CHAPTER 5
DEFENSIVE OPERATIONS

"[Captain] Liebschev prepared his defenses with extraordinary thoroughness, choosing only to defend the northern half of the town. The southern half was turned into a nightmare of trapped and mined houses some of which were blown into the streets to form road blocks and others were blown up to clear arcs of fire. All his strong points were linked by what is best described as 'mouse holing' from house to house. All approaches to the defended sector were either heavily mined or under concealed enfilade fire. The main approach into the town square was left attractively unobstructed....The 2nd Canadian Brigade was given the task of clearing a way through the town and was forced to fight its way from house to house on not more than a 250-yard front. Every building, when taken, had to be occupied to stop the Germans infiltrating back into it again after the leading troops had passed on. The fighting was at such close quarters that artillery support was impossible..."

Extracted from The Battle for Italy
By General W. G. F. Jackson

Section I. DEFENSIVE CONSIDERATIONS

Full spectrum operations require that units be prepared to defend in urban areas. Before making a decision to defend urban areas, commanders at all levels should consider the issues discussed in this chapter.

5-1. REASONS FOR DEFENDING URBAN AREAS

The worldwide increase in urban sprawl has made it virtually impossible for forces conducting operations to avoid cities and towns. For various reasons, these areas must be defended.

a. Certain urban areas contain strategic industrial, transportation, or economic complexes that must be defended. Capitals and cultural centers may be defended for strictly psychological or national morale purposes even when they do not offer a tactical advantage to the defender. Because of the sprawl of such areas, significant combat power is required for their defense. The decision to defend these complexes is made by political authorities or the theater commander.

b. The defenders' need to shift and concentrate combat power, and to move large amounts of supplies over a wide battle area may require retention of vital transportation centers. Since most transportation centers serve large areas, the commander must defend the urban area to control such centers.

c. Most avenues of approach are straddled by small towns every few kilometers and must be controlled by defending forces. These areas can be used as battle positions or strongpoints. Blocked streets covered by mortar and or artillery fire can canalize attacking armor into mined areas or zones covered by antiarmor fire. If an attacker tries to bypass an urban area, he may encounter an array of tank-killing weapons. To clear such

an area, the attacker must sacrifice speed and momentum, and expend many resources. A city or town can easily become a major obstacle.

d. A well-trained force defending an urban area can inflict major losses on a numerically superior attacker. The defender can conserve the bulk of his combat power so it is available for use in open terrain. The defenders remaining in urban areas perform an economy-of-force role.

e. Aerial photography, imagery, and sensory devices cannot detect forces deployed in cities. Well-emplaced CPs, reserves, CSS complexes, and combat forces are hard to detect.

5-2. REASONS FOR NOT DEFENDING URBAN AREAS

Reasons for not defending urban areas include the following.

a. The location of the urban area does not support the overall defensive plan. If the urban area is too far forward or back in a unit's defensive sector, is isolated, or is not astride an enemy's expected avenue of approach, the commander may choose not to defend it.

b. Nearby terrain allows the enemy to bypass on covered or concealed routes. Some urban areas, mainly smaller ones, are bypassed by main road and highway systems.

c. Structures within the urban area do not adequately protect the defenders. Extensive areas of lightly built or flammable structures offer little protection. Urban areas near flammable or hazardous industrial areas, such as refineries or chemical plants, should not be defended because of increased danger of fire to the defenders.

d. Dominating terrain is close to the urban area. If the urban area can be dominated by an enemy force occupying this terrain, the commander may choose to defend from there rather than the urban area. This applies mainly to small urban areas such as a village.

e. Better fields of fire exist outside the urban area. The commander may choose to base all or part of his defense on long-range fields of fire outside an urban area. This applies mainly to armor-heavy forces defending sectors with multiple, small, urban areas surrounded by open terrain, such as agricultural areas with villages.

f. The urban area has cultural, religious, or historical significance. The area may have been declared an "open city" in which case, by international law, it is demilitarized and must be neither defended nor attacked. The attacking force must assume civil administrative control and treat the civilians as noncombatants in an occupied country. The defender must immediately evacuate and cannot arm the civilian population. A city can be declared open only before it is attacked. The presence of large numbers of noncombatants, hospitals, or wounded personnel may also affect the commander's decision not to defend an urban area.

5-3. GENERAL CONSIDERATIONS

The basic fundamentals of defense do not change in an urban environment. In urban combat, the defender does possess key advantages over the attacker. The defender can shape the battlefield by maximizing the natural restrictions and obstacles found in the restrictive terrain of the urban environment. US forces may not wish to inflict collateral damage on the urban terrain they are defending but the very nature of conducting an urban defense may lead to high-intensity conditions on the urban battlefield and to

extensive collateral damage. Typically, US forces should not expect enemy forces attacking in urban terrain to be bound by restrictive ROE and should therefore not expect to accrue any of the advantages that a defender might have if the attacker is restricted in the application of force.

Section II. MISSION, ENEMY, TERRAIN, TROOPS AND TIME AVAILABLE, CIVIL CONSIDERATIONS

The defense of an urban area should be organized around key terrain features, buildings, and areas that preserve the integrity of the defense and provide the defender ease of movement. The defender must organize and plan his defense considering factors of mission, enemy, terrain, troops and time available, and civil considerations (METT-TC). Procedures and principles for planning and organizing the defense of an urban area are the same as for other defensive operations. In developing a defensive plan, the defender considers METT-TC factors with emphasis on fire support, preparation time, work priorities, and control measures. Planning for the defense of an urban area must be detailed and centralized. As in the offense, execution is decentralized as the battle develops, and the enemy forces assault the buildings and rooms. Therefore, it is imperative that all leaders understand the mission end-state and the commanders' intent, two levels up.

5-4. MISSION

Commanders and leaders must receive, analyze, and understand the mission before they begin planning. They may receive the mission as a FRAGO or as a formal OPORD, and must analyze all specified and implied tasks. Depending on mission requirements, an infantry unit at brigade and battalion level must be prepared to defend as part of a larger force or independently; companies and below normally defend as part of a larger force. Mission analysis for defense in urban terrain will essentially be the same as for other defensive operations. Detailed IPB is essential and must include building construction; routes, including underground systems; civilian communications; and utilities. (See Appendix G.) A hasty defense may be conducted in any of the defensive situations described in this chapter, immediately after offensive operations, or when a higher state of security is warranted during stability operations or support operations. The major difference between a hasty defense and a deliberate defense is in the amount of time for preparation. Similar to offensive operations, units must be prepared to transition to offensive or stability and support missions, and back.

5-5. ENEMY

Units must also analyze the type of enemy force they may encounter. If the attacker is mostly dismounted infantry, the greatest danger is allowing him to gain a foothold. If the attacker is mostly armor or mounted motorized infantry, the greatest danger is that he will mass direct fire and destroy the defender's positions. If the threat is primarily asymmetrical, force protection measures must be enhanced. (See Chapter 2 for detailed discussion of urban threat evaluation.)

5-6. TERRAIN AND WEATHER

Specific defensive considerations are discussed in this paragraph. Terrain in urban areas is three-dimensional; the defender must make use of the entire battle space:

- Surface (ground level, for example streets and parks).
- Supersurface (buildings, both interior and exterior).
- Subterranean (subways and sewers).

Analysis of all man-made and natural terrain features is critical when planning to defend in urban terrain. The type of urban area in which it will be operating affects the unit's defensive plan.

a. **Observation and Fields of Fire.** Although concealment and cover will be plentiful, observation will be limited. Attacking forces generally advance by crossing streets and open areas between buildings where they are exposed to fires from concealed positions.

(1) ***Weapons and Range.*** Units must position weapons to obtain maximum effect and mutual supporting fire. This allows for long-range engagements out to the maximum effective ranges. FOs should be well above street level to adjust fires on the enemy at maximum range. Observed fire will be very difficult in densely constructed areas. Fires and FPFs should be preplanned and, if possible and ROE permit, preregistered on the most likely approaches to allow for their rapid shifting to threatened areas.

(2) ***Limited Visibility.*** Units can expect the attacker to use limited visibility conditions to conduct necessary operations to sustain or gain daylight momentum. The following should be considered:

- Unoccupied areas that can be observed and covered by fire during daylight may have to be occupied or patrolled at night.
- Remote sensors and early warning devices should be employed in dead space and on avenues of approach.
- The artificial illumination available in urban terrain should be considered for use during the defense.

Responding to night probes with direct fire weapons should be avoided, as this gives away the location of the positions.

b. **Cover and Concealment.** Battle positions should be prepared using the protective cover of walls, floors, and ceilings. Units will continue to improve positions using materials on hand. Units prepare the terrain for movement between positions and can reduce exposure by—

- Using prepared breaches through buildings.
- Moving through reconnoitered and marked subterranean systems.
- Using trenches.
- Using the concealment offered by smoke and darkness to cross open areas.

c. **Obstacles.** An urban area is by its very nature an obstacle and or an obstruction. The series of man-made structures inherent in urban terrain canalizes and impedes an attack.

d. **Key Terrain.** Key terrain is any place where seizure, retention, or control affords a marked advantage to either enemy or friendly forces. Primary examples of key terrain are ports, airfields, bridges over canals or rivers, building complexes, or parks. Urban areas are unusual in that the population of the area itself may be considered key terrain. The identification of key terrain allows the defender to select his defensive positions and

assists in determining the enemy's objectives. A special kind of key terrain is the nodes that are found in urban areas. These include governmental centers, power distribution facilities, and communication hubs. These nodes may have to be protected by the defender from asymmetrical as well as conventional threats.

(1) ***Villages.*** Villages are often on choke points in valleys, dominating the only high-speed avenue of approach through the terrain (Figure 5-1). If the buildings in such a village are well constructed and provide good protection against both direct and indirect fires, a formidable defense can be mounted by placing a company in the town, while controlling close and dominating terrain with other battalion task force elements.

Figure 5-1. Village.

(2) ***Strip Areas.*** Strip areas consist of houses, stores, and factories and are built along roads or down valleys between towns and villages (Figure 5-2). They afford the defender the same advantages as villages. If visibility is good and enough effective fields of fire are available, a unit acting as a security force need occupy only a few strong positions spread out within the strip. This will deceive the enemy, when engaged at long ranges, into thinking the strip is an extensive defensive line. Strip areas often afford covered avenues of withdrawal to the flanks once the attacking force is deployed and before the security force becomes decisively engaged.

Figure 5-2. Strip area.

(3) ***Towns and Small Cities.*** Small forces can gain an advantage in combat power when defending a small city or town (Figure 5-3) that is a choke point if it places tanks, BFVs, TOWs, Javelins, and Dragons on positions dominating critical approaches, when facing a predominantly armored enemy. To deny the enemy the ability to bypass the town or city, the defending force must control key terrain and coordinate with adjacent forces. Reserve forces should be placed where they can quickly reinforce critical areas. Obstacles and minefields assist in slowing and canalizing the attacker.

Figure 5-3. Towns and small cities.

(4) ***Large Cities.*** In large cities, units must consider that the terrain is restrictive due to large buildings that are normally close together (Figure 5-4). This situation requires a higher density of troops and smaller defensive sectors than in natural open terrain. Units occupy defensive frontages about one-third the size of those in open areas.

Figure 5-4. Large cities.

e. **Avenues of Approach.** The defender must not only consider the surface (streets, boulevards, parks) avenues of approach into and out of the urban area, but also supersurface (interior and exterior of buildings) and subterranean avenues of approach. The defender normally has the advantage. He knows the urban area and can move rapidly from position to position through buildings and underground passages. Control of these above- and below-ground avenues of approach becomes more critical when the defense of nodes must be oriented against terrorism and sabotage.

5-7. TIME AVAILABLE

Units must organize and establish priorities of work, depending upon the time available. Many tasks can be accomplished simultaneously, but priorities for preparation should be in accordance with the commander's order. A sample priority of work sequence follows:

- Establish security and communications.
- Assign sectors of responsibility and final protective fires.
- Clear fields of fire.
- Select and prepare initial fighting positions.
- Establish and mark routes between positions.
- Emplace obstacles and mines.
- Improve fighting positions.

5-8. TROOPS AVAILABLE

The defensive employment of troops in urban areas is governed by all METT-TC factors and on the ROE. The defender has a terrain advantage and can resist the attacker with much smaller forces.

5-9. CIVIL CONSIDERATIONS

See Chapter 13, Section III for more information on civil considerations.

Section III. DEFENSIVE FRAMEWORK AND ORGANIZATION

This section discusses the defensive framework and organization used during the planning and execution of defensive UO.

5-10. DEFENSIVE FRAMEWORK

Similar to offensive operations, the brigade will be the primary headquarters that will be task-organized to conduct defensive urban operations. The brigade can conduct the full range of defensive operations within a single urban area or in an AO that contains several small towns and cities using the elements shown in the defensive urban operational framework in Figure 5-5, page 5-8. The elements are similar to those in offensive operations in that the brigade commander attempts to set the conditions for tactical success. Isolation of the brigade by the enemy is avoided through security operations; defensive missions are assigned subordinate task forces in order to achieve the commander's intent and desired end-state; and then the brigade transitions to stability and or support operations. During urban defensive operations, the transition to stability and support operations may not be clear to the soldiers conducting the operations. Commanders must offset this tendency with clear mission type orders and updated ROE.

Again, as in offensive operations, the elements are not phases. They may occur simultaneously or sequentially. Well planned and executed defensive operations will have all four elements present. During defensive operations the brigade commander seeks to:

- Avoid being isolated by the enemy.
- Defend only the decisive terrain, institutions, or infrastructure.
- Conduct counter or spoiling attacks to retain the initiative.

Battalion TFs and below conducts defensive operations by conducting counterreconnaissance missions and patrols (shaping/avoiding isolation); assigning battle positions or sectors to subordinate units (dominating); and consolidating/reorganizing and preparing for follow-on missions (transitioning).

