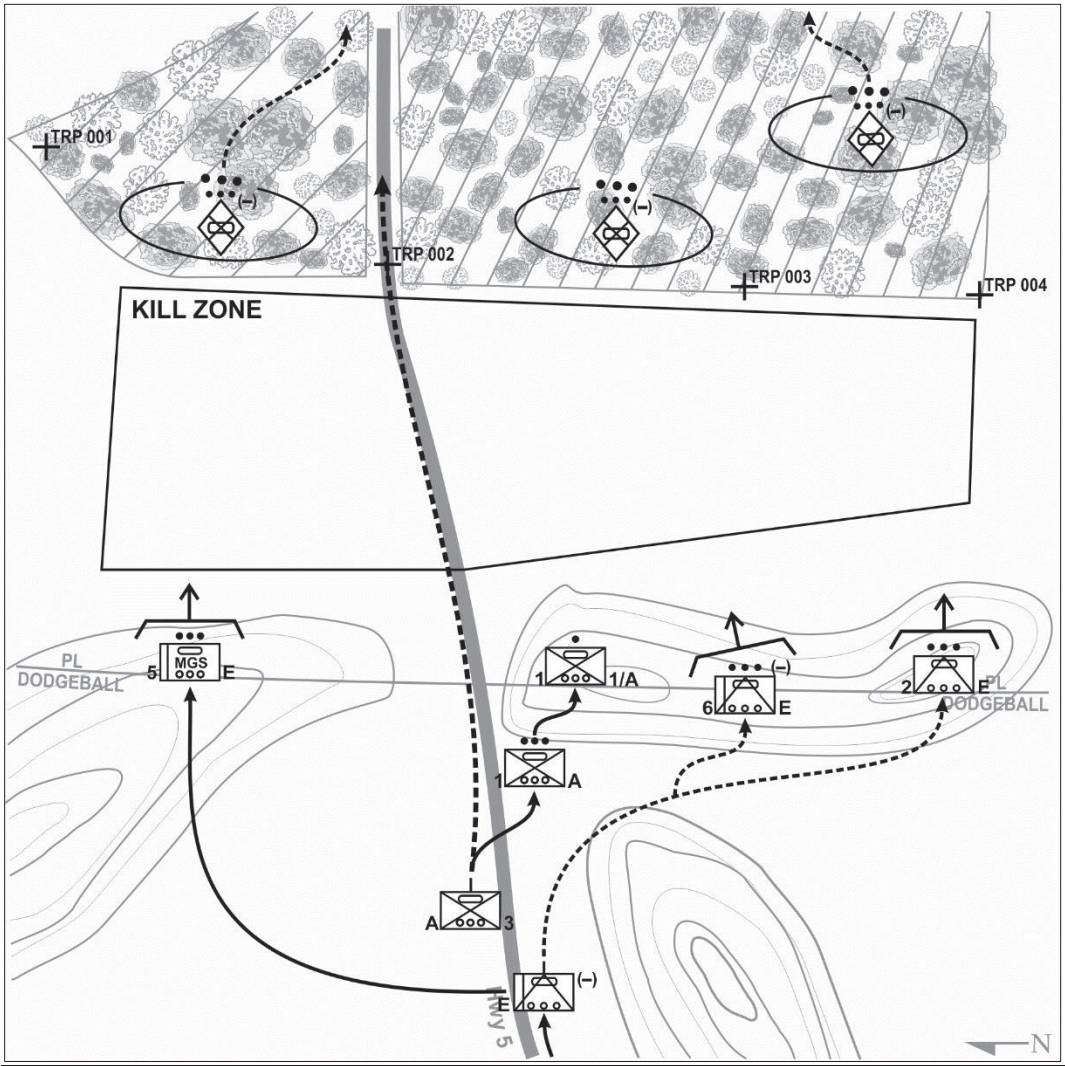
Figure C-11. Bounding and intersection

Main Attack

C-97. 4th MGS platoon occupies a support by fire position with first rifle platoon (-) from A company, and supports the 2nd Infantry rifle platoon's attack on the fortified buildings. The 3rd Infantry rifle platoon provides flank security for the company. The A company commander holds one SBCT Infantry rifle squad in reserve. C company continues to advance past A company, receives 4th MGS platoon, and continues to clear the town of Ujen to the city limits to the east.

ATTACK ON OBJ CAT

C-98. 3rd SBCT Infantry battalion's scout platoon conducts route reconnaissance toward PL Dodgeball. A and B companies attack towards OBJ Cat on line. A section of 3rd weapons platoon is attached to A company, and B Section of 3rd weapons platoon is attached to B company. The battalion scouts conduct a battle handover to A and B companies. The SBCT Infantry rifle companies destroy enemy Infantry encountered along the axis of advance. 3rd weapons platoon supports the companies' advance by engaging and destroying armored vehicles encountered along the axis of advance. Each time the Infantry company commanders encounter enemy elements, they must decide whether to engage using indirect fires, Infantry, ICVs, Infantry with ICVs, or their attached weapons platoon. In the case of the weapons troop platoon, the MGS within each MGS-ATGM pair identifies the target identified by the battalion scouts or Infantry companies. The PL verifies the battle handover report with MGS. The PL or PSG determines engagement positions and assigns targets to his vehicles. The PL or PSG leading the section initiates the engagement to destroy the enemy. Upon destroying the enemy, the weapons troop platoon retrogrades to its hide site, and A and B companies continue their attack. (See figure C-12, page C-26.)



