

## \* APPENDIX A

## MECHANIZED INFANTRY AND ARMORED, LIGHT INFANTRY, AND SPECIAL OPERATIONS FORCES OPERATIONS

Employing mechanized infantry and armored battalions with light and special operations units can be a combat multiplier. These operations take advantage of the light unit's ability to operate in restrictive terrain such as urban areas, forests, and mountains. This increases the survivability of the overall force. At the same time, it has the advantage of the mobility and firepower inherent in mechanized infantry and armored units. Forces should be mutually supporting, based on the commander's concept of employment. This ensures mechanized and light assets are integrated and synchronized. Working with special operations forces (SOF) gives the commander access to time-sensitive intelligence. Also, SOF teams can help the brigade conduct combat missions. This appendix discusses what the mechanized infantry and armored battalion commander must consider in planning for and executing three types of tactical operations: those in which the battalion is provided with a light company, those in which the battalion is part of a light brigade, and those in which the battalion works with special operations forces.

CONTENTS	
PARAGRAPH	PAGE
Section I. ORGANIZATION .....	A-2
A-1 Capabilities and Limitations .....	A-2
A-2 Organization of Light Force Brigades .....	A-3
A-3 Organization of Light Force Battalions .....	A-6
A-4 Organization of Light Force Companies .....	A-8
A-5 Organization of Special Operations Forces .....	A-12
A-6 Safety Considerations .....	A-13
Section II. EMPLOYMENT CONCEPTS .....	A-13
A-7 Planning Considerations .....	A-14
A-8 Offensive Operations .....	A-16
A-9 Offensive Missions and Roles .....	A-19
A-10 Exploitation .....	A-20
A-11 Defensive Operations .....	A-21
A-12 Defensive Missions and Roles .....	A-22
A-13 Retrograde Operations .....	A-23
A-14 Retrograde Missions and Roles .....	A-24
Section III. INTEGRATION AND SYNCHRONIZATION OF SPECIAL OPERATIONS FORCES .....	A-25
A-15 Special Operations Command and Control Element .....	A-25

PARAGRAPH	PAGE
A-16 Employment of Special Operations Forces . . . . .	A-26
A-17 Mechanized Infantry Battalion Tasks . . . . .	A-26
Section IV. MILITARY OPERATIONS ON URBANIZED TERRAIN. . . . .	
A-18 Restrictions on Armored Vehicles . . . . .	A-27
A-19 Role of Infantry . . . . .	A-27
A-20 Light and Mechanized Infantry and Armored Operations . . . . .	A-27
A-21 Offensive Considerations . . . . .	A-28
A-22 Defensive Considerations . . . . .	A-29

## Section I. ORGANIZATION

Employing light infantry, mechanized infantry and armored, and SOF forces together does more than capitalize on the unique characteristics of each; it also helps offset their limitations. This means commanders must know each force's capabilities and limitations. The commanders must also apply the principles of war to combined light infantry, mechanized infantry and armored, and SOF forces operations, and must synchronize all combat, CS, and CSS units.

### A-1. CAPABILITIES AND LIMITATIONS

The employment of a mixed force must be based on sound METT-T analysis. Commanders must effectively integrate light infantry, mechanized infantry and armored, and SOF forces by using them to complement one another.

a. **Light Force Capabilities.** Light forces are designed to do the following:

- (1) Seize, occupy, and hold terrain.
- (2) Move by aircraft, truck, or amphibious vehicle or, in areas identified as SLOW or NO-GO for mounted forces, move by foot.
- (3) Conduct operations along with mechanized infantry and armored forces.
- (4) Conduct air assault operations.
- (5) Take part in counterinsurgency operations within a larger unit.
- (6) Rapidly accept and integrate augmenting forces.

b. **Light Force Limitations.** Light forces are limited by the following factors:

- (1) They must depend on nonorganic transportation for rapid movement over long distances.

- (2) They are vulnerable to NBC unless they are dug-in or otherwise protected. Without protective clothing, light infantry soldiers are also vulnerable to prolonged NBC exposure.
  - (3) They require external (divisional) support when they must operate for an extended period.
- c. **Special Operations Forces Capabilities.** Special operations forces can do the following:
- (1) Infiltrate and exfiltrate specified operational areas by air, land, or sea.
  - (2) Conduct operations in remote areas and nonpermissive environments for an extended time, with little external direction and support.
  - (3) Develop, organize, equip, train, advise, and direct indigenous military and paramilitary personnel.
  - (4) Train, advise, and aid US and allied forces.
  - (5) Conduct reconnaissance, surveillance, and target acquisition.
  - (6) Conduct direct-action operations. These include raids, ambushes, use of snipers, and emplacement of mines and other munitions.
  - (7) Provide terminal guidance for precision-guided munitions.
  - (8) Conduct rescue and recovery operations.
- d. **Special Operations Forces Limitations.** Special operations forces are limited by the following factors:
- (1) They must depend on the resources of the theater army to support and sustain operations.
  - (2) They cannot conduct conventional combined arms operations. They can only advise or direct indigenous military forces who are conducting this type of operation.
  - (3) They lack an organic combined arms capability.
  - (4) They can provide security for operational bases only at the cost of severely degraded operational and support capabilities.

## A-2. ORGANIZATION OF LIGHT FORCE BRIGADES

An infantry brigade is a combination of infantry battalions and other supporting units commanded by a brigade headquarters. The infantry brigade participates in division or corps operations IAW prescribed principles and concepts (FM 100-15 and FM 71-100-2). The only unit permanently assigned to a brigade is its HHC. The HHC provides command and control over units attached to or supporting the brigade. Minor personnel and equipment differences exist between HHCs. Figures A-1 through A-4 show examples of how brigades may be task-organized.

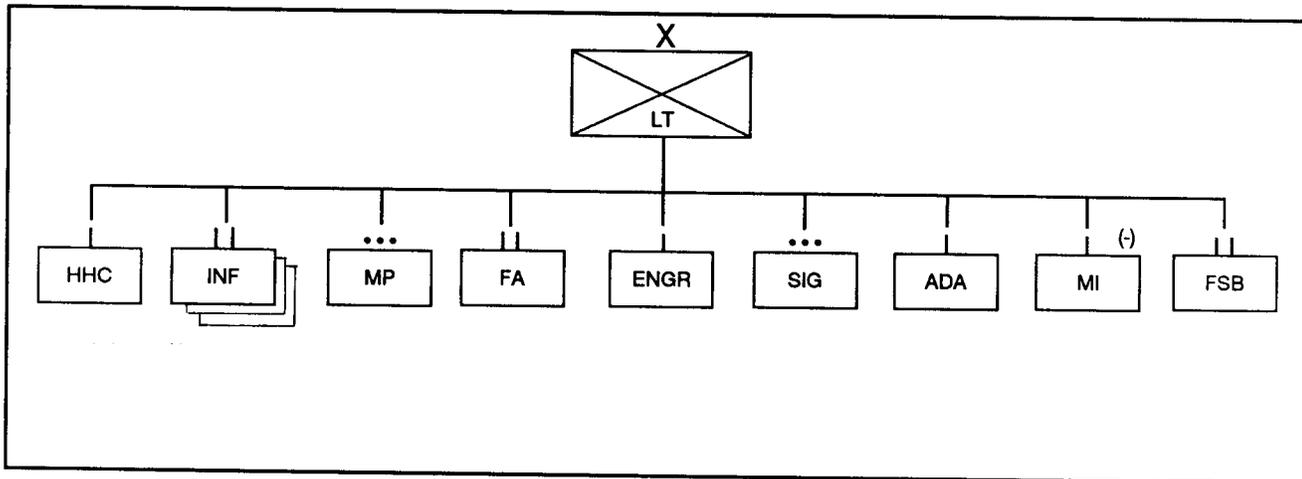


Figure A-1. Example light infantry brigade task organization.