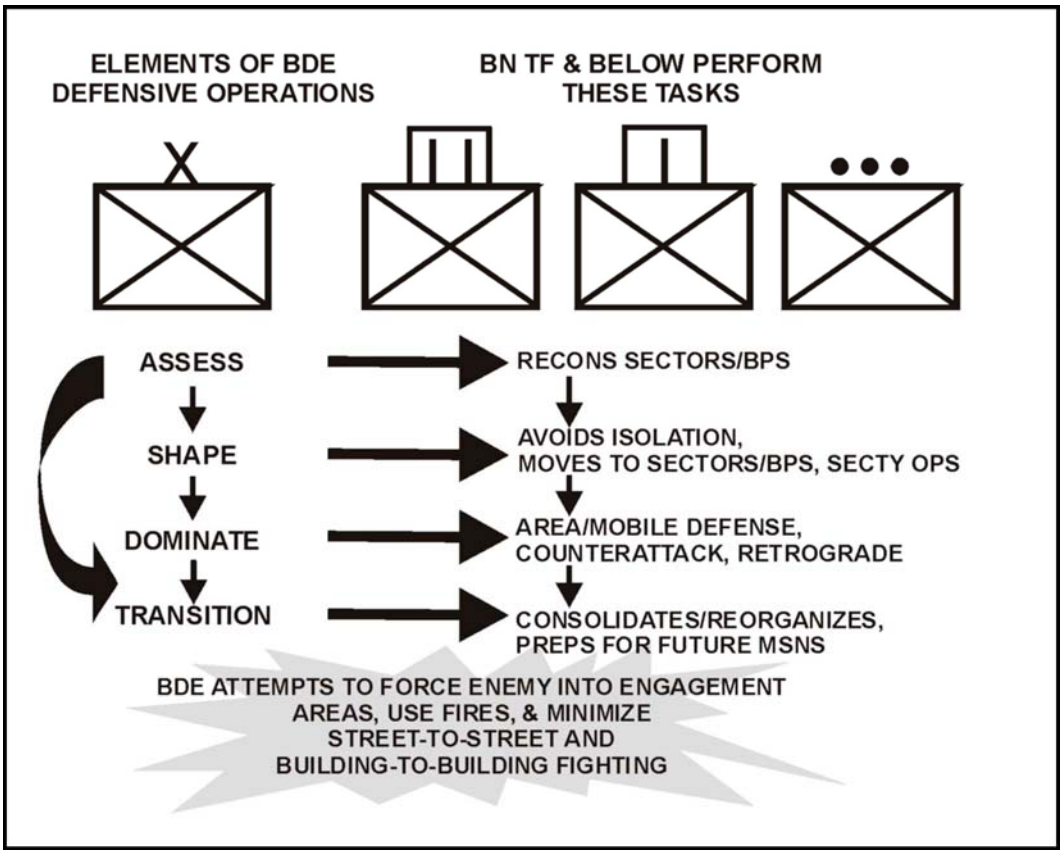

Figure 5-5. Defensive urban operational framework.

5-11. COMMAND AND CONTROL

In all defensive situations, commanders should position themselves well forward so that they can control the action. In urban terrain, this is even more critical due to obstacles, poor visibility, difficulty in communication, and intense fighting. Other key leaders may be placed in positions to report to the commander and to make critical, time-sensitive decisions.

a. **Graphic Control Measures.** The use of graphic control measures to synchronize actions become even more important to mission accomplishment in an urban

environment (Figure 5-6). Phase lines can be used to report the enemy's location or to control the advance of counterattacking units. Principal streets, rivers, and railroad lines are suitable phase lines, which should be clearly and uniformly marked on the near or far side of the street or open area. Checkpoints aid in reporting locations and controlling movement. Contact points are used to designate specific points where units make physical contact. Target reference points (TRPs) can facilitate fire control. Many of these points can be designated street intersections. These and other control measures ensure coordination throughout the chain of command.

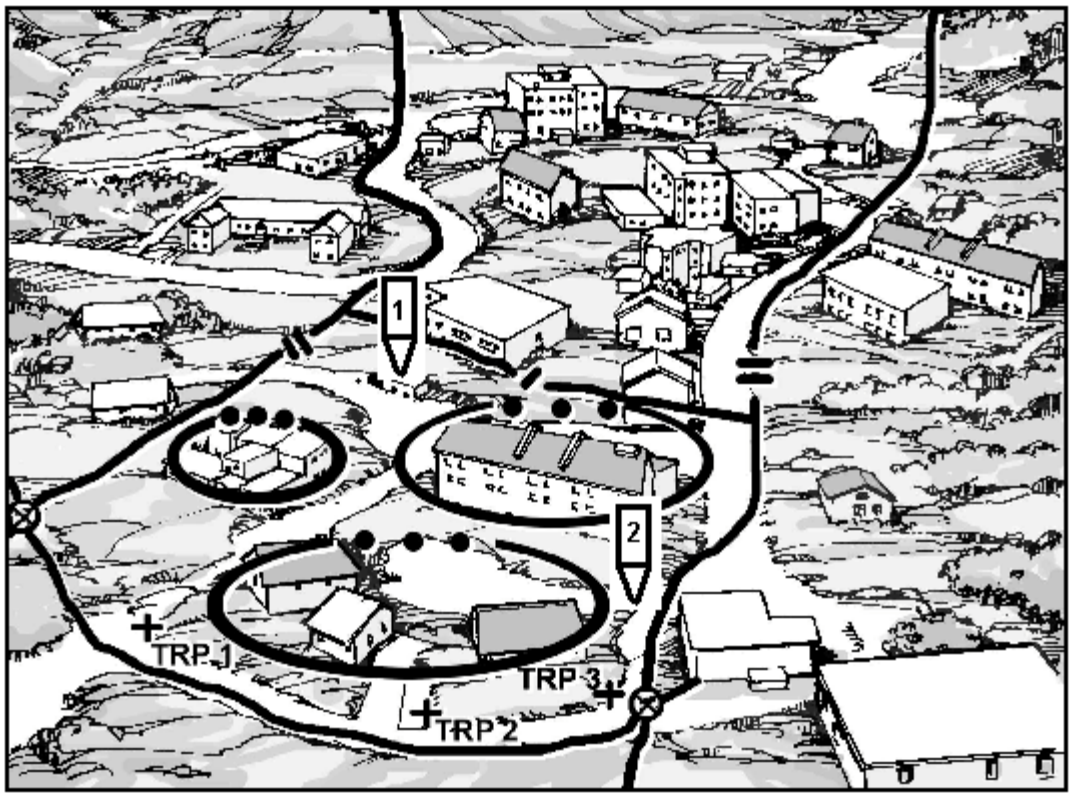

Figure 5-6. Graphic control measures.

b. **Command Post Facilities.** Command post (CP) facilities should be located underground, if possible, or in solidly constructed buildings. Their vulnerability requires all-round security. Since each facility may have to secure itself, it should be near the reserve for added security. When collocated with another unit, command post facilities may not need to provide their own security. Also, a simplified organization for command posts is required for ease of movement. Since rubble often hinders movement of tracked and wheeled vehicles, the CP must be prepared to backpack communications and other needed equipment for operations. Identification of alternate CP locations and routes to them must also be accomplished.

c. **Communications Restrictions.** Radio communications is initially the primary means of communication for controlling the defense of an urban area and for enforcing security. Structures and a high concentration of electrical power lines may degrade radio communication in urban areas. Wire is emplaced and used as the primary means of

communications as time permits. However, wire can be compromised if interdicted by the enemy. Messengers can be used as another means of communication. Visual signals may also be used but are often not effective because of the screening effects of buildings and walls. Signals must be planned, widely disseminated, and understood by all assigned and attached units. Increased battle noise makes the effective use of sound signals difficult.

5-12. ORGANIZATION AND PREPARATION OF THE DEFENSE

The defensive organization described in this paragraph will likely be used against a conventional enemy force that may threaten US forces with mechanized and dismounted Infantry supported by other combined arms. This defensive organization may also occur in a brigade area of operation (AO) where there are multiple threats. For example, one part of the AO may require linear features; other parts may require the use of other defensive techniques, such as a perimeter defense, against different types of threats in the same brigade AO. METT-TC factors and the ROE determine how units plan, prepare, and execute the defense. The defense is organized into three areas—the security force area, main battle area, and rear area (Figure 5-7). Units defending in urban areas may have missions in any one of these areas, depending on the nature of the operation. Infantry units are well suited to conduct defensive operations in close urban terrain where engagement ranges will be short, where there is abundant cover and concealment, and where the enemy's assault must be repelled.

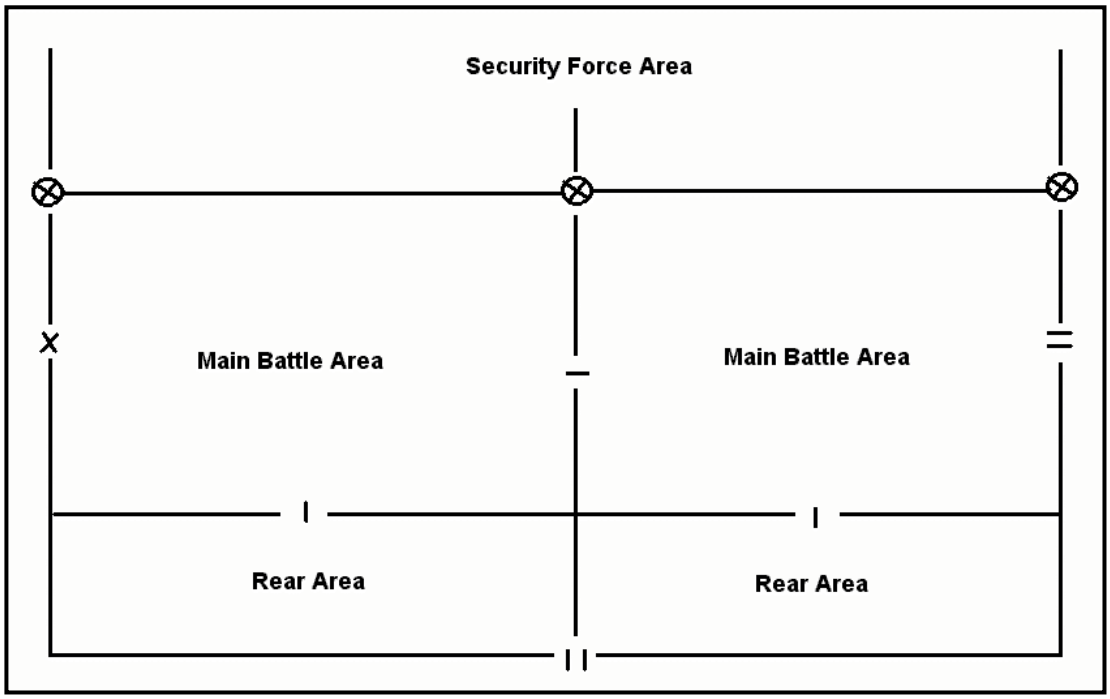

Figure 5-7. Organization of the defense.

a. **Patterns of Defense.** Of the two patterns of defense, area and mobile, the area defense will probably be the pattern most used since many of the reasons for defending

on urban terrain are focused on retaining terrain. The mobile defense pattern is more focused on the enemy and the commander may decide to use it based on his estimate of the situation. Many defenses may include a combination of both. In large urban areas, the concept of defensive operations may be mobile and exploit depth, with the defender concentrating on moving forces from key terrain features or buildings to other similar features. The defender must seek to disrupt the enemy throughout all phases of battle.

b. **General Concept of the Defense.** Planning of the defense must be detailed and centralized while execution is decentralized. In an urban area, the defender must take advantage of inherent cover and concealment afforded by the urban terrain. He must also consider restrictions to the attacker's ability to maneuver and observe. By using the terrain and fighting from well-prepared and mutually supporting positions, a defending force can inflict heavy losses on, delay, block, or fix a much larger attacking force. The defense of an urban area should be organized around key terrain features, buildings, and areas that preserve the integrity of the defense and that provide the defender ease of movement. The defender must organize and plan his defense by considering obstacles, avenues of approach, key terrain, observation and fields of fire, cover and concealment, (OCOKA) and the considerations in this paragraph. Detailed knowledge of the terrain by the defender allows him to force an attacker to expend exorbitant amounts of time, supplies, equipment, and manpower.

(1) ***Reconnaissance.*** To obtain the detailed knowledge that they need, the commanders and staffs need to conduct a reconnaissance of the defensive area. The amount of time spent and the level of detail obtained will vary greatly between a deliberate defense and a hasty defense. The defender must identify the following:

- Positions that enable him to place suppressive fires on the enemy.
- Covered and concealed routes for friendly elements to move between positions (subways and sewers).
- Structures that dominate large areas.
- Areas such as parks, boulevards, rivers, highways, and railroads where antiarmor weapons have fields of fire.
- Firing positions for mortars.
- Command locations that offer cover, concealment, and ease of command and control.
- Protected storage areas for supplies.

(2) ***Security Operations.*** The defensive battle normally begins with a combined arms force conducting security operations well forward of the main body. Operations consist of security, reconnaissance, and counterreconnaissance tasks. Counterreconnaissance missions to support these operations employ ambushes, mines, obstacles, deception, security patrols, OPs, indirect fires, camouflage, demonstrations, and other measures to destroy or deceive the enemy's reconnaissance elements. Again, urban areas are well suited for infantry counterreconnaissance operations because of the abundance of cover and concealment that permits infantry to move by stealth.

c. **Main Battle Area**. The decisive battle is usually fought in the main battle area (MBA). Depending on the threat, units can deploy on the forward edges of the urban area or in battle positions in depth. In either case, the defense is made stronger by including forces that are defending on close terrain or on the flanks into the defensive scheme.

(1) ***Size of Battle Positions.*** The size and location of battle positions within the area of operations depends mainly on the type of enemy encountered and the ability to move between positions to block threatened areas. It may be desirable to place small antiarmor elements, secured by infantry, on the forward edges while the main defense is deployed in depth.

(2) ***Considerations.*** Defensive positions on the forward edge of a city or town should:

- Provide early warning of the enemy's advance.
- Engage the enemy at long range.
- Deceive the enemy as to the true location of the defense.

(3) ***Sectors.*** Depending on the factors of METT-TC, units may also assign sectors to defend instead of battle positions. In certain instances, the units may employ both. Sectors would normally be assigned when blocks and streets provide a grid type pattern and boundaries can be clearly delineated. (See FMs 7-20 and 7-10 for detailed information on when to assign either or both.)

(4) ***Frontages.*** Infantry units will normally occupy less terrain in urban areas. For example, an infantry company, which might occupy 1,500 to 2,000 meters in open terrain, is usually restricted to a frontage of 300 to 800 meters in urban areas. The density of buildings and rubble and street patterns will dictate the frontage of the unit (Table 5-1).

UNIT	FRONTAGES	DEPTHS
Battalion or Battalion TF	4 to 8 blocks	3 to 6 blocks
Company or Company Team	2 to 4 blocks	2 to 3 blocks
Platoon	1 to 2 blocks	1 block
NOTE: An average city block has a frontage of about 175 meters. These minimum figures apply in areas of dense, block-type construction; multistory buildings; and underground passages.		

Table 5-1. Approximate frontages and depths in large urban areas.

(5) ***Selection of Buildings.*** Buildings that add most to the general plan of defense are chosen for occupation. Mutual support between these positions is vital to prevent the attacker from maneuvering and outflanking positions, making them untenable. Buildings chosen for occupation as defensive positions should:

- Offer good protection.
- Have strong floors to keep the structure from collapsing under the weight of debris.
- Have thick walls.
- Be constructed of nonflammable materials (avoid wood).
- Be strategically located (corner buildings and prominent structures).
- Be adjacent to streets, alleys, vacant lots, and park sites. These buildings usually provide better fields of fire and are more easily tied in with other buildings.
- Be covered by friendly fire and offer good escape routes.

(6) ***Occupation of Positions.*** See paragraph 5-12 and Chapter 3, Section IV.

(7) ***Obstacles.*** Obstacles are easily constructed in an urban area. An urban area itself is an obstacle since it canalizes and impedes an attack. Likely avenues of approach should be blocked by obstacles and covered by fire (Figure 5-8, page 5-14). Units must hinder or prevent enemy maneuver without interfering with its own maneuver elements. Therefore, the battalion usually detonates cratering charges at key street locations on order. Mines are laid on the outskirts of the urban area or the sector and along routes the unit will not use. Barriers and obstacles are normally emplaced in three belts, consistent with the ROE. All avenues of approach (three-dimensional) must be denied. Units must not overlook the use of field-expedient materials, such as cars, light poles, and so on, or the emplacement of command-detonated antipersonnel mines and antitank mines. Commanders must clearly understand the ROE and what they will be permitted to emplace. When necessary, obstacles can be emplaced without mines and covered by fire.