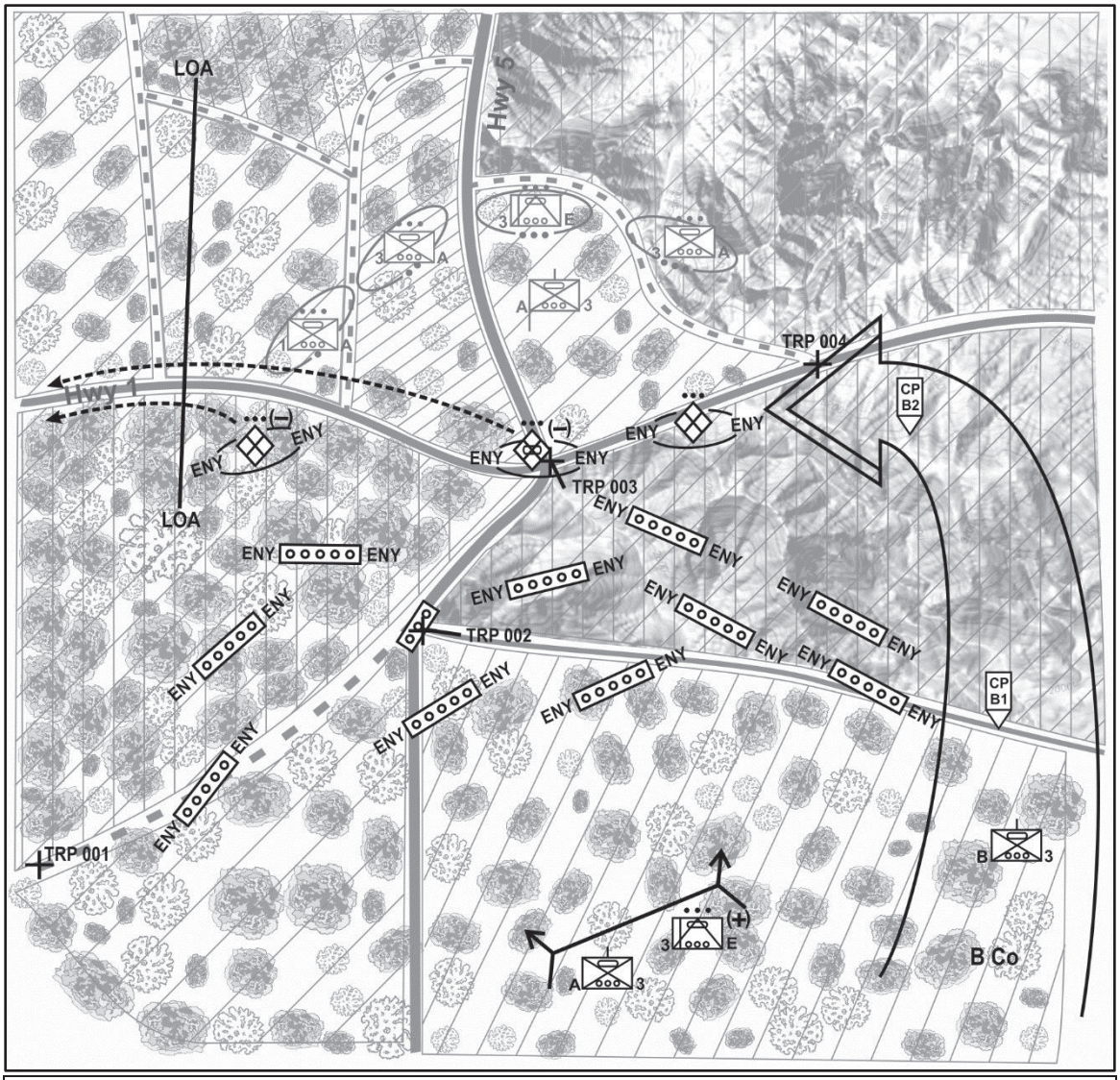
Legend: HWY = highway, MGS = mobile gun system, N = north, PL = phase line, TRP = target reference point

Figure C-12. OBJ Cat

C-99. While advancing, A company encounters an enemy ambush utilizing BMPs firing from hasty covered and concealed positions overwatching an area of generally flat and open terrain. The 3rd SBCT Infantry battalion commander requests support from the weapons troop. The weapons troop moves to conduct a linkup with the 3rd SBCT Infantry battalion and then with the A company commander. The A company commander directs the weapons troop to support the 1st SBCT Infantry rifle platoon. The weapons troop commander conducts a linkup with the first rifle platoon leader and receives a battle handover report. Using the information from the battle handover report, the weapons troop commander selects his firing positions and moves his platoons to occupy them. The weapons troop commander assigns sectors of fire to the platoons. The platoon leaders conduct a hasty reconnaissance of their positions and the suspected enemy locations. They assign primary and alternate battle positions to their vehicles, and identify five enemy BMPs. The PLs then assign targets within their sectors to each vehicle.

C-100. Once all platoon leaders have reported to the weapons troop commander that they are ready to engage, the weapons troop commander initiates fires with a troop fire command. The weapons troop engages with single, simultaneous MGS volley and destroys three BMPs. The enemy returns fire, forcing the five

MGS to shift to their alternate positions, and revealing the location of an additional two enemy BMPs. The weapons troop commander conducts a hasty battle damage assessment, and orders the platoons to reengage using the five MGS from their alternate positions and one uncompromised MGS from its primary position, destroying three additional BMPs. The losses cause the remaining four BMPs to withdraw to the east. To ensure the security and speed of the advancing 3rd SBCT Infantry battalion, the weapons troop maintains overwatch position while A company exits the mountainous area and enters forested area, establishing far side security for the battalion. Once A company is set, the weapons troop conducts a battle handover with B company of the 3rd SBCT Infantry battalion, and moves to CP R1 where it resumes its role as the SBCT reserve. (See figure C-13.)



Legend: Co = company CP = command post, ENY = enemy, HWY = highway, TRP = target reference point

Figure C-13. Engagement on OBJ Cat

C-101. The 3rd SBCT Infantry battalion continues the attack towards OBJ Cat. A company, moves dismounted through the restricted terrain supported by their ICVVs as the lead SBCT Infantry rifle company. The 3rd weapons platoon follows and supports A company in mixed ATGM/MGS sections. When A company identifies a small concrete building housing two machine guns, the company commander decides to engage

with an MGS. B section of 3rd weapons platoon moves into position, engages the bunker with a 105mm HEP round and destroys the enemy position. A company then continues its mission and advances eastward.