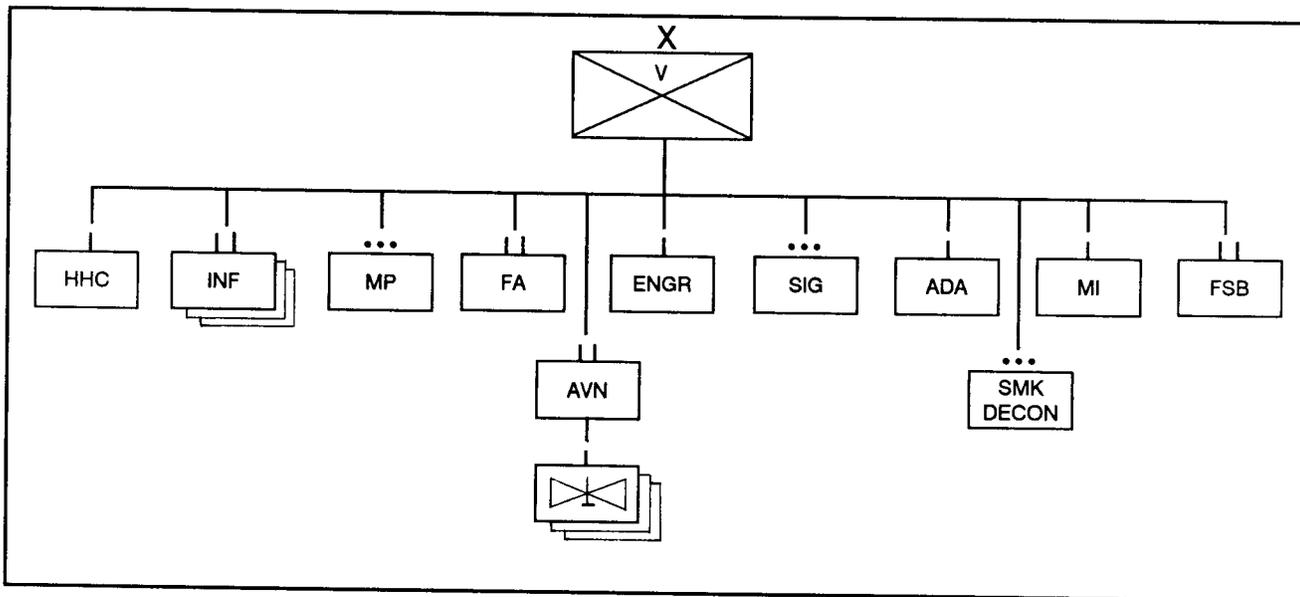


Figure A-2. Example air assault brigade task organization.

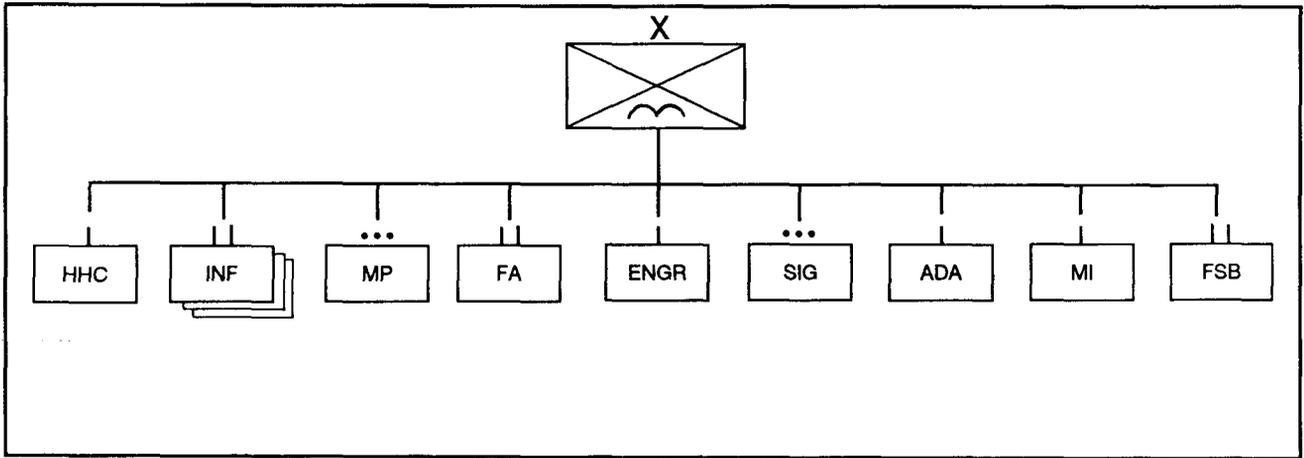


Figure A-3. Example airborne infantry brigade task organization.

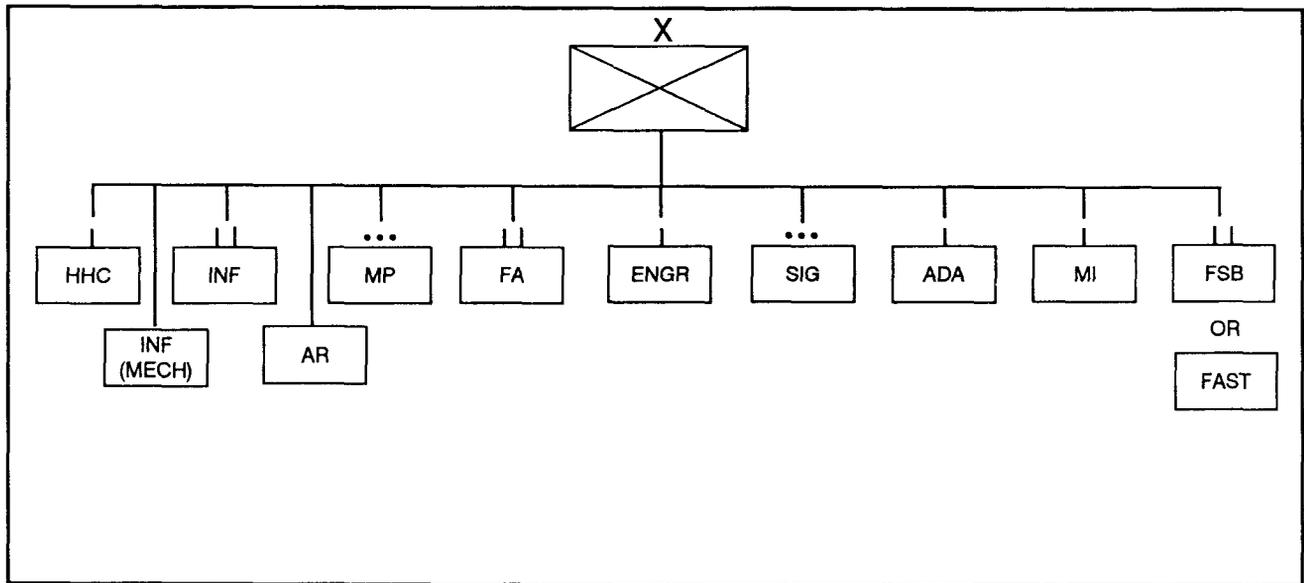


Figure A-4. Example infantry brigade task organization.

### A-3. ORGANIZATION OF LIGHT FORCE BATTALIONS

An infantry battalion has a combination of combat, CS, and CSS assets. The battalion HHC contains all CS and CSS assets as well as the reconnaissance and mortar platoons. Depending on the battalion's organization, antiarmor units are either part of HHC or are consolidated in an antiarmor company. (Figures A-5 through A-9 show an example organization of a ranger battalion and of each of the four types of light force battalions.)

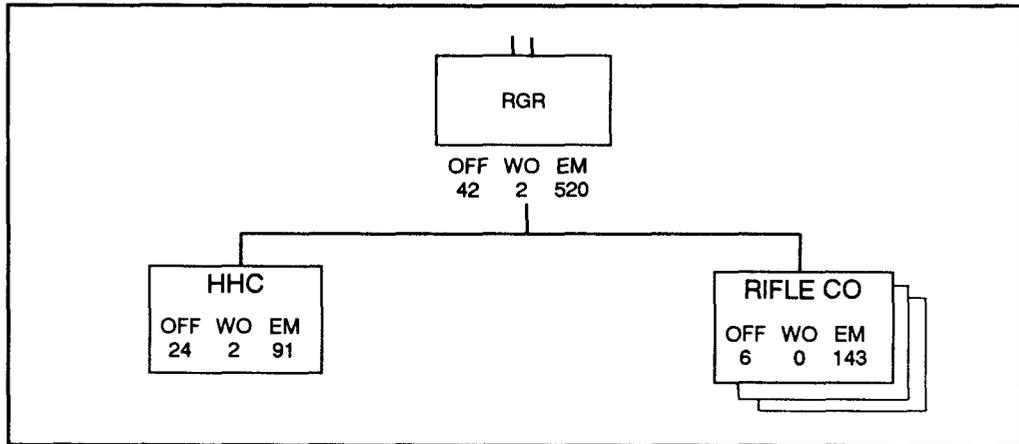


Figure A-5. Example ranger battalion.

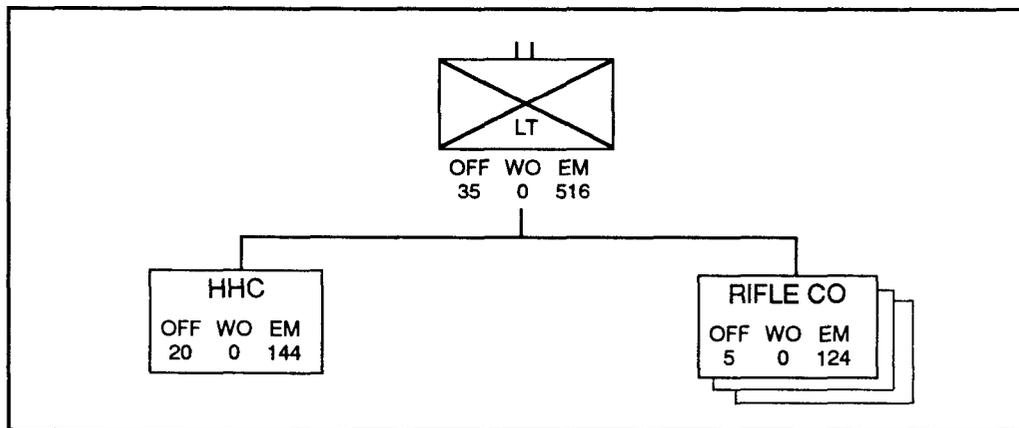


Figure A-6. Example light infantry battalion.