(a) *First Belt.* The first obstacle belt is at the nearest buildings across from and parallel to the main defensive position (MDP). This belt consists of wire and improvised barriers to include: building interiors, subterranean avenues of approach, and exterior areas, such as open areas, danger areas, and dead space. The barriers and obstacles are covered by long-range fires. This belt impedes enemy movement, breaks up and disorganizes attack formations, and inflicts casualties and is protective in nature.

(b) *Second Belt*. The second obstacle belt is placed between the first belt and the MDP buildings, but out of hand grenade range from defensive positions. It impedes movement, canalizes the enemy into the best fields of fire, breaks up attack formations, and inflicts casualties. This belt is not meant to stop enemy soldiers permanently. It should be constructed efficiently to give the most benefit—not to be an impenetrable wall. It consists mainly of wire obstacles, improvised barriers, road craters, and mine fields. It should include command-detonated Claymores. Triple-strand concertina is placed along the machine gun final protective line (FPL), as marked earlier IAW unit SOP, to slow the enemy on the FPL and to allow the machine gun to be used effectively.

(c) *Third Belt.* The third obstacle belt is the defensive position's denial belt. It consists of wire obstacles placed around, through, and in the defensive buildings and close-in mine fields as well as in subterranean accesses. It impedes and complicates the enemy's ability to gain a foothold in the defensive area. Command-detonated Claymores should be used extensively. Claymores should be placed so as not to cause friendly casualties when detonated.

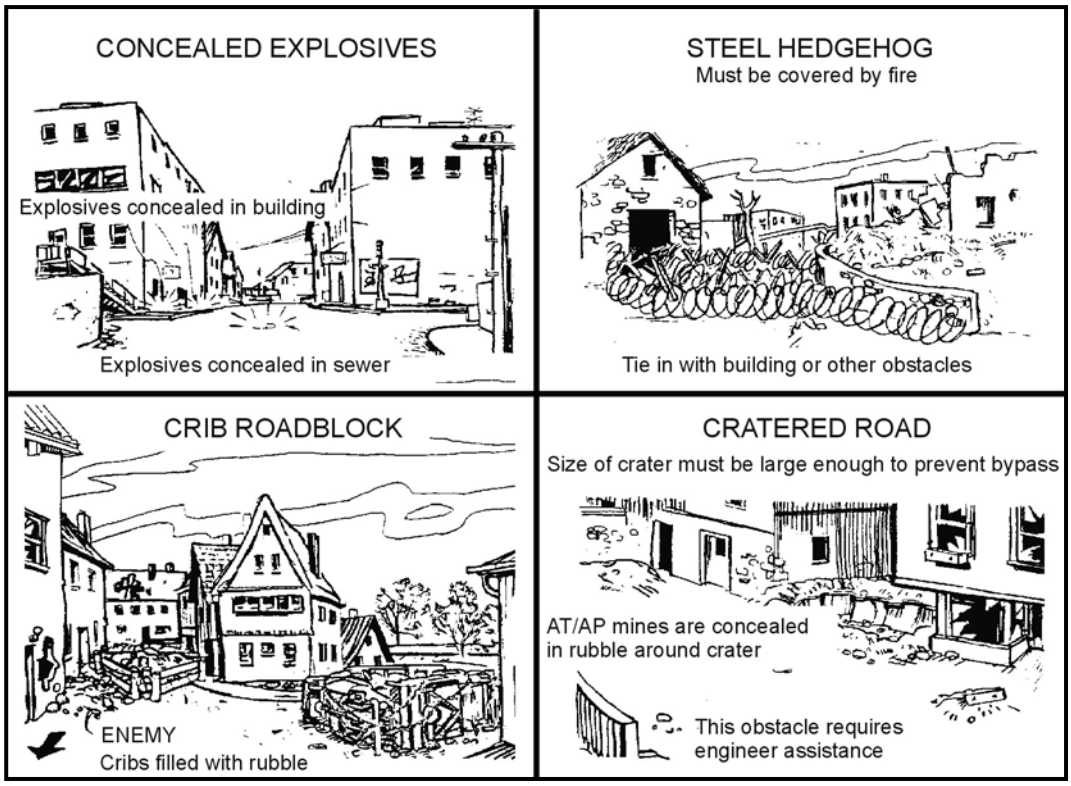

Figure 5-8. Example of urban obstacles.

(8) ***Rubbling.*** If they have the authority and the ROE permit, commanders also decide if buildings should be rubbled to increase fields of fire. However, rubbling the buildings too soon or rubbling too many may disclose exact locations and destroy cover from direct fire. Because rubbling may take more resources than are available to units, careful consideration of available resources must be made prior to rubbling. Additionally, care must be taken not to rubble areas that are necessary to support operations, such as MSRs. Buildings are normally rubbled with engineer assistance; engineers will usually employ explosives and engineer equipment to accomplish this task. If available, armored vehicles can be used to rubble buildings.

(9) ***Fire Hazards.*** The defender's detailed knowledge of the terrain permits him to avoid areas that are likely to be fire hazards. All urban areas are vulnerable to fire, especially those with many wooden buildings. The defender can deliberately set fires—

- To disrupt and disorganize the attackers.
- To canalize the attackers into more favorable engagement areas.
- To obscure the attacker's observation.

Likewise, the enemy may cause fires to confuse, disrupt, or constrain friendly forces and efforts. Units should anticipate this possibility and ensure that fire-fighting equipment is on hand when conducting these types of operations. Battalion S4s can move sand and water to buildings. The S5 can coordinate for usage of local fire-fighting equipment. Defensive positions should not be located atop known gas lines, oil storage tanks, or other highly flammable areas.

(10) ***Actions on Contact.*** When enemy forces enter and maneuver to seize initial objectives, the defender should employ all available fires to destroy and suppress the direct-fire weapons that support the ground attack. Tanks and enemy APCs should be engaged as soon as they come within the effective range of antiarmor weapons. As the enemy attack develops, the actions of small-unit leaders assume increased importance. Squad and platoon leaders are often responsible for fighting independent battles. Thus, it is important that all leaders understand their commander's concept of the defense. Situational awareness must be maintained and where the enemy's efforts are likely to result in a gaining a foothold, violent counterattacks must be employed to deny him access into the MBA.

(11) ***Employment of a Reserve.*** The unit defensive plan must always consider the employment of a reserve. The reserve force should be prepared to counterattack to regain key positions, to block enemy penetrations, to protect the flanks, or to assist by fire in the disengagement and withdrawal of positions. During urban combat, a reserve force—

- Normally consists of infantry.
- Must be as mobile as possible.
- May be a company or platoon at battalion level; a squad or platoon at company level.
- May be supported by tanks or other armored vehicles.
- Should be positioned as close as possible to the place where it is anticipated being employed.

(12) ***Counterattacks.*** All elements should be prepared to counterattack. The best counterattack force is a small, infantry-heavy element supported by BFVs and or tanks, if available. They should be prepared to counterattack to regain key positions, to block enemy penetrations, to provide flank protection, and to assist by fire the disengagement and withdrawal of endangered positions. It is especially important for enemy footholds to be repelled violently. When an element is committed to counterattack to reinforce a unit, it may be attached to the unit in whose sector the counterattack is taking place. Otherwise, the counterattack becomes the main effort. This makes coordination easier, especially if the counterattack goes through the unit's positions.

(13) ***Defense During Conditions of Limited Visibility.*** Commanders can expect the attacker to use conditions of limited visibility to conduct operations to sustain or gain daylight momentum.

(a) Commanders should employ the following measures to defend against attacks during limited visibility:

- Defensive positions and crew-served weapons should be shifted from an alternate position or a hasty security position just before dark to deceive the enemy as to the exact location of the primary position.
- Unoccupied areas between units, which can be covered by observed fire during daylight, may have to be occupied, blocked, or patrolled during limited visibility. Early warning devices and obstacles need to be installed.
- Radar, remote sensors, and night observation devices should be emplaced to cover streets and open areas. Thermal imagery devices, such as the one found on the TOW weapon system, are excellent for observation during limited visibility.

- Noise-making devices, tanglefoot tactical wire, and LP/OPs should be positioned on all avenues of approach for early warning and to detect infiltration.
- Artificial illumination should be planned, to include the use of street lamps, stadium lights, pyrotechnics, visible and IR ILLUM, and so forth.
- Indirect fire weapons, grenade launchers, and hand grenades should be used when defenses are probed to avoid disclosure of defensive positions.
- Tank and BFV platoons must know the locations of friendly positions. The use of thermal recognition signals and markers can help decrease the possibility of fratricide.

(b) Commanders should initiate FPFs through the use of a planned signal. Crew-served weapons, armored vehicle-mounted weapons if available, and individual riflemen fire within their assigned sectors. Grenades and command-detonated mines should be used to supplement other fires as the enemy approaches the positions.

(c) Defenders should move to daylight positions before BMNT. Buildings should be marked from the friendly side IAW unit SOP in order to facilitate movement. Armored vehicles can be used to cover the movement of friendly troops.

d. **Rear Area.** Units may be deployed in the rear area to protect CSS elements and to defend high payoff assets, lines of communications, C2 nodes, and other key locations. Units will employ the tactics, techniques, and procedures (TTP) discussed in Sections V, VI, and VII.

5-13. PRIORITIES OF WORK

Priorities of work in during defensive operations in urban areas are the same as other defensive operations. Specific considerations for a defense on urbanized terrain are discussed in this paragraph.

a. **Establish Security.** Units should quickly establish all-round security by placing forces on likely avenues of approaches. The level of security (50 percent, 30 percent, and so forth) is determined by METT-TC factors. The reconnaissance and counterreconnaissance plan should be emphasized. While security is being established, civilians located within the defensive area need to be identified and evacuated.

b. **Assign Areas of Responsibility.** Boundaries define sectors of responsibility. They include areas where units may fire and maneuver without interference or coordination with other units. Responsibility for primary avenues of approach should never be split. In areas of semidetached construction, where observation and movement are less restricted, boundaries should be established along alleys or streets to include both sides of a street in a single sector. Where buildings present a solid front along streets, boundaries may have to extend to one side of the street. Battle positions should also be specifically assigned, as required by METT-TC. Commanders and leaders should specify which buildings comprise the battle positions or strongpoints. Positions should be clearly designated so that no doubt remains as to which elements will have responsibility for occupation or control.

c. **Clear Fields of Fire.** In urban areas, units may need to rubble certain buildings and structures to provide greater protection and fields of fire to the defender (see paragraph 5-12c(8), Rubbling). If the ceiling of a lower-story room can support the weight of the rubble, collapsing the top floor of a building before the battle starts may

afford better protection against indirect fires. Rubbling an entire building can increase the fields of fire and create an obstacle to enemy movement. Planning must be extensive so that rubbled buildings will not interfere with planned routes of withdrawal or counterattack. Vehicles may also have to be moved to clear fields of fire.

d. **Select and Prepare Initial Fighting Positions.** Units should select positions in depth. Units should prepare positions as soon as troops arrive and continue preparing as long as positions are occupied. Enemy infiltration or movement sometimes occurs between and behind friendly positions. Therefore, each position must be organized for all-round defense. The defender should also:

(1) Make minimum changes to the outside appearance of buildings where positions are located.

(2) Screen or block windows and other openings to keep the enemy from seeing in and tossing in hand grenades. This must be done so that the enemy cannot tell which openings the defenders are behind.

(3) Remove combustible material to limit the danger of fire. Fires are dangerous to defenders and create smoke that could conceal attacking troops. For these reasons, defenders should remove all flammable materials and stockpile fire-fighting equipment (water, sand, and so forth). The danger of fire also influences the type of ammunition used in the defense. Tracers or incendiary rounds should not be used extensively if threat of fire exists.

(4) Turn off electricity and gas. Both propane and natural gas are explosive. Natural gas is also poisonous, displaces oxygen, and is not filtered by a protective mask. Propane gas, although not poisonous, is heavier than air. If it leaks into an enclosed area, it displaces the oxygen and causes suffocation. Gas mains and electricity should be shut off at the facility that serves the urban area.

(5) Locate positions so as not to establish a pattern. Units should avoid obvious firing locations like towers and buildings prohibited for use by the Law of Land Warfare, such as churches.

(6) Camouflage positions.

(7) Reinforce positions with all materials available such as mattresses, furniture, and so forth. The S4 will have to arrange for as much protective material as possible. Caution should be taken as mattresses and fabric furniture are flammable. Drawers and cabinets should be filled with earth or sand to provide cover. Vehicles, such as trucks or buses can be placed over positions outside buildings. Flammable fluids should be drained. Other flammables, such as seats should be removed, and the gas tank filled with water.

(8) Block stairwells and doorways with wire or other material to prevent enemy movement. Create holes between floors and rooms to allow covered and concealed movement within a building.

(9) Prepare range cards, fire plans, and sector sketches.

(10) Look at how basements may be used. If grazing fire can be achieved from basement widows, emplace machine guns in basements. When basements are not used, they should be sealed to prevent enemy entry.

(11) Cache resupply of ammunition, water, and medical supplies.

e. **Establish Communications.** Commanders should consider the effects of urban areas on communications when they allocate time to establish communications. Line-of-sight limitations affect both visual and radio communications. Wire laid at street level is

easily damaged by rubble and vehicle traffic. The noise of urban area combat is much louder than in other areas, making sound signals difficult to hear. Therefore, the time needed to establish an effective communications system in urban terrain may be greater than in other terrain. Units should consider the following techniques when planning for communications:

- Emplace line of sight radios and retransmission sites on the upper floors of buildings.
- Use existing telephone systems. However, telephones are not secure even though many telephone cables are underground.
- Use messengers at all levels since they are the most secure means of communications.
- Lay wire through buildings for maximum protection, if the assets are available.

f. **Emplace Obstacles and Mines.** To save time and resources in preparing the defense, commanders must emphasize using all available materials (automobiles, railcars, rubble) to create obstacles. Civilian construction equipment and materials must be located and inventoried. This equipment can be used with engineer assets or in place of damaged equipment. Coordination must be made with proper civilian officials before use.

(1) Engineers must be able to provide advice and resources as to the employment of obstacles and mines. The principles for employing mines and obstacles do not change in the defense of an urban area; however, techniques do change. For example, burying and concealing mines in streets are hard due to concrete and asphalt. Consider placing mines in sandbags so they cannot be seen and also using fake mines placed in sandbags in order to deceive the enemy.

(2) FASCAM may be effective on the outskirts of an urban area or in parks; however, in a city core, areas may be too restrictive. Mines and obstacles must be emplaced consistent with the ROE. Any antipersonnel mines must be command-detonated. Riot control agents may be employed to control noncombatant access into defensive areas, if permission is granted by the National Command Authority (NCA).

g. **Improve Fighting Positions.** When time permits, all positions, to include supplementary and alternate positions, should be reinforced with sandbags and provided overhead cover. Attached engineers can help in this effort by providing advice and assisting with construction.

h. **Establish and Mark Routes Between Positions.** Reconnaissance by all defending elements will assist in route selection for use by defenders moving between positions. Movement is crucial in fighting in urban areas. Early selection and marking of routes adds to the defender's advantages.