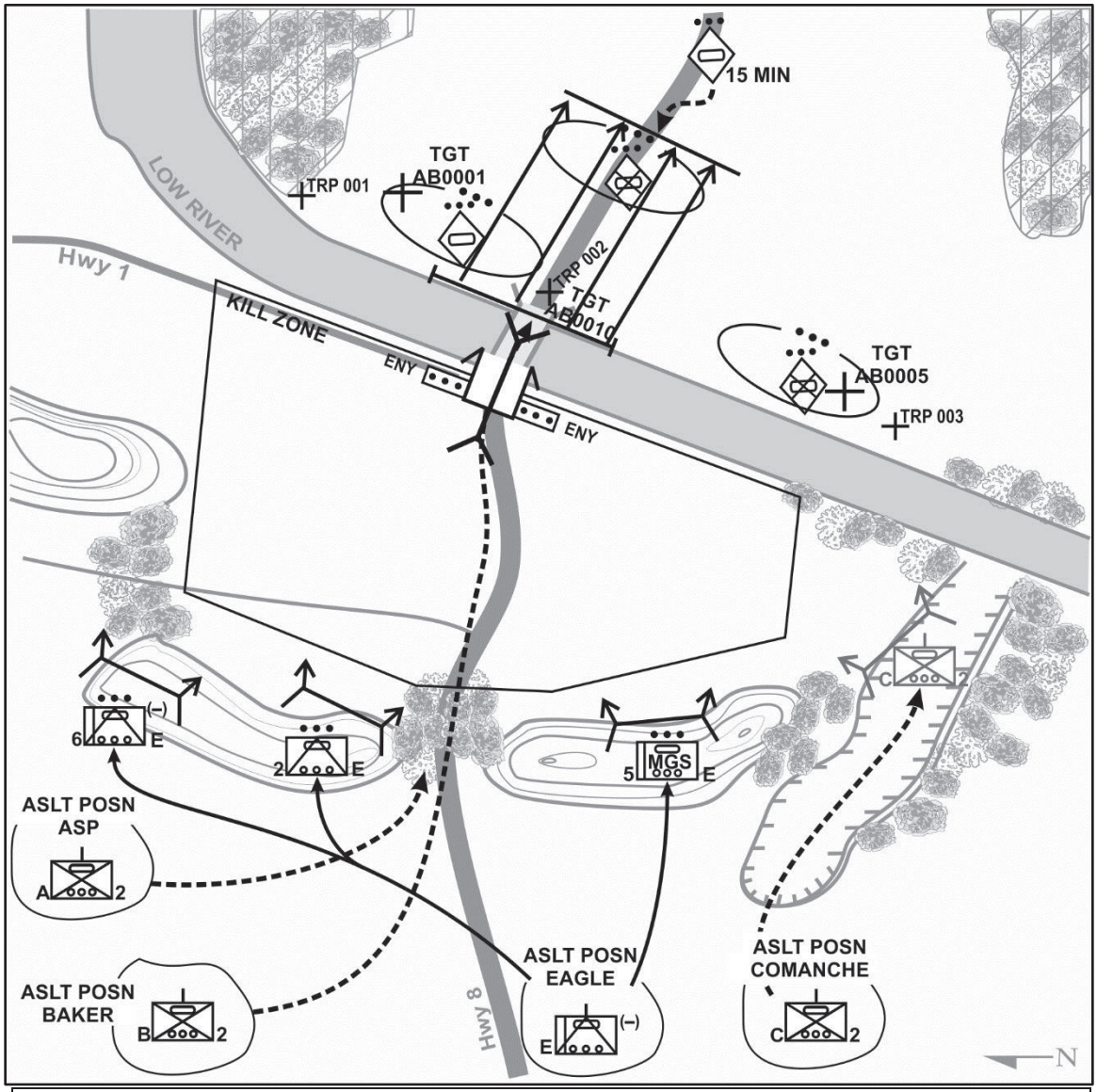
C-102. At 5km from OBJ Cat, 3rd SBCT Infantry battalion moves into its assault position. 3rd weapons platoon's MGS consolidates at A company's assault position, and prepares to conduct support by fire for A company. 3rd weapons platoon ATGM consolidates at B company's assault position, and prepares to follow and support the company. Once OBJ Cat has been taken, the 2nd SBCT Infantry battalion will transition to a hasty defense with B company to destroy any enemy counterattack. 3rd SBCT Infantry battalion conducts its deliberate attack on OBJ Cat with A company supporting by fire, and B company conducting the assault. 3rd weapons platoon, as a part of A company's support by fire, focuses on engaging enemy bunkers, vehicles, and machine gun positions. The weapons troop platoon shifts and lifts fire in coordination with A company, and utilizing TRPs that account for the SDZs of their munitions while still enabling B company's maneuver across the objective. Once A company's support by fire has suppressed the enemy on OBJ Cat, B company begins its assault.

C-103. Once assault begins, the enemy commits its tank platoon reserve to support OBJ Cat. B company rapidly bypasses the enemy's obstacles, and clears OBJ Cat. As B company destroys the enemy positions along highway 1 from South to North, it seizes the crossroads at the center of OBJ Cat. Once the crossroads has been seized, the surviving enemy elements from OBJ Cat and the enemy elements in the northern-most battle position withdraw northward, breaking contact. Once B company clears OBJ Cat, the company transitions to a hasty defense in anticipation of an enemy counterattack. The B company commander moves his supporting ATGM section forward, incorporating them into his defense. He gives the ATGMs sectors of fire that are allow them to maximize the effective range of their TOW weapon systems along the enemy's likely avenue of approach for heavy armored vehicles.