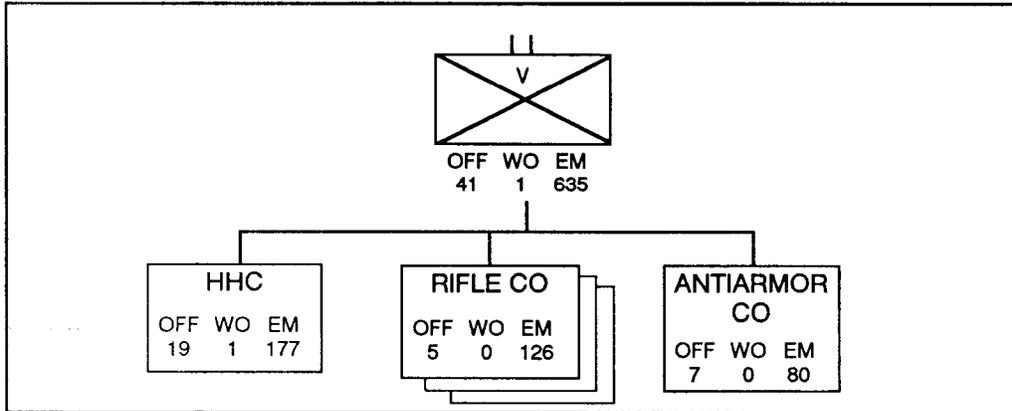


Figure A-7. Example air assault battalion.

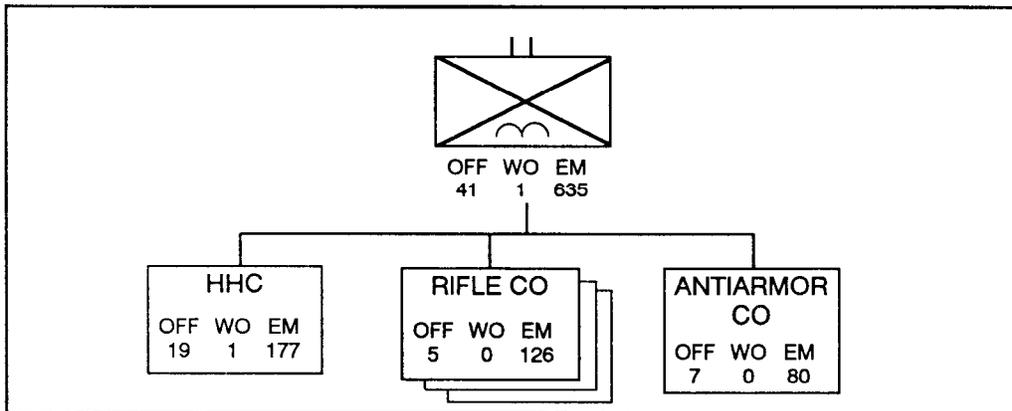


Figure A-8. Example airborne battalion.

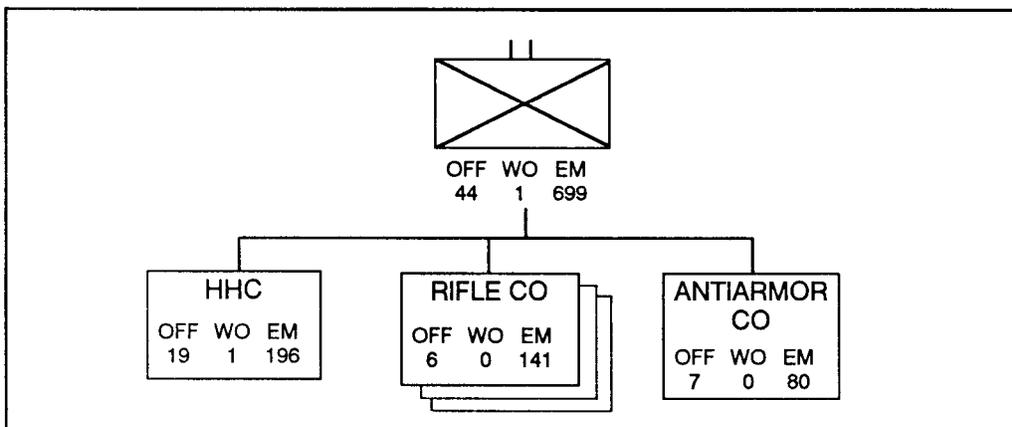


Figure A-9. Example infantry battalion.

### A-4. ORGANIZATION OF LIGHT FORCE COMPANIES

The infantry company consists of a combination of nine-man infantry squads, machine guns, mortars, and antiarmor assets. The configuration of these assets depends on the type of organization. (Figures A-10 through A-14 show the organization of ranger companies and each of the four types of light force companies.)

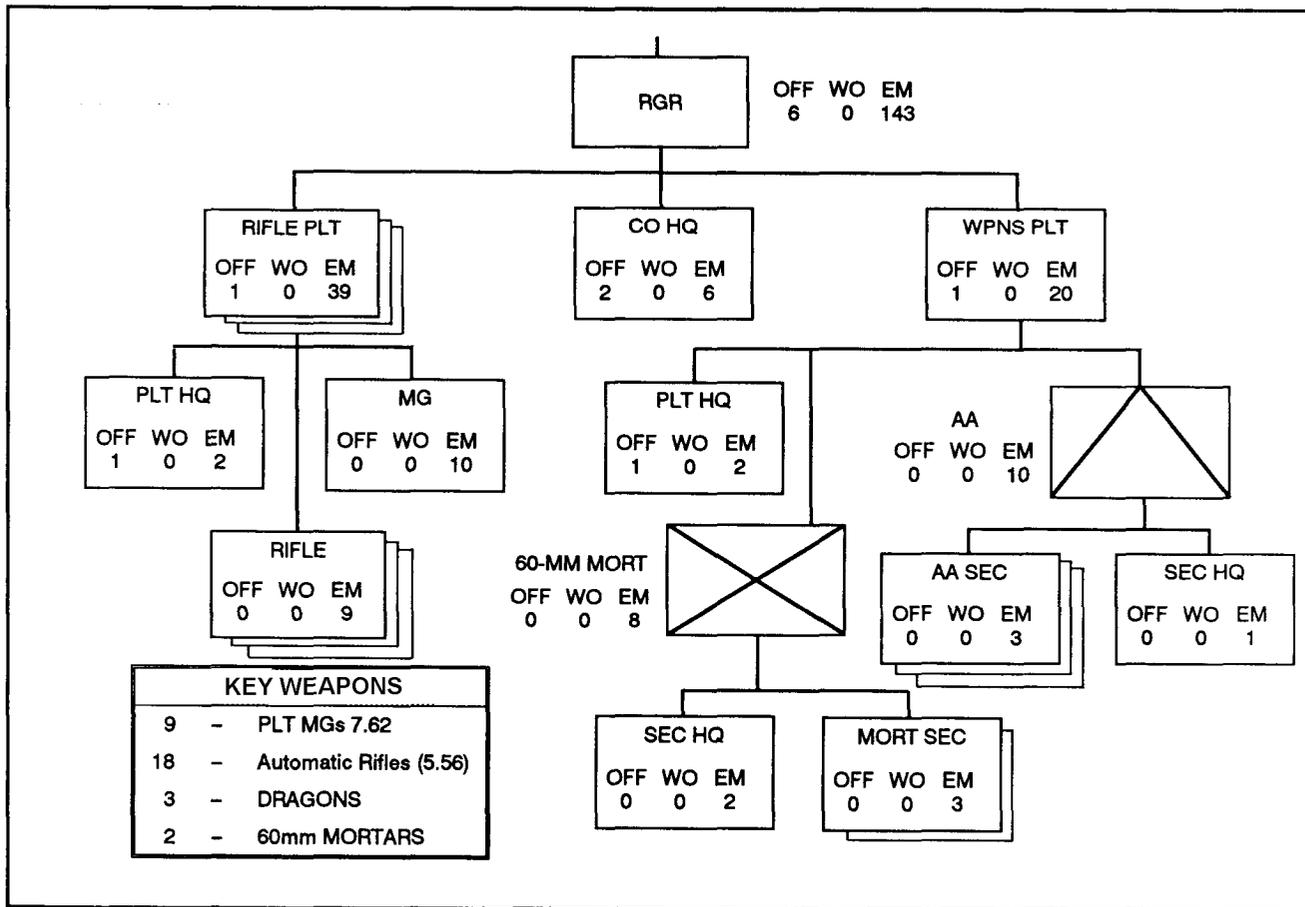


Figure A-10. Example ranger company.