Section IV. BRIGADE DEFENSIVE OPERATIONS

This section discusses planning considerations and provides tactics and techniques for the planning of brigade defensive UO.

5-14. DEFENSIVE PLANNING

In planning a defense in an urban area, the brigade staff must identify the following:

- Positions and areas that must be controlled to prevent enemy infiltration.

- Sufficient covered and concealed routes for movement and repositioning of forces.
- Structures and areas that dominate the urban area.
- Areas such as parks and broad streets that provide fields of fire for tanks and antiarmor weapons.
- Position areas for artillery assets.
- C2 locations.
- Protected areas for CSS activities.
- Suitable structures that are defensible and provide protection for defenders.
- Contingency plans in the event that the brigade must conduct breakout operations.
- Plans for rapid reinforcement.

a. Units defending in urban areas must prepare their positions for all around defense. The brigade must employ aggressive security operations that include surveillance of surface and subsurface approaches. The brigade must constantly patrol and use OPs and sensors to maintain effective security. Special measures must be taken to control possible civilian personnel who support the enemy or enemy combatants who have intermixed with the local population. Consideration must also be given to the protection of non-combatants that remain in the AO, and contingency actions in the event that the situation deteriorates and requires their evacuation.

b. Defensive fire support in urban operations must take advantage of the impact of indirect fires on the enemy before he enters the protection of the urban area. Fire support officers at all levels must coordinate and rehearse contingencies that are inherent to nonlinear fire support coordination measures and clearance of fires. Mutually supporting observation plans for daylight and periods of limited visibility must account for the degradation of lasers in well-lit urban areas. The brigade fire support officer also plans and coordinates nonlethal capabilities for the brigade (see Chapter 10). Civil affairs and PSYOP assets should be coordinated with the appropriate command and control warfare/information operations headquarters.

5-15. INTEGRATING THE URBAN AREA INTO THE DEFENSE

The brigade may also integrate villages, strip areas, and small towns into the overall defense, based on higher headquarters' constraints and applicable ROE (Figure 5-9, page 5-20). A defense in an urban area or one that incorporates urban areas normally follows the same sequence of actions and is governed by the principles contained in FM 7-30, Chapters 5 and 6. When defending large urban areas, the commander must consider that the terrain is more restrictive due to buildings that are normally close together. This requires a higher density of troops and smaller AOs than in open terrain. The brigade normally assigns task force AOs and may use phase lines, control measures, or other positions to position forces in depth.

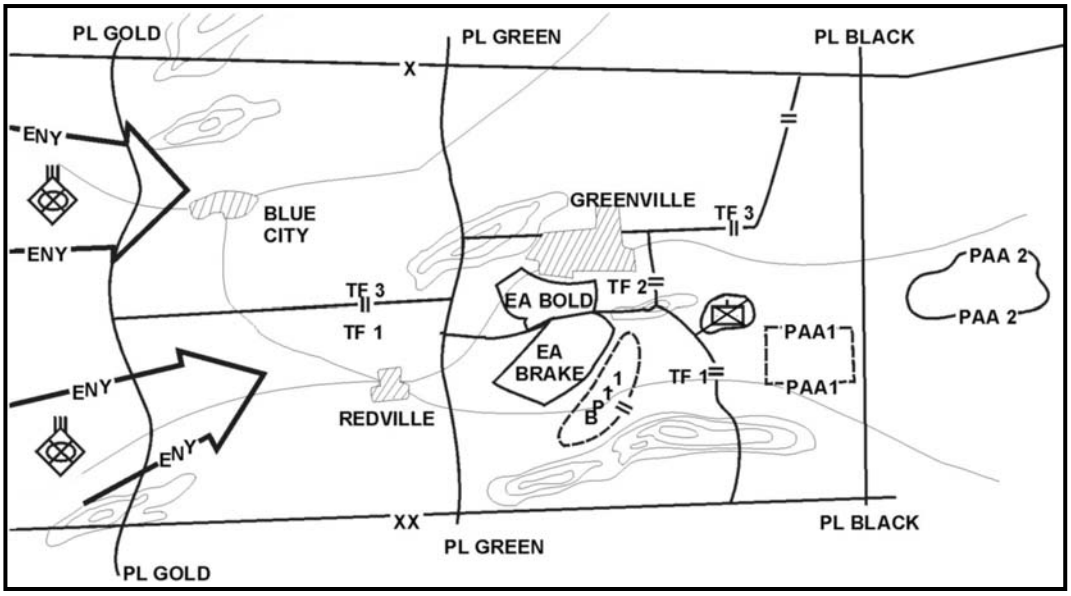

Figure 5-9. Integrating urban areas into a defense.

5-16. NODAL DEFENSE

Figure 5-10 depicts a transitional situation where the brigade moves from an offensive to a defensive or stability operation. The brigade mission may contain METT-TC factors that require varying defensive techniques by the subordinate battalion TFs under the brigade's control. Considerations in a situation such as this include:

a. **Task Organization.** TFs may very well have to be task-organized differently to conduct the specific missions assigned by the brigade commander. The task organization required for the defensive or stability operation will probably be different from the task organization used in an offensive operation.

b. **Symmetrical/Asymmetrical Threats.** The brigade will likely respond to both symmetrical and asymmetrical threats within the area of operations. The defensive techniques chosen by subordinate battalion TFs should be capable of responding to the specific threats in their respective AOs.

c. **Boundary Changes.** Again, based on the commander's intent and the brigade's defensive scheme of maneuver, boundary changes may be required in order to give battalion's more or less maneuver space.

d. **ROE Modification.** The ROE may require modification based on the type of mission to be conducted. The ROE may become more or less restrictive based on METT-TC factors. Commanders and leaders must insure that the ROE are clearly stated and widely disseminated at the beginning and conclusion of each day.

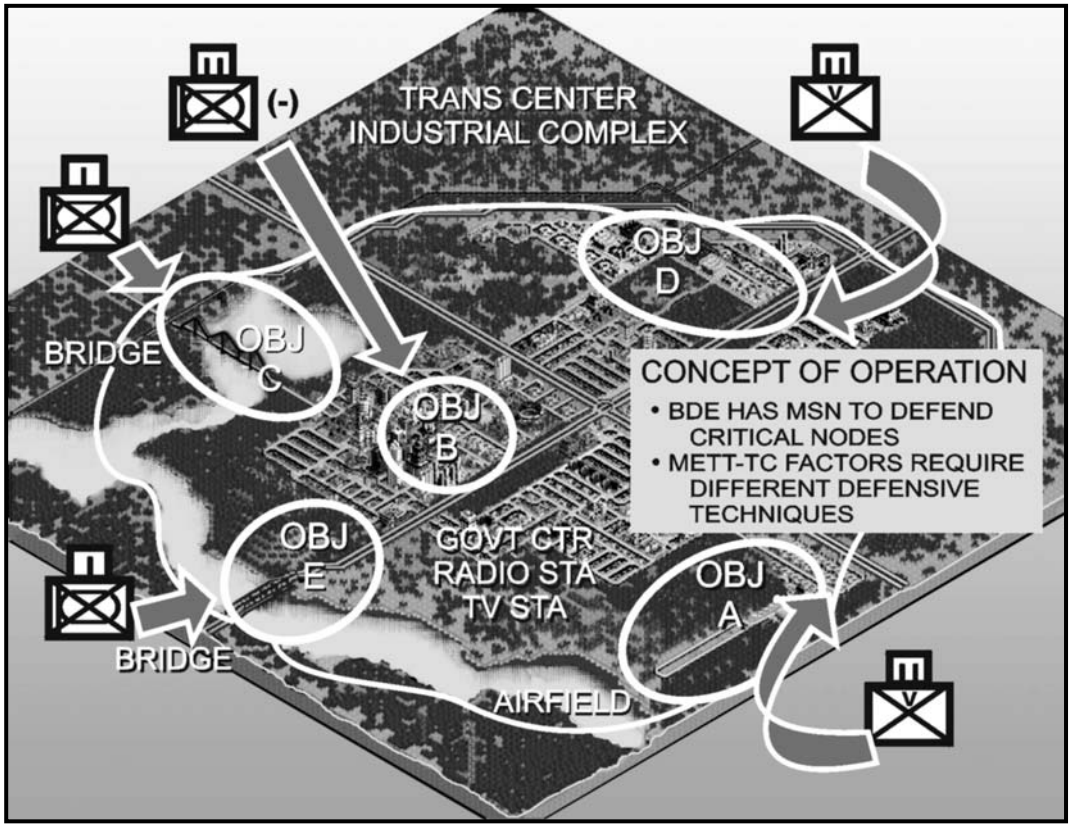

Figure 5-10. Nodal defense, transitional situation.

Figure 5-11 on page 5-22 depicts a nodal defense where TFs employ varying defensive techniques in order to achieve the brigade commander's desired end-state. The brigade commander's intent is to safeguard the key nodes that were seized during the offensive action in order to eventually return the infrastructure of this particular urban area back to civilian control. A combination of sectors, battle positions, strong points, roadblocks, checkpoints, security patrols, and OPs could be employed throughout the brigade AO. Figure 5-11 depicts the changed TF task organizations, the extended boundaries, and directed brigade OPs.

NOTE: TF operational graphics were drawn in order to provide an example of a possible technique that may be employed within the brigade AO in order to meet the brigade commander's intent. For example, the TF defending the transportation center has elected to use a perimeter defense for inner security and has assigned the attached mechanized infantry company team the mission to conduct outer security by means of a screen and manning the designated brigade OP.

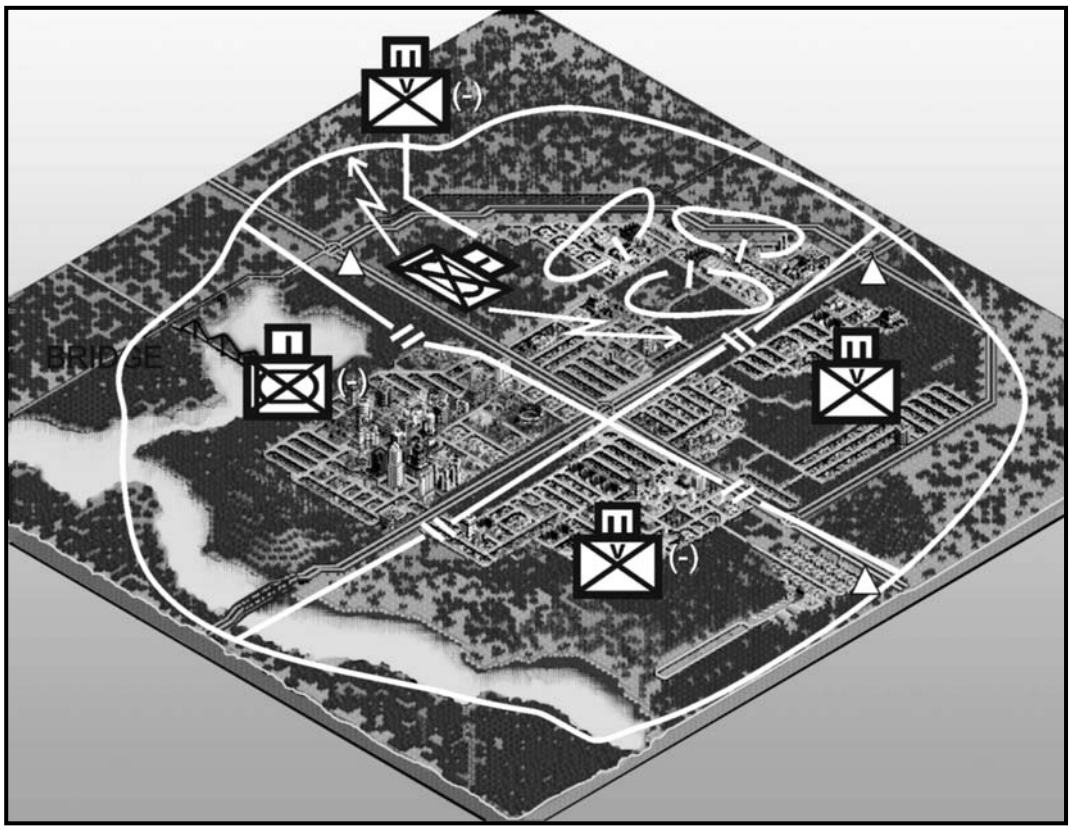

Figure 5-11. Nodal defense, varying defensive techniques.

Section V. BATTALION DEFENSIVE OPERATIONS

This section discusses planning considerations and provides tactics and techniques for the planning of battalion TF defensive UO.

5-17. EMPLOYMENT OF COMBAT AND COMBAT SUPPORT ASSETS

This paragraph will concentrate on the employment of combat and combat support assets at the battalion level. Once the battalion has decided where to defend, it should select company battle positions or sectors that block or restrict the enemy's ability to maneuver and control key areas. The battalion needs to plan two levels down at the platoon level where the battle will be fought. The frontage for a platoon is about one to two city blocks long. Platoons can occupy about three small structures or one larger two- or three-story building (Table 5-1 on page 5-12 and Figure 5-6 on page 5-9), depending on METT-TC factors. Companies may be tasked to detach a platoon to act as the battalion reserve.

a. **Mortar Platoon.** The battalion mortar platoon may be initially positioned forward in support of the security area. After withdrawal of security forces, it is positioned to support the entire battalion. (See Chapter 12 and Appendix K for detailed information concerning mortar employment in urban terrain.) Mortars at the battalion level are employed to maximize the effect of their high-angle fires. They should be used to engage:

- Enemy overwatch positions.
- Enemy infantry before they seize a foothold.
- Targets on rooftops.
- Enemy reinforcements within range.

b. **AT Weapons.** The commander will give the AT platoon missions that support the defensive scheme of maneuver based on the capabilities and limitations of the system and the type of threat that the battalion will face. For example, battalion defending against conventional threats that have armored vehicles will most likely give the AT platoon missions that primarily defend against armored threats. Battalions defending against asymmetrical threats will most likely give the AT platoon missions that will enhance force protection.

c. **Scout Platoon.** Depending on the situation and terrain, the battalion scout platoon may provide a security force forward of the battalion to give early warning of enemy activity. Alternately, the scout platoon may be used to screen a flank or the rear.

d. **Employment of Tanks and BFVs.** The battalion should employ tanks and BFVs to take advantage of their long-range fires and mobility. Urban areas restrict the mobility of tanks and BFVs and make them vulnerable to enemy infantry antiarmor weapons.

(1) When tanks and BFVs are employed in the defense of an urban area, infantry should be positioned to provide security against close antitank fires and to detect targets for the armored vehicles. Tanks and BFVs should be assigned engagement areas in support of the defensive scheme of maneuver. BFVs may be placed along the forward edge of the area in order to engage enemy armored vehicles. Friendly armored vehicles can also be placed in positions to the rear of the buildings and interior courtyards where their weapon systems can provide added rear and flank security. Combat vehicles are assigned primary, alternate, and supplementary positions as well as primary and secondary sectors of fire. They should be positioned in defilade behind rubble and walls or inside buildings for movement into and out of the area. Armored vehicles can also be used for resupply, CASEVAC, and rapid repositioning during the battle. BFVs can also provide a mobile reserve. Tank or BFV elements should be placed OPCON to a light infantry battalion rather than attached. A tank or BFV element attached or OPCON will have to be divided up within the defensive area to take advantage of the fires available to this asset. BFVs and antitank weapons should supplement tank fires. Tanks and BFVs may be—

- Positioned on the edge of the urban area in mutually supporting positions.
- Positioned on key terrain on the flanks of towns and villages.
- Used to cover barricades and obstacles by fire.
- Part of the reserve.