C-104. Soon after B company sets its hasty defense of OBJ Cat, the enemy begins its counterattack. The enemy commits its reserve and maneuvers mechanized Infantry platoon on line towards B company's positions using Highway 5 and the immediately surrounding terrain. As soon as the ATGM section identifies two enemy BMPs, they engage simultaneously from concealed positions on either side of Highway 5. The ATGM section destroys two enemy BMPs, causing the enemy's remaining two BMPs to withdraw to the east. Once the counterattack is defeated, the 3rd SBCT Infantry battalion conducts reconsolidation and reorganization actions on the objective.

ATTACK ON OBJ DOG

C-105. Once the 3rd SBCT Infantry battalion has breached the obstacles on OBJ Cat, the SBCT commander orders the commencement of the attack on OBJ Dog. 2nd SBCT Infantry battalion and C company, 3rd SBCT Infantry battalion, passes PL Baseball and conducts a FPOL with the 1st SBCT Infantry battalion using passage lane 21. The weapons troop and the 2nd SBCT Infantry battalion conduct a linkup at CP R1, and follows and supports the battalion along Axis Pitbull to attack position Terrier. Once consolidated at attack position Terrier, 2nd SBCT Infantry battalion companies move to their assault positions. The 2nd SBCT Infantry battalion utilizes the SBCT's UAVs to determine that the enemy is not west of the Low River, and identifies several battle positions on the east side of the river. (See figure C-14.)



Legend: ASLT POSN = assault position, ENY = enemy, HWY = highway, MIN = minute, N = north, TGT = target, TRP = target reference point

Figure C-14. Attack on OBJ Dog

C-106. The 2nd SBCT Infantry battalion commander directs the battalion to begin its attack once all subordinate elements are set in their assault positions. The weapons troop moves from Hide Site E1 to Battle Position E2 and begins suppressing the enemy on the east side of the Low River. The weapons troop has assigned sectors of fire where 6th platoon is oriented on the enemy position near TRP 1, 2nd platoon is oriented on TRPs 1 and 2, and 5th platoon is oriented on TRP 3. The weapons troop engages in accordance with the commander's engagement priorities: ATGM to tanks and MGS to BMPs and machine gun positions. The weapons troop suppresses the enemy tank and mechanized Infantry platoon, enabling C company to occupy its support by fire position.

C-107. Once C company has initiated its support by fire, the 2nd SBCT Infantry battalion begins breaching operations by committing B company to breach the obstacles on the west end of high bridge. As B company reaches the weapons troop's support by fire positions, the weapons troop and C company shift their fires

away from B company and its positions. B company then sets its local support by fire positions, and executes its breaching operation in accordance with the breaching fundamentals. Once B company successfully creates a lane through the obstacle, A company conducts its assault through the breach lane, still supported by the weapons troop and C company, and B company from their security positions at the breach site. C company clears OBJ Dog from west to east. The remaining enemy forces on the OBJ to withdraw towards the east. Once C company has seized OBJ Dog, the weapons troop and A company pass through the breach lane to occupy positions on the east side of OBJ Dog and prepares for an enemy counterattack. The weapons troop places 6th platoon on the north side of the defensive perimeter, 2nd platoon in the center, and 5th platoon on the south side of the perimeter, with the weapons troop oriented eastward.

C-108. The enemy counterattacks with a mechanized Infantry platoon moving in a wedge formation. The weapons troop commander intends to take advantage of the open terrain to destroy the enemy with TOW missiles. He issues his troop fire command to his platoons to engage with his ATGMs in a single frontal volley as soon as the enemy has deployed from its wedge movement formation into its line maneuver formation. The engagement destroys the enemy platoon, allowing the 2nd SBCT Infantry to consolidate and reorganize, and prepare for follow-on missions.

Glossary

The glossary lists acronyms and terms with Army or joint definitions. Where Army and joint definitions differ, (Army) precedes the definition. Terms for which ATP 3-21.91 is the proponent are marked with an asterisk. The proponent manual for other terms is listed in parentheses after the definition.

SECTION I – ACRONYMS AND ABBREVIATIONS

Acronym/Term	Definition
1SG	first sergeant
ABF	attack by fire
ADP	Army doctrine publication
ADRP	Army doctrine reference publication
AO	area of operation
ATGM	antitank guided missile
ATP	Army techniques publication
BB	bunker buster
BEB	brigade engineer battalion
BHL	battle handover line
BMP	Boyevaya Mashina Pekhoty
BP	battle position
BSA	brigade support area
BSB	brigade support battalion
CA	civil affairs
CAO	civil affairs operations
CAS	close air support
CASEVAC	casualty evacuation
CBRN	chemical, biological, radiological, and nuclear
CCIR	commander's critical information requirement
CCP	casualty collection point
CEA	captured enemy ammunition
CEE	captured enemy equipment
CMO	civil-military operations
COA	course of action
COIST	company intelligence support team
COP	common operational picture
CP	command post
DA	Department of the Army
DLIC	detachment left in contact
EA	engagement area
EOD	explosive ordnance disposal
EPW	enemy prisoner of war

FA	field artillery
FASCAM	family of scatterable mines
FEBA	forward edge of the battle area
FIST	fire support team
FM	field manual; frequency modulation
FO	forward observer
FPF	final protective fire
FSC	forward support company
FSF	foreign security forces
FSCM	fire support coordination measure
FSO	fire support officer
FSV	fire support vehicle
HEAT	high explosive antitank
HEAT-T	high-explosive antitank tracer
HEP	high-explosive plastic
HN	host nation
HNSF	host-nation security force
ICV	Infantry carrier vehicle
IED	improvised explosive device
IPB	intelligence preparation of the battlefield
IR	infrared
ISG	isolated Soldier guidance
JCR/BFT	Joint Capabilities Release and Blue Force Tracker
JP	joint publication
JTAC	joint terminal air controller
LD	line of departure
LOA	limit of advance
LOGPAC	logistics package
LRP	logistics release point
LZ	landing zone
MBA	main battle area
MEDEVAC	medical evacuation
METT-TC	mission, enemy, terrain and weather, troops and support available, time available, and civil considerations
MEV	medical evacuation vehicle
MGS	mobile gun system
MICLIC	mine-clearing line charge
MICO	military intelligence company
MIS	military information support
MISO	military information support operations
mm	millimeter
MOPP	mission-oriented protective posture