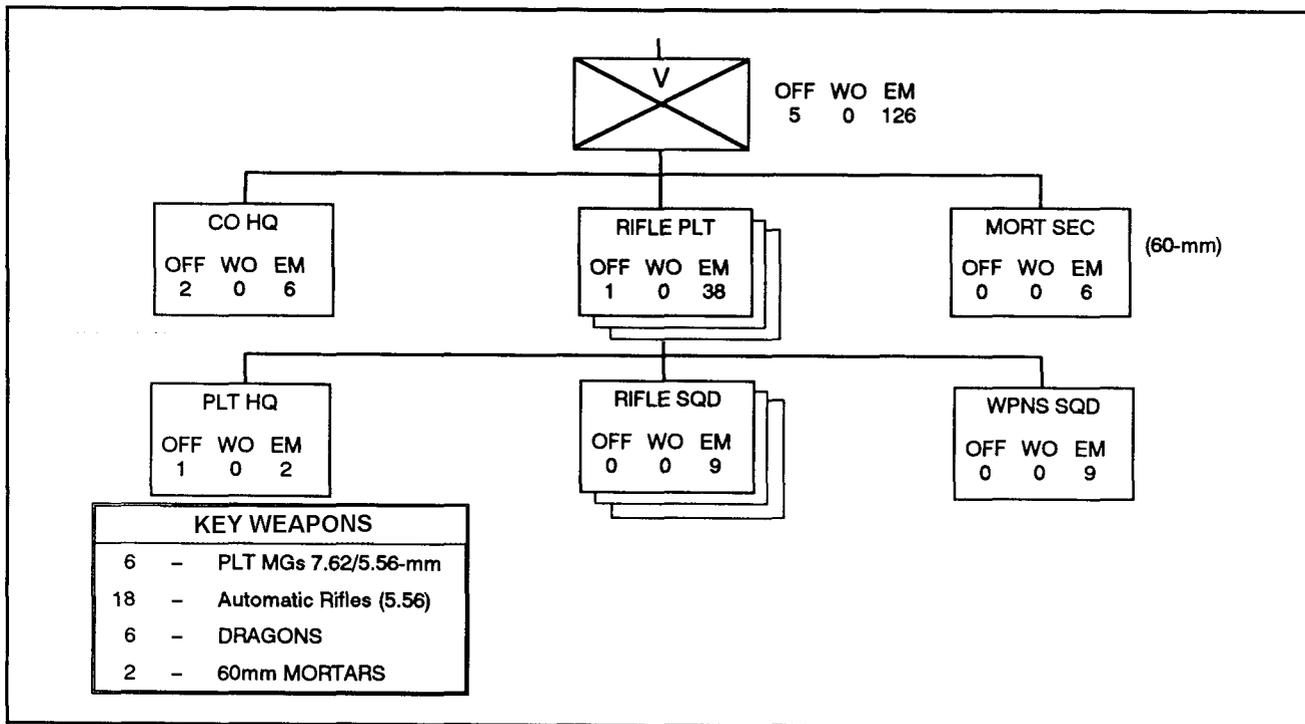


Figure A-13. Example air assault company.

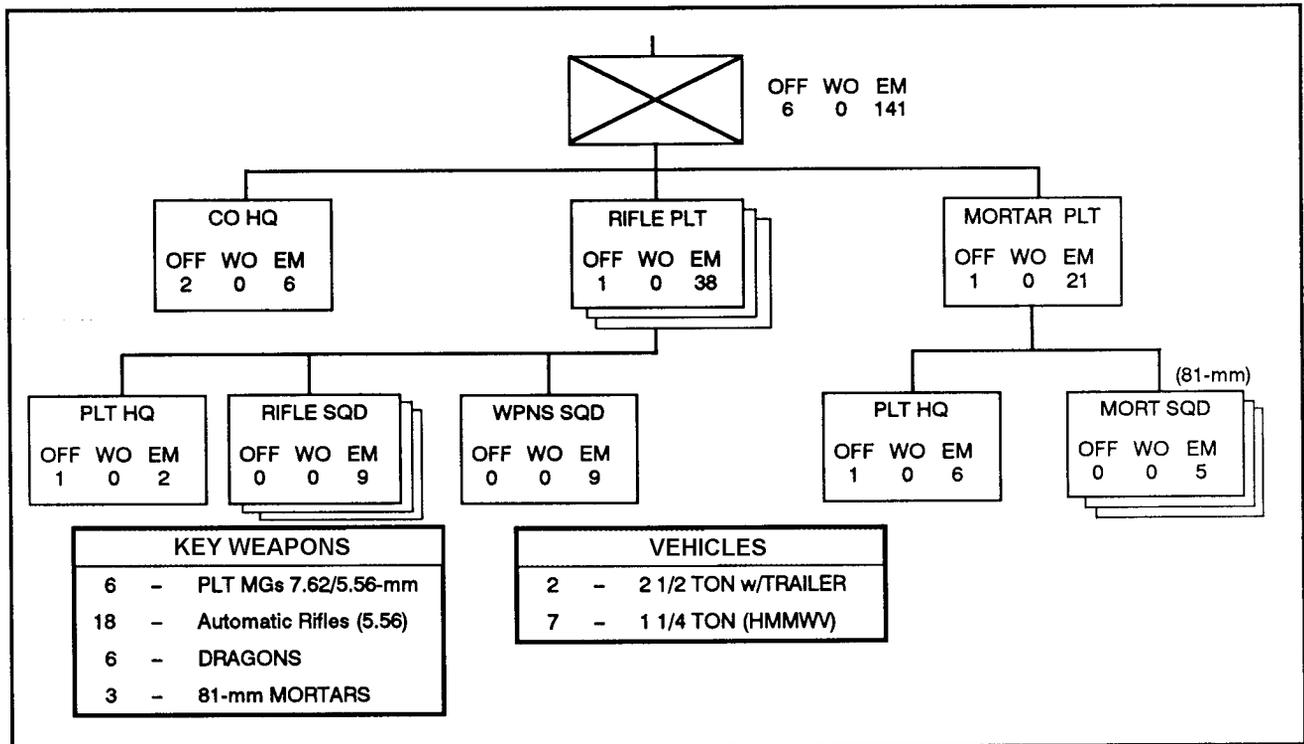


Figure A-14. Example infantry company.

## A-5. ORGANIZATION OF SPECIAL OPERATIONS FORCES

Examples of typical SOF organizations include joint operations task forces, ranger regiments, special operations aviation task forces, PSYOP task forces, civil affairs task forces, and special forces operational detachments "A." (FMs 100-25 and 31-20 provide more detailed information.) The basic special forces unit is the special forces operational detachment, A, or SFOD A. This type of unit conducts special operations in denied and remote areas for extended periods, with little external direction and support. The organization of an SFOD A is shown in Figure A-15. The complex structure and high experience level required enable it to develop, organize, equip, train, and advise or direct indigenous military and paramilitary organizations up to battalion size. The SFOD A is best employed as a unit. However, certain operations do not require its full capabilities. For these operations, the SFOD A may be task-organized to provide special forces teams specifically tailored to the requirements of the mission.