(2) Tanks and BFVs are normally employed as platoons. However, sections may be employed with light infantry platoons or squads based on METT-TC factors and identified engagement areas. This provides tanks and BFVs with the close security of the infantry. Tanks and BFVs provide the commander with a mobile force to respond quickly to enemy threats on different avenues of approach. They can also be effectively employed in counterattacks.

e. **Indirect Fire Support.** Fire planning must be comprehensive due to the proximity of buildings to targets, minimum range restrictions, repositioning requirements,

and the ROE. Mortar and artillery fires are planned on top of and immediately around defensive positions for close support.

(1) ***Artillery.*** Artillery may be used as direct or indirect support. In the defense, artillery fire should be used to—

- Suppress and blind enemy overwatch elements.
- Disrupt or destroy an assault.
- Provide counterbattery fire.
- Support counterattacks.
- Provide direct fire when necessary.

(2) ***Fire Planning.*** Fire planning is conducted for urban areas in much the same manner as it is for other areas, taking into concern the limitations of the restrictive terrain. Consideration should be given to TRPs, covering obstacles, FPFs.

(3) ***Priorities of Fire.*** The commander should establish priorities of fire based on enemy avenues of approach and threat systems that present the greatest danger to the defense. For example, during the attacker's initial advance, tanks, BMPs, and overwatching elements are the greatest threat to the defense. In certain situations, enemy APCs may provide a larger threat than enemy tanks in an urban area; the APCs carry infantry, which can gain footholds in buildings. Artillery and mortar fires should suppress and destroy enemy ATGMs and overwatch positions and or elements. If enemy formations secure a foothold, priority is shifted to the destruction of enemy forces within the penetration.

(4) ***Control of Supporting Fires.*** As the enemy attack progresses in the city, fires are increased to separate infantry from supporting tanks and fighting vehicles. During this phase, friendly artillery concentrates on attacking infantry, counterfire missions, and the destruction of reinforcements that are approaching the city.

(5) ***Support of Counterattacks.*** When initiated, counterattacks are given priority of supporting fires. When artillery is firing the missions as mentioned above, it must remain mobile and be prepared to displace to preplanned positions to avoid enemy counterbattery fire.

f. **Employment of Engineers.** Normally, one engineer platoon or company supports a battalion or battalion task force. Engineers are employed under battalion control or attached to companies. Company commanders may be given an engineer squad to assist them in preparing the defense. The battalion commander and staff must consider engineer tasks that enhance survivability, mobility, and countermobility. The supporting engineers use C4 and other explosives to make firing ports, mouseholes, and demolition obstacles. Based upon priority of work, the battalion tells the attached or OPCON engineer element to assist each of the infantry companies preparing the village for defense and to execute their obstacle plan. The engineers' mission is to tell the infantrymen exactly where to place the demolitions and how much is needed for the desired effect. They assist in preparation of charges. Tasks that engineers can accomplish in the defense of an urban area include:

- Constructing obstacles and rubbling.
- Clearing fields of fire.
- Laying mines.
- Preparing mobility routes between positions.
- Preparing fighting positions.

g. **Air Defense Assets.** Air defense assets available to the commander, such as Stinger and Avenger, are normally employed to ensure all-round air defense. These assets are normally controlled at battalion level, however they may be placed under a company commander's control when METT-TC factors warrant that type of use. The lack of good firing positions for long-range air defense missile systems in some urban areas may limit the number of deployed weapons. In the defense, weapons systems may have to be winched or airlifted into positions. Rooftops and parking garages are good firing positions because they normally offer a better line-of-sight. Stingers and Avengers can be assigned the missions of protecting specific positions or of functioning in general support of the battalion.

h. **Battalion Trains/Service Support.** The battalion locates an area where the trains can be positioned near enough to provide support but far enough away to not get in the line of fire. (See Chapter 13.) A location is chosen near the main avenue of approach to ease resupply, recovery, and maintenance operations. Company trains are often collocated with the battalion trains. Ammunition expenditure is usually high when fighting in an urban area. To avoid moving around the village with ammunition resupply during the battle, ammunition should be stockpiled in each occupied platoon and squad position. Platoons should also stockpile firefighting equipment, drinking water, food, and first-aid supplies at each squad position. Other factors the battalion must consider are:

- Resupply.
- Medical evacuation.
- Firefighting.
- Security.

5-18. INTEGRATING URBAN AREAS INTO THE DEFENSE

The battalion may often integrate villages, strip areas, and small towns into the overall defense, based on higher headquarters' constraints and applicable ROE. (See Figure 5-12 on page 5-26.) A defense in an urban area, or one that incorporates urban areas, normally follows the same sequence of actions and is governed by the principles contained in Chapters 5 and 6 of FM 7-20. Specific TTP are discussed in paragraphs 5-19 through 5-22.

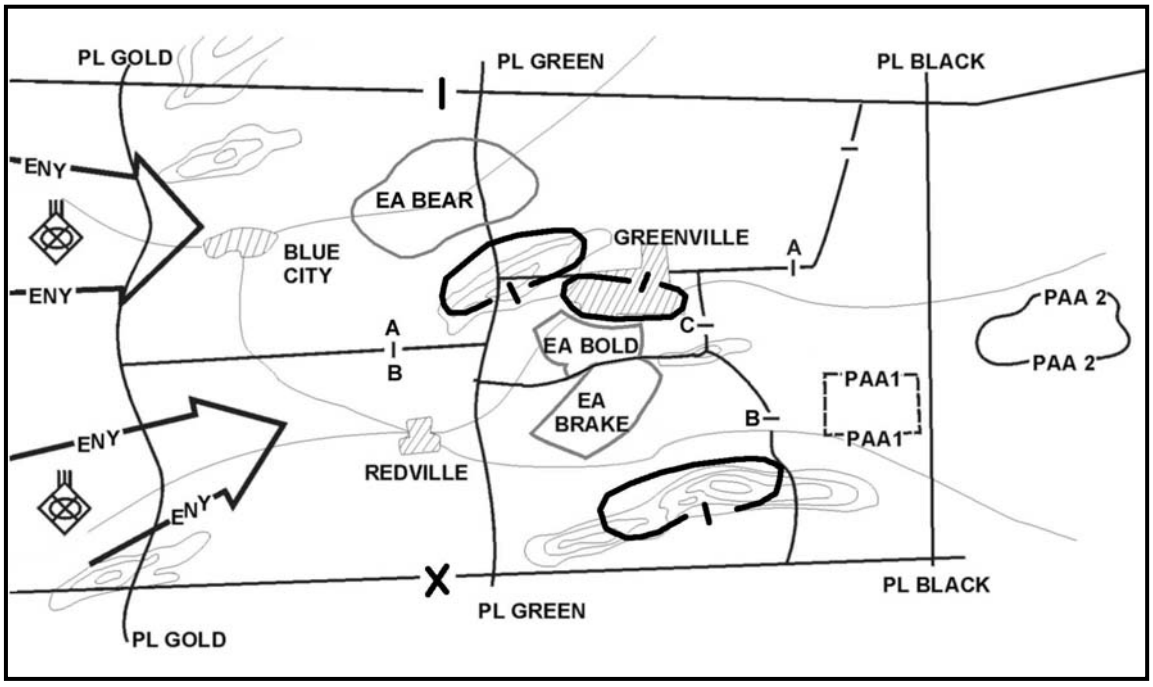

Figure 5-12. Integrating urban areas into the defense.

5-19. DEFENSE OF A VILLAGE

A battalion TF assigned a defensive sector that includes a village may incorporate the village as a strongpoint in its defense. This use of an urban area is most common when the village stands astride a high-speed avenue of approach or when it lies between two difficult obstacles. To incorporate such an area into its defense, the battalion TF must control the high ground on either side of the village to prevent the enemy from firing from those areas into the village.

a. The majority of the TF tanks and BFVs should be employed where maneuver room is the greatest on the key terrain to the flanks of the village. This is also where the TF BFVs should be employed. As the security force withdraws and companies and or teams assume the fight, BFVs can assume support by fire positions.

b. Although the battalion TFs disposition should prevent large enemy forces from threatening the rear and flanks of the village, the danger of small-unit enemy infiltration means the village must be prepared for all-round defense.

c. Engineers required for team mobility operations should stay with the company or company team in the village to provide continuous engineer support if the company team becomes isolated. The TF commander should centrally control engineer support for the rest of the TF. Engineer assets may be in DS of the other companies or company teams. The priority of barrier materials, demolitions, and mines should go to the company or company team in the village.

d. The TF commander should use any key terrain on the village flanks for maneuver to prevent the village's defense from becoming isolated. The strongpoints in the town should provide a firm location where the enemy can be stopped and around which counterattacks can be launched (Figure 5-13).

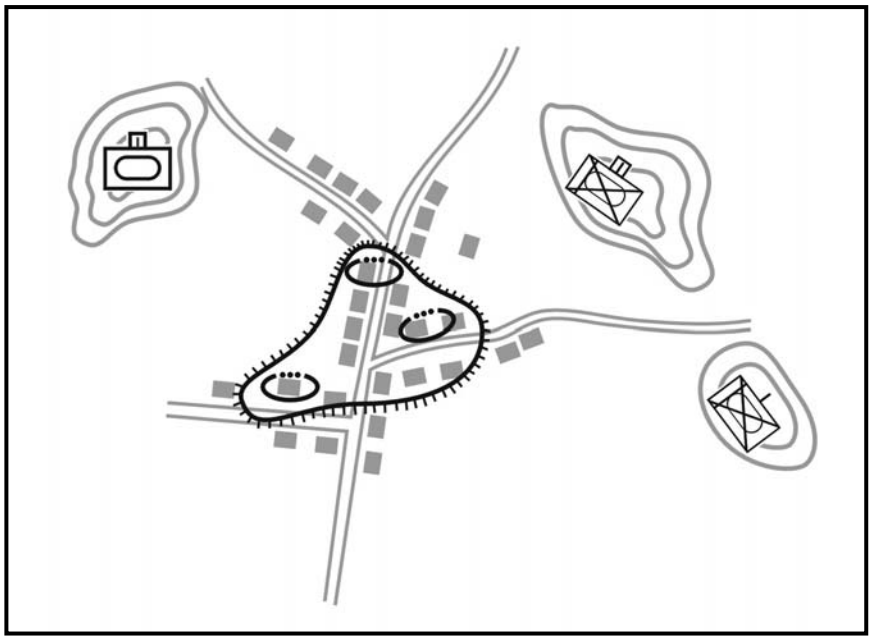

Figure 5-13. Battalion TF defense of a village.

5-20. DEFENSE IN SECTOR

A battalion TF may be given the mission of defending a sector in a city (Figure 5-14). The battalion should take advantage of the outlying structures to provide early warning and delay the enemy and take advantage of the tougher interior buildings to provide fixed defense. This defense should cover an area about 4 to 12 blocks square.

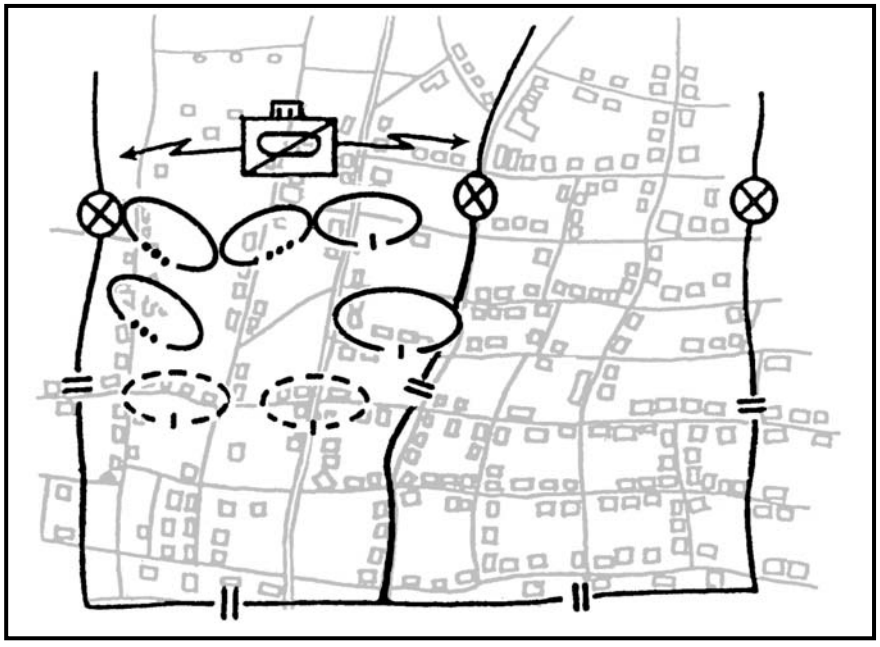

Figure 5-14. Defense in sector.

a. The battalion TF deployment begins with the reconnaissance/scout platoon reconnoitering the urban area to provide an area reconnaissance and location of the enemy. At the edge of the area, where fields of fire are the greatest, the battalion TF should deploy BFVs and other antiarmor weapon systems to provide long-range antiarmor defense.

b. The forward edge of the battle area (FEBA) should include the most formidable buildings in the sector. Forward of the FEBA, the battalion TF should organize a guard force, which could be a reinforced company. The guard force should concentrate on causing the enemy to deploy without engaging the enemy in decisive combat. This can be done through maximum use of ambushes and obstacles and using covered and concealed routes through buildings for disengagement. The guard force inflicts casualties and delays the enemy, but the guard force avoids decisive engagement since buildings beyond the FEBA do not favor the defense. As the action nears the FEBA, the guard force detects the location of the enemy's main attack. Upon reaching the FEBA, the guard force passes through the battalion lines and can be used as a reserve and reinforce other elements of the battalion, or it can counterattack.

c. Defense along the FEBA consists of a series of positions set up similar to that described in the company defense of the village (see paragraph 5-24). Key terrain features such as strong buildings, road junctions, and good firing positions should be the center of the strongpoint defense. Based on METT-TC considerations, the defense in sector may consist of either strongpoints or battle positions. Strongpoints located on or covering decisive terrain are extremely effective in the defense. Buildings should be prepared for defense as outlined in Chapter 3.

d. BFVs should be used to engage threat armored vehicles; to cover obstacles with fire; and to engage in counterattacks with tanks. They can also be used to transport casualties and supplies to and from the fight.

e. The battalion's attached tanks should be used to engage enemy tanks, cover obstacles by fire, and engage in counterattacks. They should be employed in platoons where possible, but in congested areas may be employed in sections.

f. Artillery and mortar fire should be used to suppress and blind enemy overwatch elements, to engage enemy infantry on the approaches to the city, to provide counterbattery fire, and to support counterattacks using both indirect and direct fire.

g. Engineers should be attached to the defending force to help in laying mines and constructing obstacles, clearing fields of fire, and preparing routes to the rear. These routes should also have obstacles. Engineers should help prepare fighting positions in support of the force in strongpoints.