MTOE	modified table of organization and equipment
NATO	North Atlantic Treaty Organization
NCO	noncommissioned officer
OAKOC	observation and fields of fire, avenues of approach, key terrain, obstacles, cover and concealment [military aspects of terrain]
OE	operational environment
OP	observation post
OPORD	operation order
OPSEC	operations security
PA	public affairs
PCI	precombat inspection
PIR	priority intelligence requirement
PLD	probable line of deployment
PL	phase line
PR	personnel recovery
PSG	platoon sergeant
PZ	pickup zone
RF	radio frequency
RFL	restrictive fire line
RIP	relief in place
ROE	rules of engagement
RPOL	rearward passage of lines
S-1	battalion or brigade personnel staff officer
S-2	battalion or brigade intelligence staff officer
S-4	battalion or brigade logistics staff officer
SA	situational awareness
SBCT	Stryker brigade combat team
SBF	support by fire
SDZ	surface danger zone
SOF	special operations forces
SOP	standard operating procedure
SOSRA	suppress, obscure, secure, reduce, and assault
TC3	tactical combat casualty care
TM	technical manual
TOA	transfer of authority
TOW	tube launched, optically tracked, wire guided
TRP	target reference point
TTP	tactics, techniques, and procedures
UAS	unmanned aircraft system
U.S.	United States
WCS	weapons control status
XO	executive officer

SECTION II – TERMS

adversary

A party acknowledged as potentially hostile to a friendly party and against which the use of force may be envisaged (JP 3-0).

ambush

An attack by fire, or other destructive means, from concealed positions on a moving or temporarily halted enemy (ADRP 3-90).

approach march

The advance of a combat unit when direct contact with the enemy is intended (ADRP 3-90).

area reconnaissance

A form of reconnaissance that focuses on obtained detailed information about the terrain or enemy activity within a prescribed area (ADRP 3-90).

area security

A security task conducted to protect friendly forces, installations, routes, and actions within a specific area (ADRP 3-90).

attack

An offensive task that destroys or defeats enemy forces, seizes and secures terrain, or both (ADRP 3-90).

class I

Rations and gratuitous issue of health, morale, and welfare items. (DOD Dictionary)

class II

Clothing, individual equipment, tentage, tool sets, and administrative and housekeeping supplies and equipment. (DOD Dictionary)

class III

Petroleum, oils, and lubricants. (DOD Dictionary)

class IV

Construction materials. (DOD Dictionary)

class V

Ammunition. (DOD Dictionary)

class VI

Personal demand items. (DOD Dictionary)

class VII

Major end items, including tanks, helicopters, and radios. (DOD Dictionary)

class VIII

Medical. (DOD Dictionary)

class IX

Repair parts and components for equipment maintenance. (DOD Dictionary)

class X

Nonstandard items to support nonmilitary programs such as agriculture and economic development. See also petroleum, oils, and lubricants. (DOD Dictonary)

combat power

The total means of destructive, constructive, and information capabilities that a military unit or formation can apply at a given time (ADP 3-0).

conflict transformation

The process of reducing the means and motivations for violent conflict while developing viable, peaceful alternatives for the competitive pursuit of political and socioeconomic aspirations. (ADRP 3-07).

cover

A security task to protect the main body by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct fire against the main body (ADRP 3-90).

defensive *task*

A task conducted to defeat an enemy attack, gain time, economize forces, and develop conditions favorable for offensive or stability tasks (ADRP 3-0).

disengage

A tactical mission task where the commander has the unit break contact with the enemy to allow the conduct of another mission or to avoid decisive engagement (FM 3-90-1).

enemy

A party identified as hostile against which the use of force is authorized (ADRP 3-0).

engagement area

An area where the commander intends to contain and destroy an enemy force with the massed effects of all available weapons and supporting systems (FM 3-90-1).

envelopment

A form of maneuver in which an attacking force seeks to avoid the principal enemy defenses by seizing objectives behind those defenses that allow the targeted enemy force to be destroyed in their current positions (ADP 3-90).

fire support

Fires that directly support land, maritime, amphibious, and special operations forces to engage enemy forces, combat formations, and facilities in pursuit of tactical and operational objectives (JP 3-09).

flank attack

A form of offensive maneuver directed at the flank of an enemy force (FM 3-90-1).

forward observer

An observer operating with front line troops trained to adjust ground or naval gunfire and pass back battlefield information (JP 3-09).

frontal attack

A form of maneuver in which the attacking force seeks to destroy a weaker enemy force or fix a larger enemy force in place over a broad front (FM 3-90-1).

guard

A security task to protect the main body by fighting to gain time while also observing and reporting information and to prevent enemy ground observation of and direct fire against the main body. Units conducting a guard mission cannot operate independently because they rely upon fires and functional and multifunctional support assets of the main body (ADRP 3-90).

hybrid threat

The diverse and dynamic combination of regular forces, irregular forces, terrorist forces, or criminal elements unified to achieve mutually benefitting effects (ADRP 3-0).

infiltration

A form of maneuver in which an attacking force conducts undetected movement through or into an area occupied by enemy forces to occupy a position of advantage in the enemy rear while exposing only small elements to enemy defensive fires (FM 3-90-1).

intelligence warfighting function

The related tasks and systems that facilitate understanding the enemy, terrain, weather, civil considerations, and other significant aspects of the operational environment. (ADRP 3-0).

joint fires observer

A trained Service member who can request, adjust, and control surface-to-surface fires (ATP 3-09.32/ MCRP 3-16.6A/NTTP3-09.2/AFTTP(I) 3-2.6).

leadership

The process of influencing people by providing purpose, direction, and motivation, to accomplish the mission and improve the organization (ADP 6-22).

local security

A security task that includes low-level security activities conducted near a unit to prevent surprise by the enemy (ADRP 3-90).

logistics

Planning and executing the movement and support of forces (JP 4-0).