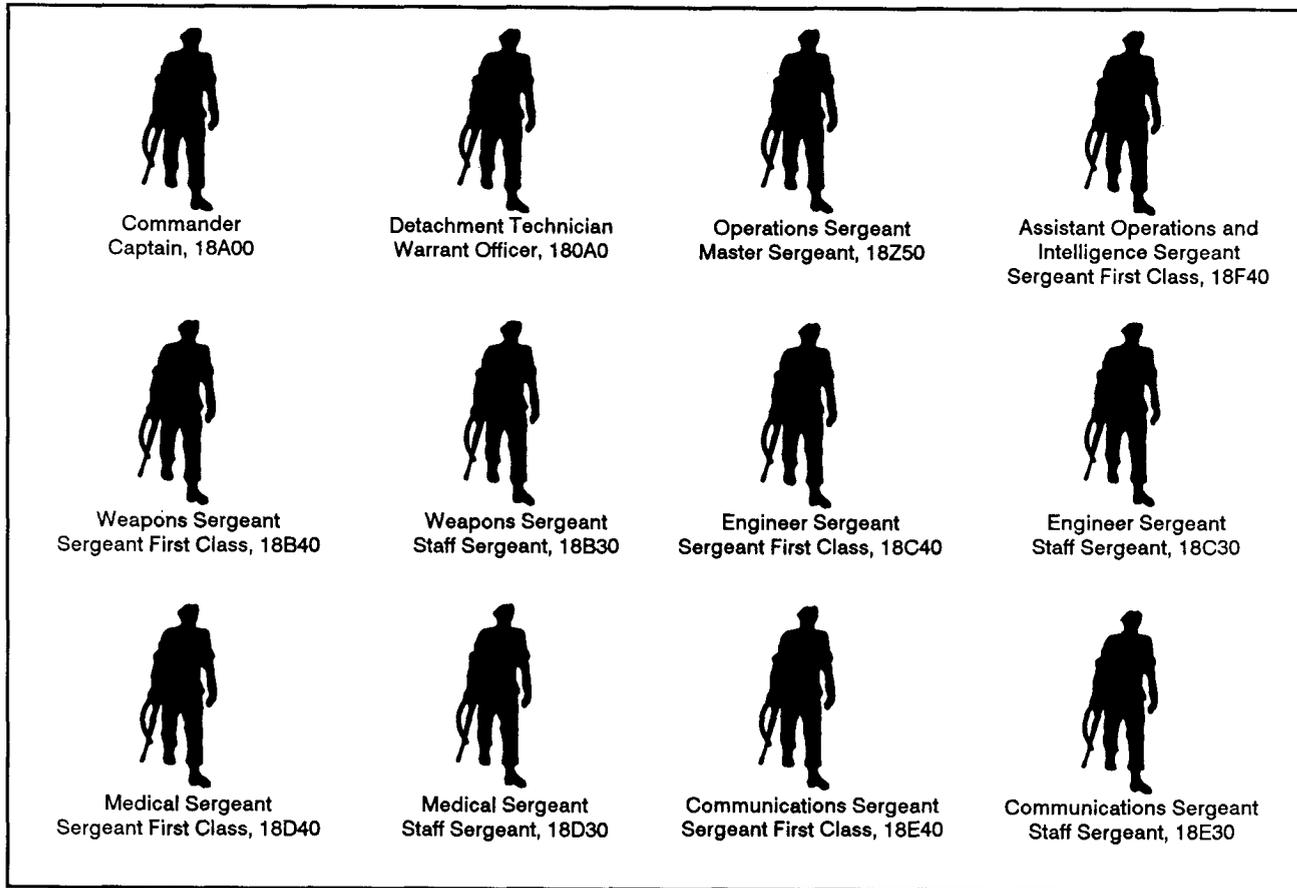


Figure A-15. Special forces operational detachment, A.

## A-6. SAFETY CONSIDERATIONS

Mechanized infantry and armored force leaders at all levels must be aware of safety concerns when operating with light forces. Special leader involvement is needed if the infantry unit has received little training with armored vehicles. All personnel must know these safety considerations and remain alert to prevent casualties during light infantry, mechanized infantry, and armored operations.

- a. The armored crew observes enemy locations (or potential locations) rather than nearby soldiers. Infantry soldiers must be alert and maintain a safe position relative to the vehicle.
- b. The high-velocity armor-piercing discarding sabot round presents a safety problem when fired by tanks and the 25-mm gun on the M2/M3. The discarded sabot petals fall to the ground shortly after leaving the muzzle; the danger area extends about 10° below the muzzle level out to at least 100 meters it extends about 17° left and right of the muzzle. Mechanized infantry and armored force leaders must ensure infantry soldiers in this area have rear protection (a berm or tree) and overhead cover.
- c. The exhaust from the M1 tank may cover an angle wider than 60° and may exceed a temperature of 1,700°F. Therefore, soldiers following the tank must move well off to the side of the exhaust grill or, if directly behind the tank, they must remain a safe distance (about 50 feet) from it.
- d. Infantry can ride on top of an armored vehicle. (FM 7-8 discusses the specifics for rigging a vehicle to carry soldiers on top.) However, doing so leaves them vulnerable to enemy fire. Therefore, infantry should ride on a vehicle only when the risk of enemy contact is small and the need for speed is great.

## Section II. EMPLOYMENT CONCEPTS

Combining light infantry with mechanized infantry and armored forces gives the brigade commander remarkable flexibility. Using the estimate process, he determines the task organization, the appropriate command or support relationship, the tasks to be accomplished, and the concept of CSS. In missions conducted by this combination of forces, either may be given the main effort. How the commander determines which to use in this role depends on METT-T. He considers such factors as the sizes and types of each force and the support structure available, the expected durations of current and future operations, the type of threat, the type of element that will be most effective on the terrain, and which force has been in the area the longest. A light infantry force combined with a mechanized infantry and armored force can conduct any of the operations neither could conduct alone.

## A-7. PLANNING CONSIDERATIONS

Effective employment of a force with mechanized infantry and armored and light elements requires detailed planning. To capitalize on advantages and address concerns, commanders and staffs must plan, rehearse, coordinate, and develop orders for employment. Critical areas include the command and support relationship, the composition of CS and CSS support, and effective use of terrain. Synchronization requires planners to know each unit's capabilities, limitations, and SOPs. Specific planning considerations include the following:

- a. **Intelligence.** Detailed intelligence is critical to integrating light infantry with mechanized infantry and armored forces. Intelligence requirements for each must be understood and integrated into the IPB process. Light forces orient on concentrations of enemy units, enemy infantry avenues of approach, enemy counterattack forces, enemy artillery and air defense assets, and enemy LZs/PZs. The individual force commanders should combine and compare PIR and decision support templates. Then they should explain both in detail to their staffs. Also, commanders should develop reconnaissance and surveillance plans jointly.
- b. **Maneuver.** Either the light force or the mechanized infantry and armored force can fix the enemy. The maneuver force then attacks. In either case, the light force requires the advantage of close terrain.
  - (1) The light force is best suited to close and restrictive terrain, where it can reduce the enemy's mobility and nullify his ability to use long-range weapons and observation assets.
  - (2) The differences between the operational tempos of light infantry and tanks and mechanized infantry must always be considered, as should rehearsal schedules. For both forces to take part, an early rehearsal may be needed.
  - (3) The movement of light infantry must be planned to coincide with darkness, severe weather, smoke, or fog. To help prevent detection, light infantry should move during poor visibility.
  - (4) Direct and indirect fires should be mutually supporting. The mechanized infantry battalion can use its long-range direct fires to provide suppression and overwatch fires for the light brigade.
- c. **Fire Support.** The mechanized infantry and armored force must recognize that dismounted infantry operations focus on stealth, which might not allow for preparatory and other preliminary fires. Fire support available to each force must be integrated into the fire plan. Planners must know the organizations, capabilities, and limitations of all forces involved, particularly their digital and nondigital capabilities. During planning and preparation, a liaison team helps synchronize fire support. Restrictive fire control measures must be jointly developed and understood by everyone.

- d. **Air Defense.** Air defense artillery (ADA) resupply requirements should get special attention. ADA support for combined light infantry and mechanized infantry and armored organizations must be planned centrally. ADA units can be consolidated to provide more dense coverage around critical assets. (Before ADA assets can support light forces in restrictive terrain, resupply must also be consolidated.) The light force must rely heavily on passive air defense measures.
- e. **Mobility/Counter mobility/Survivability.** A common obstacle plan must be developed. Light forces may be used to clear obstacles and choke points for the mechanized infantry and armored forces. Disparities between weapons' ranges, the impact of these weapons on prepared obstacles, and the use of terrain during battle handover to a mechanized infantry and armored force must all be considered. Survivability remains the priority for light forces. These forces must prepare to take advantage of the engineer assets available to the mechanized infantry and armored forces. When breaching obstacles, light forces must ensure the breach is large enough for the widest vehicle in the operation.
- f. **Combat Service Support.** A mechanized infantry and armored battalion can satisfy the CSS needs of an infantry company more easily than an infantry brigade can satisfy the needs of a mechanized infantry or armored battalion or company.
- (1) **Mechanized infantry and armored battalion, infantry company.** Except for mortar rounds, the mechanized infantry unit can provide all munitions the light infantry company needs. Therefore, the S4 must plan to receive and move 120-mm, 81-mm, or 60-mm mortar munitions.
  - (2) **Infantry brigade, mechanized infantry and armored battalion or company.** Adding a mechanized infantry and armored battalion or company to an infantry brigade significantly increases the fuel, ammunition, and maintenance that must be delivered to the forward area support team (FAST) or to the forward support battalions (FSBs). The infantry brigade lacks the transportation required to support even a small mechanized infantry and armored force, particularly the HETs, for armored vehicle evacuation. The mechanized infantry and armored battalion S4 must constantly project needs to allow the infantry brigade S4 more time to react. Support packages may be required for the mechanized infantry or armored element attached to the light force. The preferred method of attachment is OPCON. This relationship permits the mechanized infantry or armored battalion to continue receiving support from its FSB. The support package may need to include fuel, heavy expanded-mobility tactical trucks (HEMTTs) and operators, HETs with drivers, tracked ambulances, and maintenance support teams (MSTs).
- g. **Command and Control.** The directing headquarters designates the command relationships within the light infantry and mechanized infantry and armored

forces. Generally, the preferred relationship is a light infantry battalion *attached* to a mechanized infantry or armored brigade. However, when a mechanized infantry and armored battalion is tasked to a light infantry brigade, the preferred relationship is *OPCON*. Either way, they exchange liaison officers. LOs plan jointly and coordinate the development of orders and overlays. Briefbacks are required at the brigade level of all combat, CS, and CSS units; this ensures timing, synchronization, and understanding of intent. Standard operational terms and symbols must be used; codes, recognition signals, and SOI are exchanged. The directing headquarters may need to set up a retransmission site to compensate for the shorter range of the light unit's communications equipment.