5-21. NODAL DEFENSE

Figure 5-15 depicts a transitional situation where the battalion moves from an offensive to a defensive or stability operation. The brigade mission may contain METT-TC factors that require varying defensive techniques by the subordinate battalions under the brigade's control. Figure 5-16 on page 5-30 depicts a nodal defense where battalions employ different defensive techniques in order to achieve the brigade commander's desired end-state. The brigade commander's intent is to safeguard the key nodes that were seized during the offensive action in order to eventually return the infrastructure of this particular urban area back to civilian control. A combination of sectors, battle

positions, strong points, roadblocks, checkpoints, security patrols, and OPs could be employed within the TF sector or AO. Figure 5-16 on page 5-30 depicts the changed TF task organizations, the extended boundaries, and directed brigade OPs. Considerations in a situation such as this include:

a. **Task Organization.** Companies may have to be task organized differently to conduct the specific missions assigned by the battalion or TF commander. The task organization required for the defensive or stability operation will probably be different from the task organization used in an offensive operation.

b. **Symmetrical/Asymmetrical Threats.** The battalion or TF will likely respond to both symmetrical and asymmetrical threats within the area of operations. The defensive techniques chosen by subordinate companies should allow them to respond to the specific threats in their respective AOs, battle positions, or sectors.

c. **Boundary Changes.** Again, based on the commander's intent and the battalion's or TF's defensive scheme of maneuver, boundary changes may be required in order to give companies more or less maneuver space.

d. **ROE Modification.** The ROE may require modification based on the type of mission to be conducted. The ROE may become more or less restrictive based on METT-TC factors. Commanders and leaders must ensure that the ROE are clearly stated and widely disseminated at the beginning and conclusion of each day.

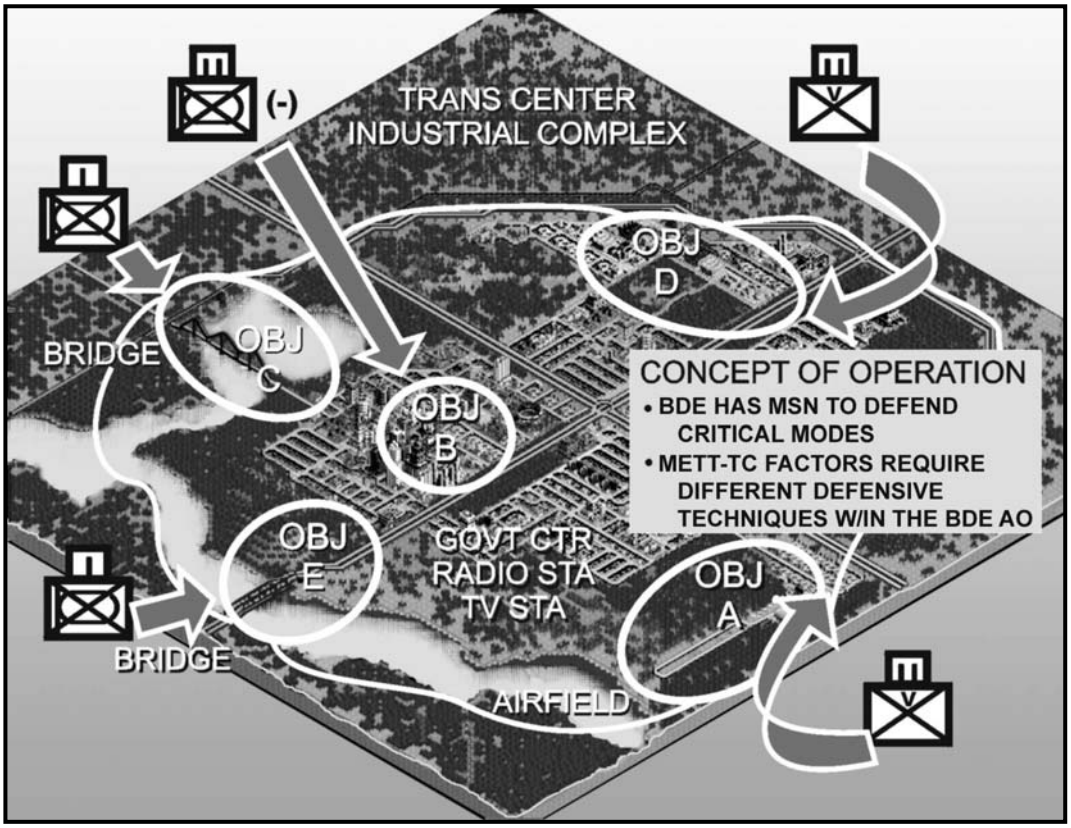

Figure 5-15. Nodal defense, transitional situation.

NOTE: In Figure 5-16, the northern TF defending the transportation center/industrial complex has decided to use a perimeter defense for inner security and has assigned the attached mechanized Infantry company the mission to conduct outer security by means of a screen and manning the designated brigade OP. Other TFs within the brigade AO may be required to use different defensive techniques.

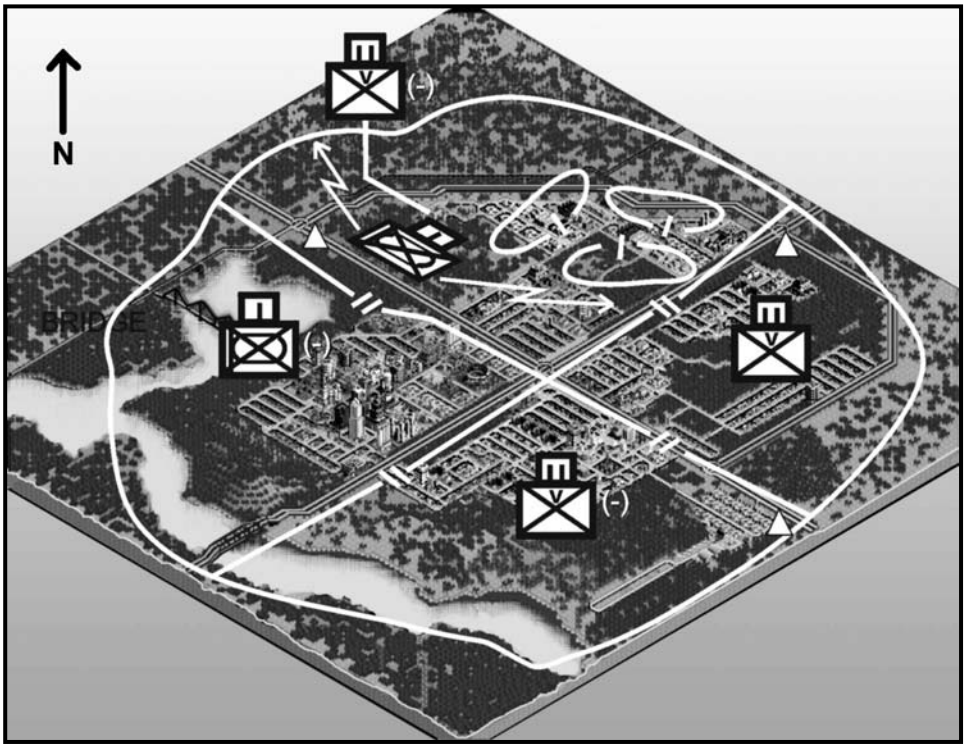

Figure 5-16. Nodal defense, different defensive techniques.

NOTE: The digital force has the potential to provide accurate threat information that can enhance situational awareness, which facilitates targeting and obstacle placement. JSTARS; GUARDRAIL; unmanned aerial vehicles, if present; and other reconnaissance assets will significantly improve the threat situational awareness and targeting capability of the unit.

5-22. DELAY

The purpose of a delay is to slow the enemy, cause enemy casualties, and stop the enemy (where possible) without becoming decisively engaged or bypassed. The delay can be oriented either on the enemy or on specified terrain such as a key building or manufacturing complex.

a. **Ambushes and Battle Positions.** A delay in an urban area is conducted from a succession of ambushes and battle positions (Figure 5-17). The width of the TF zone depends upon the amount of force available to control the area, the nature of the buildings and obstacles along the street and the length of time that the enemy must be delayed.

(1) ***Ambushes.*** Ambushes are planned on overwatching obstacles and are closely coordinated but they are executed at the lowest levels. The deployment of the TF is realigned at important cross streets. The ambushes can be combined with limited objective attacks on the enemy's flanks. These are usually effective in the edge of open spaces, parks, wide streets, and so on. Tanks and BFVs should execute these along with dismounted Infantry.

(2) ***Battle Positions.*** Battle positions should be placed where heavy weapons, such as tanks, BFVs, antiarmor weapons, and machine guns, will have the best fields of fire. Such locations are normally found at major street intersections, parks, and at the edge of open residential areas. Battle positions should be carefully and deliberately prepared, reinforced by obstacles and demolished buildings, and supported by artillery and mortars. They should be positioned to inflict maximum losses on the enemy and cause him to deploy for a deliberate attack.

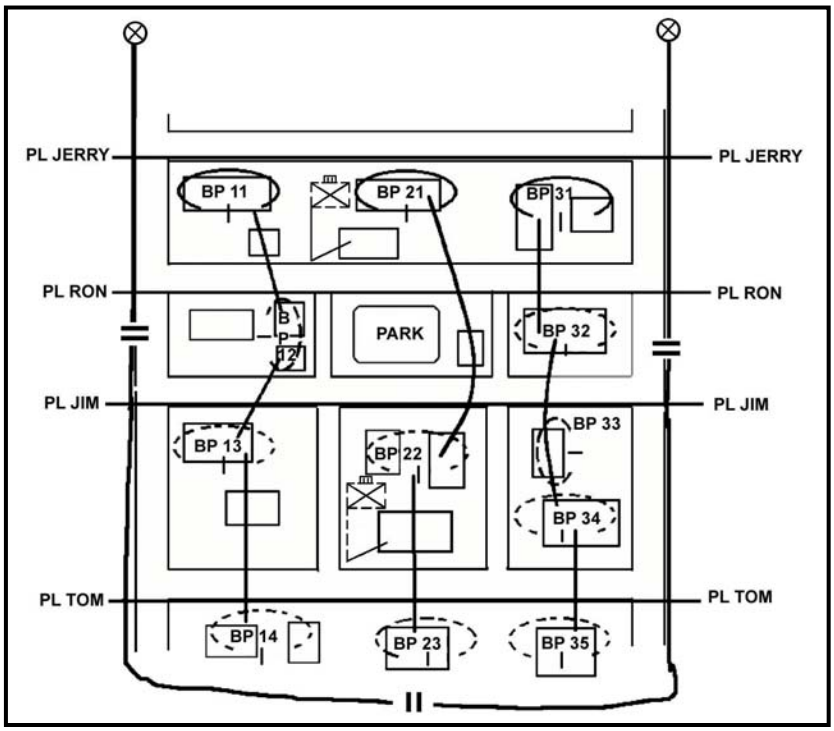

Figure 5-17. Battalion delay in an urban area.

b. **Two Delaying Echelons.** The TF is most effective when deployed in two delaying echelons, alternating between conducting ambushes and fighting from battle positions. As the enemy threatens to overrun a battle position, the company disengages and delays back toward the next battle position. As the company passes through the company to the rear, it establishes another battle position. Smoke and demolitions are used to aid in the disengagement. Security elements on the flank can be employed to prevent the enemy from out-flanking the delaying force. A small reserve can be used to react to unexpected enemy action and to conduct continued attacks on the enemy's flank.

c. **Engineers.** The engineer effort should first be centralized to support the preparation of battle positions and then decentralized to support the force committed to ambush.

Section VI. COMPANY DEFENSIVE OPERATIONS

This section discusses planning considerations and provides tactics and techniques for the planning of company team defensive UO.

5-23. HASTY DEFENSE

A very likely defensive mission for the Infantry company in urban terrain will be to conduct a hasty defense. This mission is characterized by reduced time for the preparation of the defense. All of the troop-leading procedures are the same. The priorities of work will basically be the same, but many will take place concurrently. Units will be deployed, weapons emplaced, and positions prepared in accordance with the mission analysis and amount of time the company commander has available. Companies must be prepared to conduct a hasty defensive mission as part of stability and support operations.

a. **Occupation and Preparation of Positions.** Preparations for the hasty defense will vary with the time available. The preparations described below will generally take between two to four hours. In a hasty defense, the primary effort is to camouflage and conceal the presence of the hasty fighting positions and provide as much protection as possible for the soldiers manning them. Positions are constructed back from the windows in the shadows of the room using appliances, furniture, and other convenient items and materials. The emphasis on fortifying positions and making major alterations to the environment is reduced. These actions will occur after security has been established.

(1) ***Position Crew-Served and Special Weapons.*** Generally, they will be employed from the inside of buildings, unless an outside position is preferable and can be protected and camouflaged. Armored vehicles can exploit longer fields of fire or a reverse slope engagement using buildings to protect the vehicle's position.

(2) ***Emplace Barriers and Obstacles.*** Lack of time means there will be two belts established and they will not be as extensive as in a defense that permits more time. Cover all obstacles with observation and fire.

(a) *First Belt.* The first belt is usually between 50 to 100 meters from and parallel to the defensive trace. It will normally consist of wire obstacles, improvised barriers, road craters, and minefields. For example, burning tires and trash have proven to be effective obstacles on urban terrain. Antitank and command detonated mines are used consistent with the ROE. This belt blocks, fixes, turns, or canalizes the enemy; disrupts attack formations; and inflicts casualties.

(b) *Second Belt.* The second belt is the denial belt. It consists of wire obstacles placed around, through, and in the defensive buildings and close-in mine fields as well as in subsurface accesses. It impedes and complicates the enemy's ability to gain a foothold in the defensive area. Command detonated Claymores are used extensively consistent with the ROE. Claymores are placed where they will not cause friendly casualties.

(c) *Field-Expedient Obstacles.* Field-expedient obstacles made from available materials, such as rubble, cars and light poles, should be employed.

(3) ***Prepare Positions.*** Squads and platoons prepare positions using whatever materials are available; for example, filling dressers or other furnishings with earth or other materials.

(4) ***Rehearsals.*** Conduct rehearsals with leaders and soldiers concerning the orientation of the defense, unit positions, location of crew served weapons, CASEVAC, resupply, execution of counterattack plans, withdrawal plan, and so on. One of the more important rehearsals to conduct is the synchronization of direct and indirect fires to accomplish the commander's intent.

(5) ***Movement Enhancement.*** There will not be much time to improve movement within the defense. Units should plan to use subsurface and supersurface (through buildings) routes. Priority should be given to removing obstructions to alternate positions and to the counterattack route.

(6) ***Communications.*** Check communications. Communications is initially radio. Plans are made for messengers, and routes improved for them. Wire is emplaced as an improvement to the defense as time and the terrain allows.

NOTE: The digital force has the potential to provide accurate threat information that can enhance situational awareness, which helps facilitate targeting and obstacle placement. JSTARS; GUARDRAIL; unmanned aerial vehicles, if present; and other reconnaissance assets will significantly improve the threat situational awareness and targeting capability of the unit.

b. **Improving the Defense.** As time permits, the following areas can be given consideration and prioritized in accordance with METT-TC.