mission command warfighting function

The related tasks and systems that develop and integrate those activities enabling a commander to balance the art of command and the science of control in order to integrate the other warfighting functions (ADRP 3-0).

movement and maneuver warfighting function

The related tasks and systems that move and employ forces to achieve a position of relative advantage over the enemy and other threats (ADRP 3-0).

movement to contact

An offensive task designed to develop the situation and establish or regain contact (ADRP 3-90).

neutral

A party identified as neither supporting nor opposing friendly or enemy forces (JP 3-0).

operation

A sequence of tactical actions with a common purpose or unifying theme (JP 1).

operational environment

A composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander (JP 3-0).

passage of lines

An operation in which a force moves forward or rearward through another force's positions with the intention of moving into or out of contact with the enemy. (JP 3-18).

penetration

A form of maneuver in which an attacking force seeks to rupture enemy defenses on a narrow front to disrupt the defensive system (FM 3-90-1).

protection warfighting function

The related tasks and systems that preserve the force so the commander can apply maximum combat power to accomplish the mission (ADRP 3-0).

reconnaissance

A mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary, or to secure data concerning the meteorological, hydrographical, or geographical characteristics and the indigenous population of a particular area (JP 2-0).

reconnaissance in force

A deliberate combat operation designed to discover or test the enemy's strength, dispositions, and reactions or to obtain other information (ADRP 3-90).

reconnaissance pull

Used when commanders are uncertain of the composition and disposition of threat forces in their areas of operation, information concerning terrain is vague, and time is limited (FM 3-98).

reconnaissance push

Used when commanders have a relatively thorough understanding of the operational environment (FM 3-98).

retrograde

A type of defense task that involves organized movement away from the enemy (ADRP 3-90).

route reconnaissance

A directed effort to obtain detailed information of a specified route and all terrain from which the enemy could influence movement along that route (ADRP 3-90).

screen

A security task that primarily provides early warning to the protected force (ADRP 3-90).

security operations

Those operations undertaken by the commander to provide early and accurate warning of enemy operations, to provide the force being protected with time and maneuver space within which to react to the enemy, and to develop the situation to allow the commander to effectively use the protected force (ADRP 3-90).

Soldier and leader engagement

Interpersonal interactions by Soldiers and leaders with audiences in an area of operations (FM 3-13).

spoiling attack

A tactical maneuver employed to seriously impair a hostile attack while the enemy is forming or assembling for an attack (FM 3-90-1).

stability operations

An overarching term encompassing various military missions, tasks, and activities conducted outside the United States in coordination with other instruments of national power to maintain or reestablish a safe and secure environment, provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief (JP 3-0.)

stability tasks

Tasks conducted as part of operations outside the United States in coordination with other instruments of national power to maintain or reestablish a safe and secure environment and provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief. (ADP 3-07).

sustainment

The provision of the logistics, personnel services, and health service support necessary to maintain operations until successful mission completion (ADRP 4-0).

sustainment warfighting function

The related tasks and systems that provide support and services to ensure freedom of action, extend operational reach, and prolong endurance (ADRP 3-0).

tactical road march

A rapid movement used to relocate units within an area of operations to prepare for combat operations (ADRP 3-90).

threat

Any combination of actors, entities, or forces that have the capability and intent to harm United States forces, United States national interests, or the homeland (ADRP 3-0).

troop-leading procedures

A dynamic process used by small-unit leaders to analyze a mission, develop a plan, and prepare for an operation (ADP 5-0).

troop movement

The movement of troops from one place to another by any available means (ADRP 3-90).

turning movement

A form of maneuver in which the attacking force seeks to avoid the enemy's principle defensive positions by seizing objectives behind the enemy's current positions thereby causing the enemy force to move out of their current positions or divert major forces to meet the threat (FM 3-90-1).

unified action

The synchronization, coordination, and/or integration of the activities of governmental and nongovernmental entities with military operations to achieve unity of effort (JP 1).

unified action partners

Those military forces, governmental and nongovernmental organizations, and elements of the private sector with whom Army forces plan, coordinate, synchronize, and integrate during the conduct of operations. (ADRP 3-0).

unified land operations

Are simultaneous offensive, defensive, and stability or defense support of civil authorities tasks to seize, retain, and exploit the initiative and consolidate gains to prevent conflict, shape the operational environment, and win our Nation's wars as part of unified action (ADRP 3-0).

unity of effort

The coordination and cooperation toward common objectives, even if the participants are not necessarily part of the same command or organization, which is the product of successful unified action (JP 1).

warfighting function

A group of tasks and systems united by a common purpose that commanders use to accomplish missions and training objectives (ADRP 3-0).

zone reconnaissance

A form of reconnaissance that involves a directed effort to obtain detailed information on all routes, obstacles, terrain, and enemy forces within a zone defined by boundaries (ADRP 3-90).

References

REQUIRED PUBLICATIONS

ADRP 1-02, *Terms and Military Symbols, 16 November 2016*.

Department of Defense Dictionary of Military and Associated Terms, February 2017.

RELATED PUBLICATIONS

Most Army doctrinal publications and regulations are available at: http://armypubs.army.mil/.

Other publications are available on the Central Army Registry on the Army Training Network, https://atiam.train.army.mil.

NATO publications are available at https://nso.nato.int/protected. Go to left column, publications, and type in number.

ADP 3-0, *Unified Land Operations*, 10 October 2011.

ADP 3-05, *Special Operations*, 31 August 2012.

ADP 3-07, *Stability*, 31 August 2012.

ADP 4-0, *Sustainment,* 31 July 2012.

ADP 5-0, *The Operations Process*, 17 May 2012.

ADP 6-22, *Army Leadership*, 1 August 2012.

ADRP 2-0, *Intelligence*, 31 August 2012.

ADRP 3-0, *Unified Land Operations*, 16 May 2012.

ADRP 3-05, Special Operations, 31 August 2012.

ADRP 3-07, Stability, 31 August 2012.