- h. **Nuclear, Biological, Chemical.** The light force lacks decontamination equipment and, therefore, is more limited in an NBC environment than the mechanized infantry and armored force. The mobility of the light force is affected by the soldiers' need to carry protective clothing in addition to their standard loads. When higher headquarters cannot provide transportation assets, planners should arrange for mechanized infantry and armored unit vehicles to help transport light force NBC equipment. Also, a mechanized infantry and armored battalion has expedient devices and water-hauling capabilities that can be used to offset light force shortfalls. Transporting these items with mechanized or armored assets reduces the load of light infantry units. Commanders must consider METT-T and must plan linkup points to ensure the light unit obtains these critical items as they need them.

## A-8. OFFENSIVE OPERATIONS

The fundamentals, principles, and concepts discussed in Chapter 3 apply to light infantry as well as to mechanized infantry and armored offensive operations. However, this combination can work many different ways in the offense. The following are some of the basic ones:

- a. **Mechanized Infantry and Armored Force Support, Light Force Assault.** With this method, tanks and BFVs attack by fire while the infantry assaults the objective. The vehicles tire from hull-defilade positions until the infantry masks their fires. This is the most effective method for BFVs; it may also be used with tanks when antitank weapons or obstacles prohibit them from moving to the objective.
- (1) This method may incorporate a feint to deceive the enemy as to the location of the main attack. If so, the mechanized infantry and armored force supporting attack by fire is timed to divert the enemy's attention from the light force's assault. The fires of the mechanized infantry and armored force may also cover the sound of the infantry's approach or breach. Close coordination between the mechanized infantry and armored commander and the light force commander is vital for effective fire control.

- (2) This method may vary when either the terrain or the disposition of the enemy limits the mechanized infantry and armored forces' ability to support the infantry's attack by fire. In this case, the mechanized infantry and armored force may be tasked to suppress or fix adjacent enemy positions, or to accomplish other tasks to isolate the objective area.
- b. **Simultaneous Assault.** With this method, light and mechanized infantry and armored forces advance together, and infantry and vehicles move at the same speed. The vehicles may advance rapidly for short distances, stop and provide overwatch, then move forward again when the infantry comes abreast. Tanks are best suited to assault under fire. Mechanized infantry vehicles may also be used in this manner, but only when the threat of antitank fires is small. If an antitank threat exists, infantry usually leads; the vehicles follow to provide fire support.
- (1) This method may be used when the enemy situation is vague, when the objective is large and consists of both open and restrictive terrain, or when visibility, fields of fire, and the movements of the mechanized infantry and armored force are restricted. These conditions exist in fog, at night, in towns, and in woods. The vehicles provide immediate close direct fires, and the infantry protects the vehicles from individual antitank measures.
  - (2) This method sometimes requires infantry to follow a safe distance behind the tanks for protection from frontal fires. This is true when the main enemy threat is small-arms fire. From behind the tanks, the infantry can protect the flanks and rear of the tanks from handheld antitank weapons.
  - (3) This method may require light and mechanized infantry and armored forces to advance together in operations that require long, fast moves. Infantrymen ride on the armored vehicles until they make contact with the enemy. Though this is a quick way to move, it exposes infantry to enemy fire, particularly to airburst munitions. Also, it interferes with the operation of BFVs and tanks.
- c. **Assault from Different Directions.** With this method, mechanized infantry and armored forces and light forces converge on the objective from different directions. BFVs, tanks, and light infantry advance by different routes and assault the objective at the same time. For this synchronization to succeed, the infantry elements must maneuver and close on their assault position under cover of darkness or poor weather. The synchronization of the assault provides surprise, increases fire effect, and maximizes shock action. Planning, disseminating, and rehearsing the coordination of direct-fire and indirect-fire measures are critical in this type of operation.
- (1) This method is effective when tanks are used and may be used when two conditions exist: First, terrain must be at least partly open and must be free from mines and other tank obstacles. Second, supporting fires and smoke must effectively neutralize enemy antitank weapons during the

brief period required for the tanks to move from their assault positions to the near edge of the objective.

- (2) This method requires that light and mechanized infantry and armored forces coordinate to provide effective fire control on the objective. When conditions prohibit the armored vehicles from advancing rapidly, infantry should accompany them to provide protection.

d. **Mechanized Infantry and Armored Force Support/Assault, Light Force Assault.** With this method, the mechanized infantry and armored force attacks by fire, then moves forward rapidly and joins the light forces for the assault. Once the light infantry has moved into an assault position, armored vehicles begin by suppressing the objective from hull-defilade positions. When the light infantry masks the vehicle fires or when the commander gives the signal, the mechanized infantry and armored force moves forward rapidly and joins the infantry in the final assault.

- (1) This method should only be used with tanks. It should only be used with other armored vehicles when little antitank threat exists. Armored vehicles that cannot assault with the infantry can be used to isolate the objective area; once the objective is secured, the armored vehicles support the consolidation of the objective. During the assault, the tanks may move with or slightly ahead of the infantry.
- (2) This method is used when the enemy has prepared obstacles on the mounted avenues of approach. The infantry seizes a foothold and secures multiple lanes through obstacles to allow the mechanized infantry and armored force access to the objective. This method exposes tanks to enemy fire for a shorter time than do the other three methods. With this method, tanks can move forward at their own speed. Also, enemy fire directed at the friendly tanks does not endanger the infantry. This may be the best method to use to give the infantry the chance to approach the objective undetected.
  - (a) With two different forces assaulting, actions within 300 meters of the objective are critical. In this area, the infantry is the most exposed to the largest number of well-sited weapons and intense direct and indirect fires. Therefore, enemy positions must themselves be subjected to a continuous, high-volume of direct and indirect fires. Enemy mortars must be targeted and attacked by indirect fire or CAS. Supporting fires must range the width and depth of the objective but, to avoid fratricide, must not be placed on the obstacles to be breached. Speed is critical, as is separation of infantry and armored vehicles in the breach lanes and on the objective.
  - (b) Time must be spent during rehearsals to coordinate actions on the objective to ensure a synchronized assault. These actions include supporting fires, breach markings, signals, and control measures. At the conclusion of actions on the objective, armored vehicles should move quickly to positions that facilitate consolidation.

## A-9. OFFENSIVE MISSIONS AND ROLES

The firepower, mobility, and shock effect of the mechanized infantry and armored force are integrated with the dispersed and synchronized attacks of the light forces during offensive operations. Tables A-1 and A-2 show missions and roles that the mechanized infantry and armored battalion, and the light infantry company, conduct in offensive operations.

<b>BATTALION TASK FORCE MISSION</b>	<b>ROLE OF LIGHT INFANTRY COMPANY</b>
Movement to contact	Clear and secure restrictive areas. Assault by air to fix or create weakness. Reconnoiter. Conduct a deception. Establish contact points for linkup.
Attack	Reconnoiter. Suppress antitank weapons. Conduct a deception. Breach obstacles. Suppress and destroy obstacles. Reduce strongpoint. Provide security. Assault by air to seize objectives. Seize and secure restrictive terrain. Create weaknesses in enemy defense. Obstruct enemy command, control, and communications capabilities. Attack by fire. Establish roadblocks.

**Table A-1. Mechanized Infantry and armored battalion, light infantry company, offense.**

LIGHT INFANTRY BRIGADE MISSION	ROLE OF BATTALION TF
Movement to contact	Overwatch likely enemy avenues of approach. Provide attack-by-fire force. Overwatch and help reduce obstacles. Defend a moving force. Provide a covering force, guard, or both. Provide a counterattack force.
Attack	Provide suppressive fires. Isolate the objective. Counterattack. Provide initial hasty defense during consolidation. Attack by fire. Exploit or reinforce success. Overwatch counterattack routes on objective. Conduct a deception. Help in assault breach. Provide a reserve or exploitation force. Support by fire. Provide a lead force. Provide mounted reconnaissance.