- Sleep plan.
- Barrier and obstacle improvement.
- Improvement of primary and alternate positions.
- Preparation of supplementary positions.
- Additional movement enhancement efforts.
- Initiation of patrols.
- Improvement of camouflage.
- Maintenance/refueling.
- Continued rehearsals for counterattack and withdrawal.

5-24. DEFENSE OF A VILLAGE

An Infantry company may be given the mission to defend a village (Figure 5-18, page 5-34). Once the company commander has completed his reconnaissance of the village, he scouts the surrounding terrain and, with the information assembled, he develops his plan for the defense. One of his first decisions is whether to defend with his Infantry on the leading edge of the village or farther back within the confines of the village. Normally, defending on the leading edge will be more effective against an armor heavy force, where the defending company can take advantage of longer range observation and fields of fire. Defending in depth within the village will be more effective against a primarily Infantry heavy force, in order to deny the enemy a foothold. This decision will be based on the factors of METT-TC. This mission is usually characterized with the company defending an urban area that is surrounded by open

terrain. The company may need to coordinate with adjacent units to plan for the defense or control of this terrain.

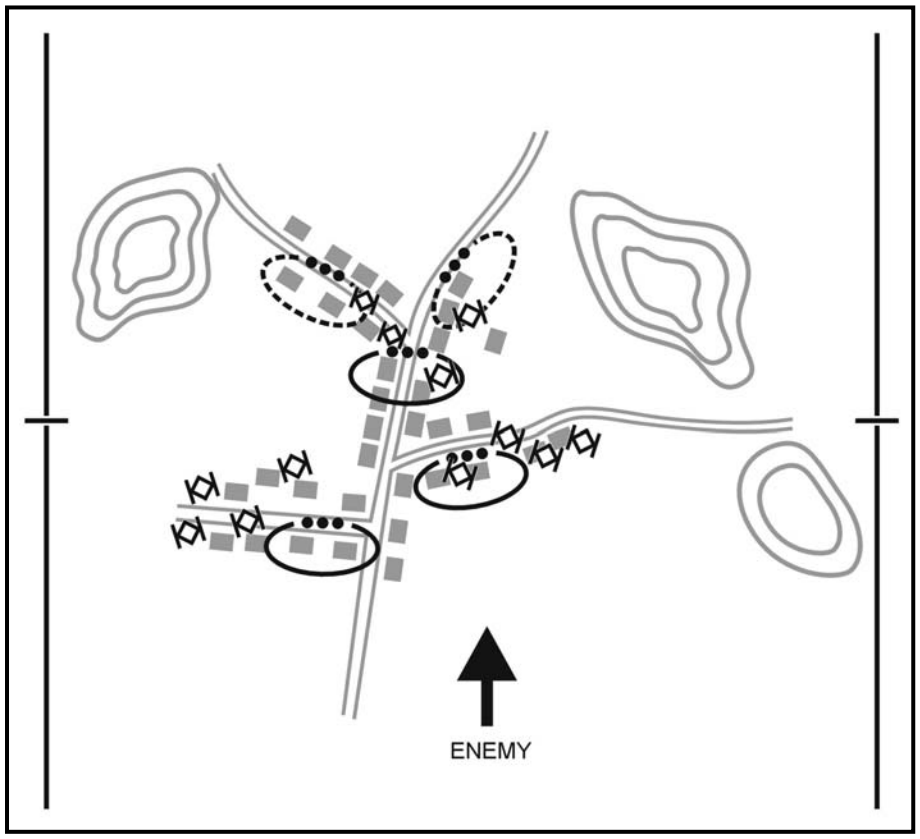

Figure 5-18. Company defense of a village.

a. **Influencing Factors.** Several factors influence the commander's decision. First, he must know the type of enemy that his company defends against. If the threat is mainly Infantry, the greater danger is allowing them to gain a foothold in the village. If the threat is armor or motorized Infantry, the greatest danger is that massive direct fire destroys the company's defensive positions. The company commander must also consider the terrain forward and to the flanks of the village from which the enemy can direct fires against his positions.

b. **Platoon Battle Positions.** Based on the mission analysis, platoons are normally given a small group of buildings in which to prepare their defense, permitting the platoon leader to establish mutually supporting squad-sized positions. This increases the area that the platoon can control and hampers the enemy's ability to isolate or bypass a platoon. A platoon may be responsible for the road through the village. The rest of the company is then positioned to provide all-round security and defense in depth.

c. **Company Mortars and Antitank** Weapons. A position for the company mortars must be chosen that protects mortars from direct fire and allows for overhead clearance. Antitank weapons are placed where they can engage targets at maximum ranges with alternate firing points. Infantry should protect antitank weapons.

d. **BFVs.** Based on METT-TC considerations, BFVs may be placed along the forward edge of the urban area to engage enemy armored vehicles. Friendly armored vehicles can also be placed in positions to the rear of the buildings and interior courtyards where their weapon systems can provide added rear and flank security. Combat vehicles are assigned primary, alternate, and supplementary positions as well as primary and secondary sectors of fire. They should be positioned in defilade behind rubble and walls or inside buildings for movement into and out of the area. Armored vehicles can also be used for resupply, CASEVAC, and rapid repositioning during the battle. BFVs can also provide a mobile reserve for the company. If a mechanized Infantry platoon is attached, it is controlled through its chain of command. If a mechanized Infantry section is attached, it can be controlled through the senior squad leader.

e. **Tanks.** If a tank platoon is available from the battalion task force, the company commander could place the tanks along the leading edge where rapid fire would complement the antitank weapons. The tank platoon leader should select exact firing positions and recommend engagement areas. If faced by enemy Infantry, the tanks move to alternate positions with the protection of friendly Infantry. These alternate positions allow the tanks to engage to the front as well as the flanks with as little movement as possible. Positions can be selected within buildings and mouseholes can be constructed. After they are withdrawn from the leading edge of the village, the tanks could provide a mobile reserve for the company.

f. **FPFs.** FPFs are planned to address the biggest threat to the company—the enemy's Infantry. When firing an FPF inside an urban area is required, mortars are more effective than artillery. This situation is true due to their higher angle of fall that gives them a greater chance of impacting on the street.

g. **Barriers and Obstacles.** Obstacles are easily constructed in an urban area. The company commander must stop enemy vehicles without interfering with his own movement in the village. Therefore, the company detonates cratering charges at key street locations on order. Mines are laid on the outskirts of the town and along routes the company will not use. Barriers and obstacles are normally emplaced in three belts. If attached or OPCON, the tank or BFV platoon leader can assist the commander by giving advice on where to place antivehicular obstacles.

h. **Engineers.** The supporting engineers use C4 and other explosives to make firing ports, mouseholes, and demolition obstacles. Based upon his priority of work, the commander tells the engineer squad leader to assist each of the Infantry platoons preparing the village for defense and to execute the company team's obstacle plan. The engineer squad leader's mission is to tell the Infantrymen exactly where to place the demolitions and how much is needed for the desired effect. He assists in preparation of charges. He also assists in the emplacement and recording of the minefields as well as the preparation of fighting positions.

i. **Communications.** To ensure adequate communications, redundant verbal and nonverbal communications are planned and checked. The company installs a wire net and develops a plan for pyrotechnic signals. Lay backup wire in case the primary lines are cut by vehicles, fires, or the enemy. The commander also plans for the use of messengers throughout the village.

5-25. DEFENSE OF A BLOCK OR GROUP OF BUILDINGS

An Infantry company operating in urban terrain may have to defend a city block or group of buildings in a core periphery or residential area. The company conducts this operation in accordance with the battalion task force's defensive scheme of maneuver. The operation should be coordinated with the action of security forces charged with delaying to the front of the company's position. The defense should take advantage of the protection of buildings that dominate the avenues of approaches into the MBA. This mission differs from defense of a village in that it is more likely to be conducted completely on urban terrain, without surrounding open terrain that characterizes the defense of a village. An Infantry company is particularly well suited for this type of mission, since the fighting will require the enemy to move Infantry into the urban area in order to seize and control key terrain. (See Table 5-1 on page 5-12.)

a. **Task and Purpose.** A well-organized company defense in an urban area—

- Defeats the enemy's attack on the streets and city blocks by using obstacles and fire.
- Destroys the enemy by ambush and direct fire from prepared positions within defensible buildings.
- Clears the enemy from footholds or remains in place for a counterattack.

b. **Reconnaissance and Security.** The execution of the mission will be more effective if the terrain is reconnoitered and obstacles and fire lanes are prepared. The LP/OPs should be supplemented by patrols, mainly during periods of limited visibility, and wire communications should be used. Platoons should be given the mission to provide one LP/OP in order to provide spot reports concerning the size, location, direction and rate of movement, and type of enemy assaulting the company sector or battle position.

c. **Task Organization.** METT-TC factors will determine how the company will be task organized to accomplish the mission. A possible task organization might be:

(1) ***Rifle Platoons.*** Three platoons (one platoon minus a squad) occupy the defensive sector.

(2) ***Reserve.*** Detached squad from one of the rifle platoons. The reserve should be given priority of commitment missions such as reinforcing the fires of the defense, reacting to a danger on the flank, or counterattacking to throw the enemy from a foothold. The biggest threat to the company is for the enemy to gain a foothold and use it to begin clearing buildings. Any foothold should be counterattacked and the enemy must be quickly and violently expelled.

(3) ***Fire Support.*** Company 60-mm mortar and antitank weapons.

(4) ***Company Control.*** An engineer squad, with priority to the company obstacle plan, then reverts to company reserve. Engineers should be controlled at company level. They construct obstacles, prepare access routes, and assist in preparing defensive positions. Additional attachments or OPCON units, such as BFVs and tanks may be placed under company control. For example, a BFV Infantry element can be used to defend a sector or battle position. The BFVs can stay under the control of the platoon sergeant and support by fire and or conduct other missions as determined by the company commander. A platoon or section of tanks attached or OPCON to the company should provide heavy direct-fire support, engage enemy tanks, and support counterattacks. An attached or OPCON tank platoon can initially attack by fire and then revert to a mobile

reserve role. The company executive officer can be used to control a reserve with multiple elements.

d. **Execution.** The defensive forces should ambush on the avenues of approach, cover the obstacles by fire, and prepare a strong defense inside the buildings. Counterattack forces should be near the front of the company sector in covered and concealed positions with an on order mission to counterattack. Rehearsals should be conducted both day and night. Counterattack forces should also be given specific instructions of what their actions will be after the enemy assault has been repelled; for example, stay in sector or revert back to reserve status.

5-26. DEFENSE OF KEY URBAN TERRAIN

An Infantry company may have to defend key urban terrain. This defense may be part of defensive operations or may be an adjunct mission to stability and support operations. In many cases, the mission is characterized by an unclear enemy situation and extremely restrictive ROE. The key terrain may be a public utility, such as gas, electrical, or water plants; a communications center, such as radio and or television; transportation center; a traffic circle; and so forth. When assigned a mission of this type, a company commander may often find his company having to defend a piece of terrain that he would rather not have to occupy. Often the facilities previously described are sited for their centrality of location and convenience and not for the defensibility of the terrain.

a. **Task Organization.** The factors of METT-TC will determine the task organization of the company. Figure 5-19, page 5-38, depicts an Infantry rifle company reinforced with an additional rifle platoon to defend the objective (water purification plant). Additional assets will be given to the company commander as they are requested or assigned, based on mission requirements and availability. In the situation depicted in Figure 5-19, the organic weapons of the Infantry company are sufficient to accomplish the mission. The only additional requirement was for another rifle platoon to defend the objective.

b. **Tasks.** In the situation shown in Figure 5-19, the company commander has determined that in order to properly defend the objective, he needs to deploy platoons on the defensible terrain available. Therefore, he is defending urban terrain (left), high ground (top), and low vegetated terrain (right, bottom). Additionally, it may be necessary to perform some of the tasks listed below:

- Provide inner and outer security patrols.
- Conduct counterreconnaissance.
- Establish LP/OPs.
- Establish checkpoints and roadblocks.
- Conduct civilian control and evacuation.
- Conduct coordination with local authorities.
- Prevent collateral damage.
- Supervise specific functions associated with operation of the facility, such as water purification tests, site inspections, and so forth.

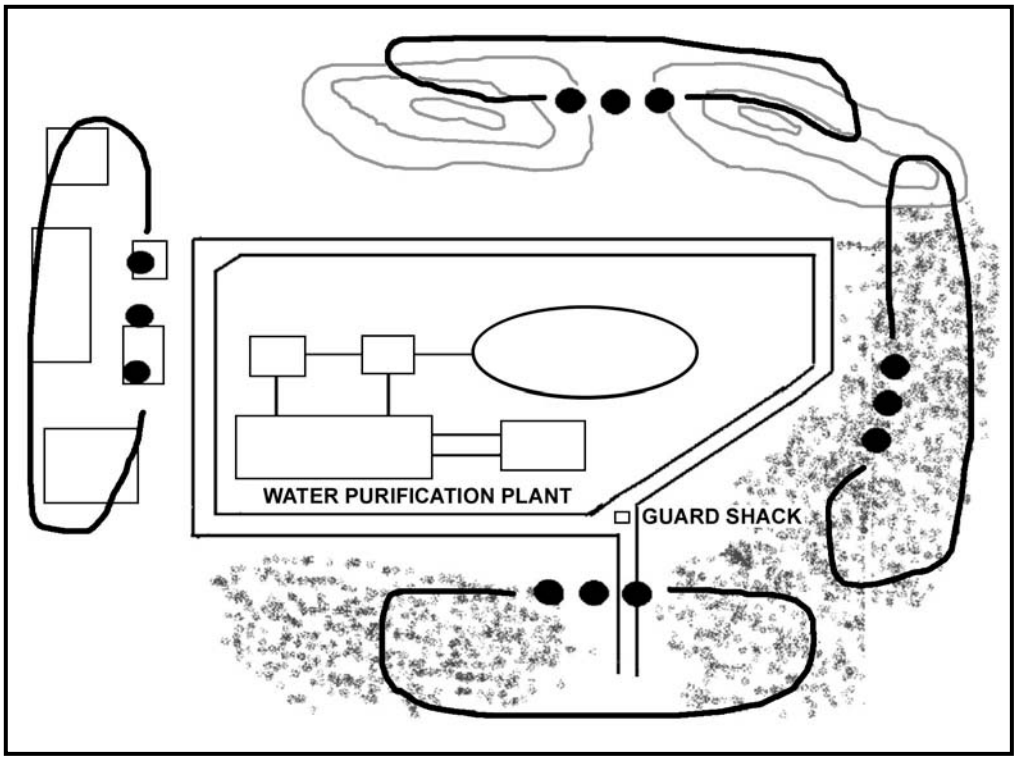

Figure 5-19. Perimeter defense of key terrain

c. **Execution.** The company commander will normally deploy platoons in a perimeter around the objective in order to dominate key terrain and cover the mounted and dismounted avenues of approach into the objective. Machine guns and antitank weapons will be emplaced to cover the dismounted and mounted avenues of approach into the objective, respectively. Wire obstacles will normally be used to restrict and deny entry into the objective area. Obstacles should be covered by fire and rigged with detection devices and trip flares. Antitank and command-detonated mines will be used consistent with the ROE. The company prepares to defend against a direct attack, such as a raid, or sabotage against key facilities within the objective, for example, water filtration system, pump station, and so forth. The commander makes an assessment as to the overall importance of the key facilities within the objective and prioritizes security requirements. The 60-mm mortar section is positioned to provide 360-degree fire support. The AT section is positioned to engage vehicular targets. If the threat does not require the employment of mortars or AT weapons, these sections are given other tasks.