ADRP 3-09, *Fires*, 31 August 2012.

ADRP 3-28, Defense Support of Civil Authorities, 14 June 2013.

ADRP 3-37, *Protection*, 31 August 2012.

ADRP 3-90, *Offense and Defense*, 31 August 2012.

ADRP 4-0, *Sustainment*, 31 July 2012.

ADRP 6-0, *Mission Command*, 17 May 2012.

ATP 2-01.3, *Intelligence Preparation of the Battlefield/Battlespace*, 10 November 2014.

ATP 3-04.1, *Aviation Tactical Employment*, 13 April 2016.

ATP 3-06.20, *Multi-Service Tactics, Techniques, and Procedures for Cordon and Search Operations*, 18 August 2016.

ATP 3-07.5, *Stability Techniques*, 31 August 2012.

ATP 3-07.10/MCRP 3-33.8A/NTTP 3-07.5/AFTTP 3-2.76, *Multi-Service Tactics, Techniques, and Procedures for Advising Foreign Security Forces*, 1 November 2014.

ATP 3-09.30, *Techniques for Observed Fire*, 2 August 2013.

ATP 3-09.32/MCRP 3-16.6A/NTTP 3-09.2/AFTTP(I) 3-2.6, *JFIRE Multi-Service Tactics, Techniques, and Procedures for the Joint Application of Firepower*, 21 January 2016.

ATP 3-11.32/MCWP 3-37.2/NTTP 3-11.37, *Multi-Service Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Passive Defense*, 13 May 2016.

ATP 3-11.36/MCRP 3-37B/NTTP 3-11.34/AFTTP 3-2.70, *Multi-Service Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Aspects of Command and Control*, 1 November 2013.

ATP 3-11.50, *Battlefield Obscuration*, 15 May 2014.

ATP 3-20.16, *Mobile Gun System Platoon*, 15 February 2013.

ATP 3-20.96, *Cavalry Squadron*, 12 May 2016.
ATP 3-21.8, *Infantry Platoon and Squad*, 23 August 2016.
ATP 3-21.11, *SBCT Infantry Rifle Company*, 4 February 2016.
ATP 3-34.22, *Engineer Operations—Brigade Combat Team and Below*, 5 December 2014.
ATP 3-34.40, *General Engineering*, 25 February 2015.
ATP 3-34.80, *Geospatial Engineering*, 23 June 2014.
ATP 3-34.81, *Engineer Reconnaissance*, 1 March 2016.
ATP 3-36, *Electronic Warfare Techniques*, 16 December 2014.
ATP 3-37.34, *Survivability Operations*, 28 June 2013.
ATP 3-90.4, *Combined Arms Mobility*, 8 March 2016.
ATP 3-90.8, *Combined Arms Countermobility Operations*, 17 September 2014.
ATP 3-90.37, *Countering Improvised Explosive Devices*, 29 July 2014.
ATP 3-90.97, *Mountain Warfare and Cold Weather Operations*, 29 April 2016.
ATP 4-02.2, *Medical Evacuation*, 12 August 2014.
ATP 4-02.3, *Army Health System Support to Maneuver Forces*, 9 June 2014.
ATP 4-10, *Multi-service Tactics, Techniques, and Procedures for Operational Contract Support*, 18 February 2016.
ATP 4-11, *Army Motor Transport Operations*, 5 July 2013.
ATP 4-25.13, *Casualty Evacuation*, 15 February 2013.
ATP 5-19, *Risk Management*, 14 April 2014.
ATTP 3-06.11, *Combined Arms Operations in Urban Terrain*, 10 June 2011.
ATTP 3-21.50, *Infantry Small Unit Mountain Operations*, 28 February 2011.
FM 1-0, *Human Resources Support*, 1 April 2014.
FM 1-04, *Legal Support to the Operational Army*, 18 March 2013.
FM 1-05, *Religious Support*, 5 October 2012.
FM 1-06, *Financial Management Operations*, 15 April 2014.
FM 3-05, *Army Special Operations*, 9 January 2014.
FM 3-07, *Stability*, 2 June 2014.
FM 3-13, *Inform and Influence Activities*, 25 January 2013.
FM 3-22, *Army Support to Security Cooperation*, 22 January 2013.
FM 3-22.34, *TOW Weapon System*, 28 November 2003.
FM 3-34, *Engineer Operations*, 2 April 2014.
FM 3-53, *Military Information Support Operations*, 4 January 2013.
FM 3-57, *Civil Affairs Operations*, 31 October 2011.
FM 3-61, *Public Affairs Operations*, 1 April 2014.
FM 3-90-1, *Offense and Defense, Volume 1*, 22 March 2013.
FM 3-90-2, *Reconnaissance, Security, and Tactical Enabling Tasks, Volume 2*, 22 March 2013.
FM 3-96, *Brigade Combat Team*, 8 October 2015.
FM 3-98, *Reconnaissance and Security Operations*, 1 July 2015.
FM 4-02, *Army Health System*, 26 August 2013.
FM 6-0, *Commander and Staff Organization and Operations*, 5 May 2014.
FM 90-3, *Desert Operations*, 24 August 1993.
FM 90-5, *Jungle Operations*, 16 August 1982.
TC 3-22.32, *M41 Improved Target Acquisition System (ITAS) and Tube-Launched, Optically-Tracked, Wire-Guided/Wireless (TOW) Missile*, 18 November 2015.

TM 9-1410-470-23, *Field Maintenance Manual for Guided Missile, Surface Attack BGM-71 Series and Guided Missile Practice BTM-71 Series TOW/TOW2 Heavy Antitank/Assault Weapon System*, 10 March 2009.

TM 9-1425-923-10, *TOW Improved Target Acquisition System (ITAS) M41A3 (Part Number 13480670-3) (NSN 5865-01-556-1363) (EIC: PGD); M41A4 (Part Number 13480670-4) (NSN 1425-01-559-8728) (EIC: PGE); M41A7 (Part Number 13480670-7) (NSN 5865-01-606-3354) (EIC: PGF)*, 1 September 2010.