**Table A-2. Light infantry brigade, mechanized infantry and armored battalion or company, offense.**

## A-10. EXPLOITATION

Exploitation follows success in battle. The mechanized infantry and armored force is usually the most capable exploitation force. It takes full advantage of the enemy's disorganization by driving into the enemy's rear to destroy and defeat him. A tank-heavy force operating as a team may exploit the local defeat of an enemy force or the capture of an enemy position. The purpose of this type of operation is to prevent reconstitution of enemy defenses, to prevent enemy withdrawal, and to secure deep objectives. A common combination is the mechanized infantry and armored force battalion reinforced by an attached infantry company, engineers, and other supporting units. The infantry may be transported in armored vehicles or trucks or may ride on the tanks. Riding on tanks reduces road space, decreases supply problems, and keeps the members of the team together. Infantry leaders ride with the corresponding tank unit commanders. Depending on METT-T conditions, this may be the best way to move the team. However, firing a main gun or cannon at an unexpected enemy would probably injure passengers riding on top of the vehicle. Therefore, the commander must first weigh the likelihood of enemy contact against the need for speed.

## A-11. DEFENSIVE OPERATIONS

Light infantry and mechanized infantry and armored forces are well suited to conduct defensive operations. The mechanized infantry and armored force provides a concentration of antiarmor weapons and the capability to rapidly counterattack by fire or maneuver. The light force can occupy strongpoints, conduct spoiling attacks, and conduct stay-behind operations. The fundamentals, principles, and concepts discussed in Chapter 4 apply also to combined light and mechanized infantry and armored defensive operations. Techniques are as follows:

- a. **Mechanized Infantry and Armored Force Forward, Light Force in Depth.** With this method, the mechanized infantry and armored unit covers forward of a light unit's defense, masking the location of the light unit. While passing through the light unit's positions, mechanized infantry and armored units provide most of their own overwatch protection. Careful planning is required for battle handover to the light unit. Light unit direct-fire overwatch weapons are scarce that support from inside the battle handover line. To solve this problem, some mechanized infantry and armored force antiarmor assets can be provided to the light infantry. Usually, these assets are provided only at company level and above.
- b. **Light Force Forward, Mechanized Infantry and Armored Force in Depth.** With this method, the mechanized infantry and armored force assumes positions in depth behind the light unit's defense. The light unit's forward deployment shapes the battlefield for decisive action by the mechanized infantry and armored forces. The light unit leaves an avenue of approach into the mechanized infantry and armored unit's engagement area; at the same time, the light unit prevents the enemy from using restrictive terrain. If the enemy penetrates the light unit, the mechanized infantry and armored unit counterattacks, destroying or blocking the enemy until additional units can be repositioned to destroy him. To support this counterattack, the light unit identifies the location of the enemy's main effort, slows his advance, and destroys his command, control, and CS elements. The light unit can also guide the counterattacking force through restrictive terrain to surprise the enemy on his flank.
- c. **Light Force Terrain-Oriented, Mechanized Infantry and Armored Force Enemy-Oriented.** Terrain-oriented refers to area defense, and enemy-oriented refers to mobile defense. With this method, the entire force defends along the FEBA. The light force, whether used as a flanking or covering force or positioned in depth, emplaces its elements to best use restrictive terrain. The mechanized infantry and armored force keeps its freedom of maneuver. To protect the light unit, contact points between light and mechanized infantry and armored units should be in restrictive terrain. Also, a light unit may defend to hold terrain while the tanks and BFVs maneuver to destroy the enemy from the flanks or rear.

- d. **Strongpoint.** With this method, the light unit, along with additional assets, occupies a strongpoint. The enemy is then forced into the mechanized infantry and armored units' engagement area.
- e. **Stay-Behind Operations.** With this method, the light unit occupies hide positions well forward of the FEBA. As the enemy passes, the light forces attack the enemy's command, control, CS, or CSS elements. The mechanized infantry and armored force defends against enemy maneuver forces.

## A-12. DEFENSIVE MISSIONS AND ROLES

Tables A-3 and A-4 show the missions and roles of light and mechanized infantry and armored forces in defensive operations.

BATTALION TASK FORCE MISSION	ROLE OF LIGHT INFANTRY COMPANY
Defend	Block or fix likely dismounted approaches. Occupy positions in depth. Block mounted infiltration routes in restrictive terrain. Occupy strongpoints. Provide security. Conduct counterreconnaissance. Set up observation posts. Conduct ambushes. Provide antiarmor ambush teams. Conduct air assault to counter rear threat. Conduct spoiling attack raids and provide reaction forces to counter enemy reconnaissance. Conduct military operations on urbanized terrain (MOUT). Reconnoiter to identify engagement areas and locations of friendly obstacle positions. Defend obstacles against enemy reconnaissance units. Create weaknesses in the enemy attack.

**Table A-3. Mechanized infantry and armored battalion, light infantry company, defense.**

LIGHT INFANTRY BRIGADE MISSION	ROLE OF BATTALION TF
Defend	Defend Counterattack to restore integrity of the defense. Cover obstacles with long-range direct fire. Deceive enemy about main defense. Provide a covering or security force. Provide a reserve or exploitation force. Conduct counterreconnaissance.

**Table A-4. Light Infantry brigade, mechanized Infantry and armored battalion or company, defense.**

### A-13. RETROGRADE OPERATIONS

Retrograde operations include delays and withdrawals, which help gain time and avoid decisive action. Mechanized infantry and armored forces are employed against the enemy forces and avenues of approach that most threaten the operation. To move to subsequent positions, light forces need additional transportation assets, including helicopters. Basic movement techniques include maneuver and a reverse bounding overwatch. Mechanized infantry and armored units with small, light force units, mounted along with infantry reconnaissance platoons and antitank elements, move to subsequent delay positions under the cover of mutually supporting forces.

## A-14. RETROGRADE MISSIONS AND ROLES

Tables A-5 and A-6 list missions and roles for retrograde operations.

BATTALION TASK FORCE MISSION	ROLE OF LIGHT INFANTRY COMPANY
Delay	Delay along likely infantry avenues of approach (need mobility assets to move quickly). Reconnoiter and prepare delay routes. Reinforce at subsequent delay positions. Use limited counterattacks to aid in disengagement. Help with obstacles planned and executed in depth. Occupy stay-behind positions.
Withdrawal	Establish in-depth positions and obstacles. Provide an air assault to deceive the enemy, cause him to pause in his maneuver, or both.

**Table A-5. Mechanized Infantry and armored battalion, light infantry company, retrograde.**

LIGHT INFANTRY BRIGADE MISSION	ROLE OF BATTALION TF
Delay	Overwatch. Counterattack by fire. Deceive the enemy. Reinforce. Reposition rapidly to prevent a bypass. Reserve.
Withdrawal	Deceive the enemy. Fix the enemy attack. Provide a detachment left in contact (DLIC). Provide a rear guard. Occupy in-depth positions. Reserve.

**Table A-6. Light infantry brigade, mechanized infantry and armored battalion, retrograde.**

### Section III. INTEGRATION AND SYNCHRONIZATION OF SPECIAL OPERATIONS FORCES

Special operations forces (SOF) frequently operate along with conventional forces, preceding them into the area of operations. Contact between them occurs only for the purpose of extracting the SOF or passing responsibility.

#### A-15. SPECIAL OPERATIONS COMMAND AND CONTROL ELEMENT

The SOF report to a special operations command and control element (SOCCE). The main task of the SOCCE is to synchronize, rather than integrate SOF with conventional forces. This is crucial in prolonged contact with the enemy.

- a. **Level of Authority and Responsibility.** The SOCCE's level of authority and responsibility varies. For example, when directed, it controls SOF operational elements during specific missions such as linkups. If SOCCE's mission exceeds its organic capabilities, it may be augmented by other assets assigned to the Army special operations task force (ARSOTF).
- b. **Operational Level.** The level at which a SOCCE operates also varies. In times of war, it normally operates at corps level or above. During contingency operations, divisions or independently operating brigades may be provided with a SOCCE. However, when SOF and conventional forces operate near each other, the SOCCE may work down to divisional brigade level, with smaller liaison teams at battalion level.
- c. **Support Requests.** The conventional force commander must request a SOCCE as soon as he identifies the need to synchronize or physically integrate SOF. The joint force commander coordinates the deployment of the SOCCE.
- d. **Linkup Procedures.** When SOF are to operate in the task force's area of operations or interest (AO or AI), the SOF headquarters controlling SOF forces exchange liaison officers with the task force.
- e. **Functions.** The SOCCE performs the following functions:
  - (1) Establishes a cell at the supported unit's CP and operates the cell continuously.
  - (2) Advises the *supported* conventional force commander on employment, missions, terrain management, current situation, capabilities, and limitations of the *supporting* SOF units. Participates in the *supported* unit's development of the estimate of the situation and concept of operations.
  - (3) Advises the *supporting* SOF commander of the *supported* conventional force commander's situation, intentions, and requirements.

- (4) Provides required communication links. However, elements attached to a SOCCE or Ranger liaison team must provide or coordinate their own secure communications.
- (5) Synchronizes special operations with conventional force operations and intelligence requirements. Pays special attention to doing so in such a way as to avoid fratricide.
- (6) Coordinates conventional force *support* for the special operations.
- (7) Receives SOF operational, intelligence, and target acquisition reports from deployed SOF elements and provides them to the conventional force commander and staff.
- (8) When linkup becomes imminent, assists the staff of the conventional force in planning the linkup.
- (9) Provides SOF locations to the FSE and brigade operations section through personal coordination, overlays, and other friendly order-of-battle data.
- (10) Requests appropriate restrictive FSC measures and provides windows for the times when these measures are to be effective. Ensures that FSE dissemination of these measures does not violate OPSEC.

## **A-16. EMPLOYMENT OF SPECIAL OPERATIONS FORCES**

The SOF may provide the following information and aid to the mechanized infantry and armored forces:

- Enemy movement patterns within an area of operations.
- Cultural background information.
- Communication with the indigenous population.
- Communication with other US agencies within the area of operations.
- Civil affairs guidance.
- Limited PSYOP support.

## **A-17. MECHANIZED INFANTRY BATTALION TASKS**

Commanders may task mechanized infantry battalions to perform the following when operating with SOF:

- a. Provide extra combat power to an SOF-supported indigenous combat force or to a host nation force during counterinsurgency operations.
- b. Provide a reaction force or reinforcements to SOF during direct action or special reconnaissance operations.
- c. Link up with SOF and relieve them in place (Chapter 6).

- d. Deny enemy access to or reinforcements of areas where SOF are operating.
- e. Provide support to civil affairs and PSYOP personnel.

#### **Section IV. MILITARY OPERATIONS ON URBANIZED TERRAIN**

Towns or other urban areas are considered restrictive terrain, so close teamwork between mechanized infantry and armored forces and light infantry forces is critical. The battalion commander and S3, when developing the scheme of maneuver, should consider whether the SOF are working in the same area with conventional forces. Company teams may be used to encircle an enemy force operating in a town, to penetrate the enemy's outer defenses, or to fight house-to-house within the town (MOUT). (FM 90-10-1 provides more information.)

#### **A-18. RESTRICTIONS ON ARMORED VEHICLES**

The effectiveness of armored vehicles that operate inside the built-up area is degraded; the vehicles are vulnerable to enemy ambush. Armor protection is offset by the close-range of engagement. The ability of armored vehicles to acquire targets, the effectiveness of their long-range fires, their speed, and their mobility are restricted on urbanized terrain. Also, handheld antitank weapons or explosives employed from the roofs or upper floors of buildings can easily penetrate the top of armored vehicles.

#### **A-19. ROLE OF INFANTRY**

Operations conducted on urbanized terrain are fought mainly with infantry. Though armored vehicles can be effective when used as mobile fire support assets, their survival requires close infantry support. As a result, the armored force is usually task-organized into infantry-heavy company teams. Mechanized infantry and armored sections in a MOUT environment are also commonly task-organized to an infantry platoon.

#### **A-20. LIGHT AND MECHANIZED INFANTRY AND ARMORED OPERATIONS**

Commanders plan light infantry battalion, mechanized infantry and armored company operations the same for a MOUT environment as for any other terrain. If possible, the mechanized infantry and armored force is employed where it has the greatest potential for offensive maneuver. In some situations, tanks and BFs may be used exclusively around the perimeter of the town. They

can operate outside a small town or village and still provide adequate fire support to the infantry.

## A-21. OFFENSIVE CONSIDERATIONS

The task force conducts a light infantry battalion, mechanized infantry and armored company attack by isolating the area, seizing a foothold, and clearing an area.

- a. The mechanized infantry and armored force can help with each of these steps. Its offensive role in MOUT is as follows:
  - (1) **To isolate the area.** The area to be isolated may be an entire village or small town, or it may be part of a larger built-up area. The mechanized infantry and armored force is usually effective during this isolation phase. It can operate outside the town, using its long-range fires, speed, and mobility. A defender often initially positions much of his force outside the town (to disrupt an attack, limit reconnaissance, and prevent bypass). However, the mechanized infantry and armored force may prevent these enemy elements from withdrawing back into the town. For the isolation plan to work, it must support the next step seizure of a foothold. After the objective has been isolated, task organization may be changed to provide armored vehicle support to each infantry company within the town.
  - (2) **To seize a foothold.** The mechanized infantry and armored force can also support this phase of the operation. It uses the sights and thermal viewers of its armored vehicles to conduct an initial long-range reconnaissance. In this way, the mechanized infantry and armored force may provide the best means for locating enemy positions, vehicles, or both during limited visibility. Once the enemy's weak points have been located, the armored vehicles can provide fire support for infantry assaulting to secure the foothold. The infantry conducts their assault like any other light and mechanized infantry and armored assault. As an option, the mechanized infantry and armored force (or a part of it) may divert the enemy's attention away from the point of the main attack. Vehicles with an on-board smoke capability can provide concealment for the infantry assault.
  - (3) **To clear the objective.** The armored vehicles continue, once the infantry has seized a foothold, to provide close supporting fires while the infantry clears each building. Because of the danger of ambush, tanks do not move ahead of the infantry but provide fire support from positions already cleared. In fact, armored vehicles may be able to continue providing fire support without entering the town. If any armored vehicles do operate within the town, they must be closely controlled by the infantry leader. Target identification and fire control measures change rapidly as clearing progresses. Armored vehicles provide suppressive fires

to enable the infantry to establish a foothold in each building. Then the armored vehicles isolate the building by engaging known or suspected enemy locations. Once the infantry is inside the building, the armored vehicles continue to suppress other floors within the building or to shift their fires to adjacent buildings.

- (a) Visual signals are the most effective and reliable means of communication between the infantry force and the armored vehicles. Targets can be identified with tracer fire, smoke rounds fired from grenade launchers, smoke grenades, or arm-and-hand signals. Specific actions initiating, lifting, or shifting fires; moving forward to the next position; or providing smoke obscuration can be directed in a similar manner.
  - (b) Communications between the armored vehicles and the infantry leader may be by FM radio or landline. However, the terrain may interfere with radio communications. Landlines should be used only when the leader can operate while walking behind the vehicle. To use landlines, soldiers must run the wire to the inside of the vehicle through the hatch to the binding post on the AM-1780 or to the binding post terminals on the right rear deck of the M2/M3. The leader then uses TA-ls to relay fire control instructions from the assaulting infantry force to the tank commander.
- b. Specific mechanized infantry and armored force actions include the following:
- (1) Firing into the upper stories of buildings to drive the enemy to the basement, where the infantry can trap and destroy him.
  - (2) Suppressing and destroying enemy weapons and personnel, allowing infantry to maneuver.
  - (3) Providing protection for other antitank systems.
  - (4) Creating openings in walls and reducing barricades with cannon fire, giving soldiers access to buildings.

## A-22. DEFENSIVE CONSIDERATIONS

Mechanized infantry and armored forces defending in a MOUT environment have the same weaknesses as attacking forces. They also require the close support of infantry forces. Mechanized infantry and armored forces can support the infantry defense of an urban area by defending or delaying forward of the town, fighting a mobile battle around the town, or defending within the built-up area along with the infantry.

- a. **Fighting Forward of the Built-Up Area.** A mechanized infantry and armored force can either delay the enemy, disrupt his attack, or prevent him from conducting a timely reconnaissance of the defenses within the town. They can delay the enemy while defenses within the town are completed. After

this, they may withdraw into defensive positions that are either integrated into the MOUT defense or positioned outside the town to prevent the enemy from enveloping or bypassing the town. A mechanized infantry and armored force fighting outside the town requires infantry augmentation.

- b. **Fighting on the Perimeter of the Built-Up Area.** A mechanized infantry and armored force fighting on the perimeter of a built-up area may find and use terrain suitable to its capabilities. From the perimeter, this force can also prevent the enemy force from isolating all or part of the town. Conducting spoiling attacks or counterattacking against enemy forces may also be easier. Before conducting a counterattack, the mechanized infantry and armored force may occupy a concealed location outside the built-up area to avoid detection. It can produce decisive results if it prevents the enemy from seizing a foothold or if it times the counterattack for when part of the enemy's force starts clearing into the built-up area.
- c. **Fighting Within the Built-Up Area.** A mechanized infantry and armored force may be employed as fire support for infantry positions or strongpoints or, where the terrain allows, as a mobile defense. Defenses may be shaped to draw the enemy into position where part of his forces can be destroyed or cut off by a mobile mechanized infantry and armored force counterattack. Depending on the type of construction in the built-up area, armored vehicles may reduce buildings to rubble or may burn them to clear routes for movement. When used for direct-fire support of infantry positions or in highly restrictive, armored vehicles operate most often in sections. For short periods, they may operate as individual vehicles.