TM 9-2355-311-10-7-1, Operator's Manual Volume 1 of 4, Antitank Guided Missile Vehicle (ATGM) M1134 (NSN 2355-01-481-8576) (EIC: AFP) Stryker, 30 September 2016

TM 9-2355-311-10-7-2, Operator's Manual Volume 2 of 4, Antitank Guided Missile Vehicle (ATGM) M1134 (NSN 2355-01-481-8576) (EIC: AFP) Stryker, 30 September 2016.

TM 9-2355-311-10-7-3, Operator's Manual Volume 3 of 4, Antitank Guided Missile Vehicle (ATGM) M1134 (NSN 2355-01-481-8576) (EIC: AFP) Stryker, 30 September 2016.

TM 9-2355-311-10-7-4, Operator's Manual Volume 4 of 4, Antitank Guided Missile Vehicle (ATGM) M1134 (NSN 2355-01-481-8576) (EIC: AFP) Stryker, 30 September 2016.

JOINT PUBLICATIONS

Most joint publications are available online at: www.dtic.mil/doctrine/new_pubs/jointpub.htm. STANAGs are available online at: http://www.nato.int/cps/en/natolive/publications.htm (Note: must log in to access.)

JP 1, *Doctrine for the Armed Forces of the United States*, 25 March 2013.

JP 1-04, *Legal Support to Military Operations*, 2 August 2016.

JP 2-0, *Joint Intelligence*, 22 October 2013.

JP 3-0, *Joint Operations*, 11 August 2011.

JP 3-01, *Countering Air and Missile Threats*, 23 March 2012.

JP 3-07, *Stability*, 3 August 2016.

JP 3-09, *Joint Fire Support*, 12 December 2014.

JP 3-13.4, Military Deception, 26 January 2012.

JP 3-18, *Joint Forcible Entry Operation*, 27 November 2012.

JP 3-22, *Foreign Internal Defense*, 12 July 2010.

JP 3-57, *Civil-Military Operations*, 11 September 2013.

JP 4-0, *Joint Logistics*, 16 October 2013.

STANAG 3204, *Aeromedical Evacuation*, 17 November 2014.

PRESCRIBED FORMS

This section contains no entries.

REFERENCED FORMS

Unless otherwise indicated, DA forms are available on the Army Publishing Directorate (APD) web site (http://armypubs.army.mil/).

DD Forms are available on the Office of the Secretary of Defense (OSD) web site (http://www.dtic.mil/whs/directives/forms/index.htm).

DA Form 1156, *Casualty Feeder Card*.

DD Form 1380, *Tactical Combat Casualty Care (TCCC) Card* (available through normal supply channels).

DA Form 2028, *Recommended Changes to Publications and Blank Forms*.

DA Form 2404, *Equipment Inspection and Maintenance Worksheet*.

DA Form 5988-E, *Equipment Maintenance and Inspection Worksheet* (available through the ULLS-G/SAMS-E system, DA PAM 750-8, *The Army Maintenance Management System (TAMMS)* 22 August 2005).

Index

Entries are by paragraph number unless mentioned otherwise.

A

air assault operation
five phases. 6-81
alerts. 9-76
ambush
three types of. 3-179
ammunition. A-15
antiarmor platoon. 1-43
assistant gunner
duties, 1-17
aviation support. 4-117

B

breaching methods
three. 8-61
breaching tenets
five. 8-44

C

capabilities. 1-44
CBRN
six mission-oriented protective postures. 7-54
company commander
duties. 1-66

D

defense
three types of retrograde. 4-26
two types of withdrawal, 4-6
defense transition
two basic techniques. 3-195
defensive
three basic tasks. 4-12
two defensive maneuvers. 4-74, 4-15
defensive tasks
rehearsals
five types of. 4-119
direct fire
eight principles of. 9-10
driver
duties. 1-74

E

enabling operations
passage of lines
two basic conditions. 8-25
patrols
two types. 8-10
patrols, combat
three types of. 8-11
patrols, reconnaissance
seven types of. 8-12
reconnaissance
forms of. 2-12
reconnaissance
fundamentals. 2-5
relief in place
three techniques. 8-15
route reconnaissance tasks. 2-18
security
operations
enemy contact fundamentals. 2-52
five fundamentals. 2-46
security operations
five forms. 2-53
zone reconnaissance tasks. 2-14
enabling operations guard operations
three types of. 2-61
equipment. 1-50
executive officer
duties. 1-67

F

fire control process
four basic steps. 9-3
first sergeant
duties. 1-68
forms of defense
three. 4-33
defense of a linear obstacle. 4-34
perimeter defense. 4-36
reverse-slope defense. 4-38

G

graphic control measures
five types of battle positions. 4-70
gunner
duties. 1-73

I

information objective. 2-28

L

limitations. 1-44
linkups
three phases. 8-39
Phase 1, Far Recognition Signal. 8-40
Phase 2, Coordination. 8-41
Phase 3, Movement to the Linkup Point and Linkup. 8-42

M

METT-TC. 2-30
mission variables. 2-30
mobile gun system
capabilities, 1-10
urban environment. A-15
movement to contact
fundamentals. 3-97

O

offense
mountainous terrain characteristics. 3-82
seven forms of contact. 3-13
six forms of maneuver. 3-29
three movement techniques. 3-56
warfighting functions. 3-41

P

platoon leader
duties. 1-69
platoon sergeant
duties. 1-71
protection
14 protection tasks and systems. 7-31

R

reconnaissance. 2-33, 2-31, 2-28, 2-27, 2-26, 2-25, 2-22, 2-19

S

special purpose attacks
ambush, three elements of. 3-180
squad leader
duties. 1-72
stability
six primary stability tasks. 5-11

T

threat. 2-28, 2-27
troop-leading procedures
definition. 2-22
steps. 2-22

V

vulnerabilities. 1-44

W

weapons control status. 9-82
three levels. 9-54

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