NOTE: IBCT company assets will be positioned using the same considerations.

d. **Other Considerations.** Depending on the mission requirements and threat, the company commander may have to consider the need for the following.

- Artillery and attack helicopter support.
- ADA assets to defend against air attack.
- Engineer assets to construct obstacles.

- Interpreters to assist in the functioning of the facility and operation of the equipment.
- MP, civil affairs, and or PSYOP assets for civilian control and liaison/ coordination with local police and or authorities.
- BFVs or tanks to act as a mobile reserve or reaction force, or integrated into the company plan.

e. **Force Protection.** The company may be required to conduct a perimeter defense as part of force protection, such as defending a friendly base camp on urban terrain. The same techniques of establishing a perimeter defense would be used. The company maintains the appropriate level of security (100, 50, 30 percent, and so forth), consistent with the commander's plan and the enemy situation. Additional tasks may include:

- Setting up roadblocks and checkpoints.
- Searching individuals and vehicles prior to entry into the camp.
- Maintaining a presence as a show of force to the population outside the base camp.
- Conducting inner and outer security patrols.
- Clearing potential threats from any urban terrain that overwatches the base camp.
- Conducting ambushes to interdict any enemy forces moving towards the base camp.
- Restricting access to locations within the base camp. Conducting surveillance of these locations from within or from adjacent structures or positions.
- Conducting reaction force duties inside and outside the perimeter of the camp.

NOTE: See Chapter 14 for detailed information on roadblocks, checkpoints, and searches.

f. **Defense of a Traffic Circle.** An Infantry company may be assigned the mission of defending a key traffic circle in an urban area, or similar terrain, to prevent the enemy from seizing it or to facilitate movement of the battalion task force or other units (Figure 5-20, page 5-40).

(1) The company commander with this mission should analyze enemy avenues of approach into the objective and buildings that dominate those avenues. He should plan direct and indirect fires, consistent with the ROE, on to the traffic circle itself and on the approaches to it. He should also plan for all-round defense of the buildings that dominate the traffic circle to prevent encirclement. The company should prepare as many covered and concealed routes between these buildings as time permits. This makes it easier to mass or shift fires and to execute counterattacks.

(2) Obstacles can also deny the enemy the use of the traffic circle. Obstacle planning, in this case, must take into account whether friendly forces will need to use the traffic circle.

(3) Antitank weapons can fire across the traffic circle if fields of fire are long enough. Tanks should engage enemy armored vehicles and provide heavy direct-fire support for counterattacks. BFVs should engage enemy armored vehicles and provide direct fire to protect obstacles.

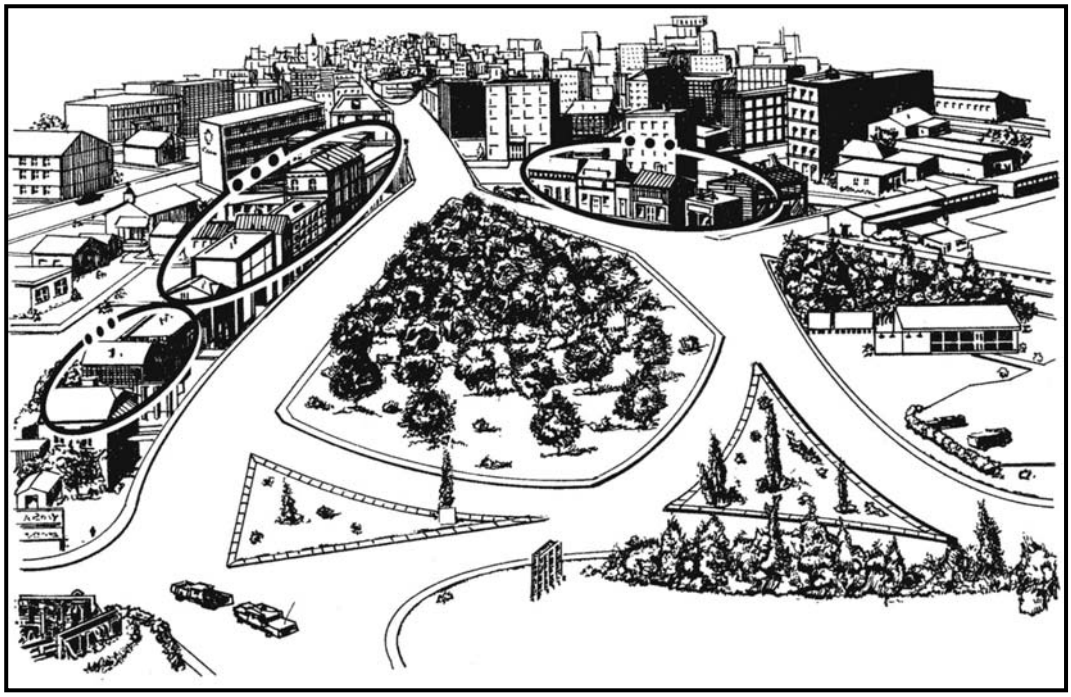

Figure 5-20. Defense of a traffic circle.

5-27. DEFENSE OF AN URBAN STRONGPOINT

A company may be directed to construct a strongpoint as part of a battalion defense (Figure 5-21). In order to do so, it must be augmented with engineer support, more weapons, and CSS resources. A strong point is defended until the unit is formally ordered out of it by the commander directing the defense. Urban areas are easily converted to strongpoints. Stone, brick, or steel buildings provide cover and concealment. Buildings, sewers, and some streets provide covered and concealed routes and can be rubbled to provide obstacles. Also, telephone systems can provide communications.

a. The specific positioning of unit in the strongpoint depends on the commander's mission analysis and estimate of the situation. The same considerations for a perimeter defense apply in addition to the following:

(1) Reinforce each individual fighting position (to include alternate and supplementary positions) to withstand small-arms fire, mortar fire, and artillery fragmentation. Stockpile food, water ammunition, pioneer tools, and medical supplies in each fighting position.

(2) Support each individual fighting position with several others. Plan or construct covered and concealed routes between positions and along routes of supply and communication. Use these to support counterattack and maneuver within the strongpoint.

(3) Divide the strongpoint into several independent, but mutually supporting, positions or sectors. If one of the positions or sectors must be evacuated or is overrun, limit the enemy penetration with obstacles and fires and support a counterattack.

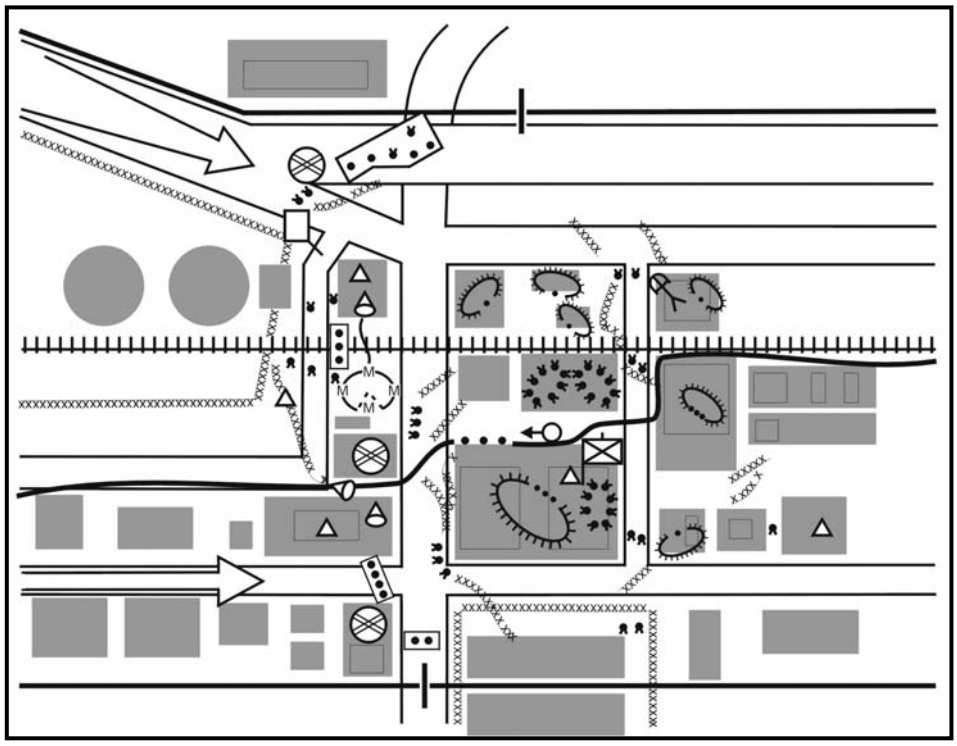

Figure 5-21. Urban strongpoint.

(4) Construct obstacles and minefields to disrupt and canalize enemy formations, to reinforce fires, and to protect the strongpoint from the assault. Place the obstacles and mines out as far as friendly units can observe them, within the strongpoint, and at points in between where they will be useful.

(5) Prepare range cards for each position and confirm them by fires. Plan indirect fires in detail and register them. Indirect fires should also be planned for firing directly on the strongpoint using proximity fuses.

(6) Plan and test several means of communication within the strongpoint and to higher headquarters. These are radio, wire, messenger, pyrotechnics, and other signals.

(7) Improve or repair the strongpoint until the unit is relieved or withdrawn. More positions can be built, routes to other positions marked, existing positions improved or repaired, and barriers built or fixed.

b. A strong point may be part of any defensive plan. It may be built to protect vital units or installations, as an anchor around which more mobile units maneuver, or as part of a trap designed to destroy enemy forces that attack it.

5-28. DELAY

The intent of a delay is to slow the enemy, cause casualties, and stop him, where possible, without becoming decisively engaged. This procedure is done by defending, disengaging, moving, and defending again. A company delay is normally conducted as part of the battalion task force's plan. The delay destroys enemy reconnaissance elements forward of the outskirts of the urban area, prevents the penetration of the urban area, and gains and maintains contact with the enemy to determine the strength and location of the main

attack by trading space for time. Infantry companies are well suited for this operation, because they can take advantage of the cover and concealment provided by urban terrain and inflict casualties on the enemy at close range. Delays are planned by assigning platoon battle positions, platoon sectors, or both. Figure 5-22 depicts a company delay in urban terrain with the company commander assigning platoon battle positions. Routes are planned to each subsequent battle position or within the sector. Routes also are planned to take advantage of the inherent cover and concealment afforded by urban terrain, such as going through and hugging buildings, using shadows, subsurface areas, and so forth.

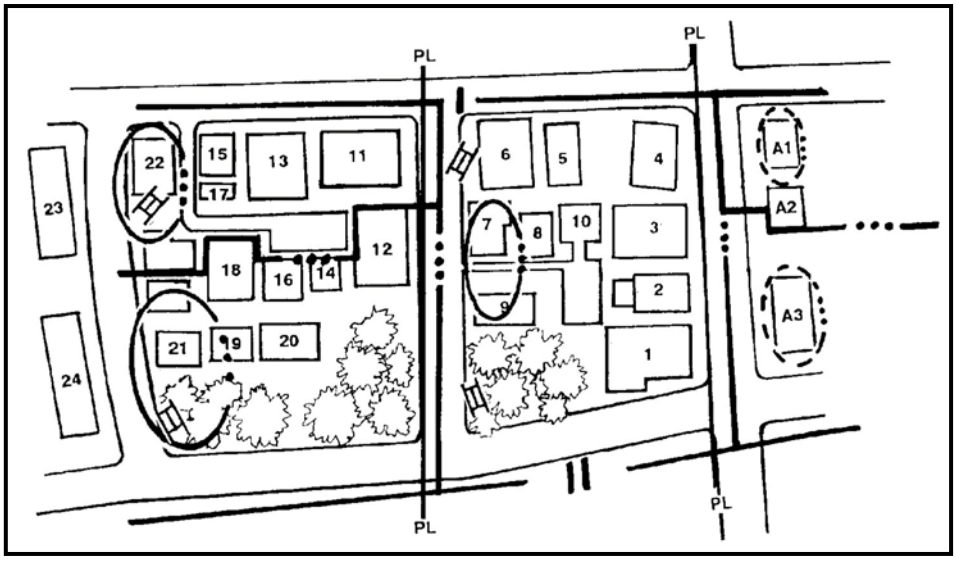

Figure 5-22. Company delay in an urban area.

a. The company's sector should be prepared with obstacles to increase the effect of the delay. Engineers prepare obstacles on main routes but avoid some covered and concealed routes that are known by the friendly troops for reinforcement, displacement, and resupply. These routes are destroyed and obstacles are executed when no longer needed.

b. Antiarmor weapon systems, tanks, and BFVs should be positioned on the outskirts of the urban area to destroy the enemy at maximum range. They should be located in defilade positions or in prepared shelters. They fire at visible targets and then fall back or proceed to alternate positions. Platoons should be assigned sectors from 100 to 300 meters (one to two blocks) wide. If available, they should be reinforced with sensors or GSRs, which can be emplaced on the outskirts or on higher ground to attain the maximum range in the assigned AO. Platoons delay by detecting the enemy early and inflicting casualties on him using patrols, OPs, and ambushes and by taking advantage of all obstacles. Each action is followed by a disengagement and withdrawal. Withdrawals occur on covered and concealed routes through buildings or underground. By day, the defense is dispersed; at night, it is more concentrated. Close coordination and maintaining situational awareness are critical aspects of this operation.

Section VII. PLATOON DEFENSIVE OPERATIONS

In urban areas, buildings provide cover and concealment, limit fields of observation and fire, and restrict the movement of troops and armored vehicles. This section covers the key planning considerations, weapons selection, preparations, and the construction of a platoon defensive position on urbanized terrain.

5-29. PLANNING THE DEFENSE

Planning the defense begins when the leader receives a mission or determines a requirement to defend such as during consolidation and reorganization after an assault. The leader must use terrain wisely and designate a point of main effort. He chooses defensive positions that force the enemy to make costly attacks or conduct time-consuming maneuvers to avoid them. A position that the enemy can readily avoid has no defensive value unless the enemy can be induced to attack it. The defense, no less than the offense, should achieve surprise. As platoon leaders conduct their troop-leading procedures, they also have to consider civilians, ROE, limited collateral damage, and coordination with adjacent units to eliminate the probability of fratricide. Maneuver, methods, and courses of action in establishing defensive positions in and around urbanized terrain are METT-TC intensive.

a. **Focus.** The squad's and platoon's focus for defending in an urban area is the retention of terrain. As with most defensive scenarios, the squad and platoon will defend as part of the company. The platoon will either be given a sector to defend or a battle position to occupy and the platoon leader must construct his defense within the constraints given to him. See Sections II and III for other planning considerations.

b. **Strongpoint.** One of the most common defensive tasks a platoon will be given during urban operations is to conduct a strongpoint defense of a building, part of a building, or a group of small buildings (see paragraph 5-27 and Figure 5-21). The platoon's defense is normally integrated into the company's mission. The platoon leader organizes the strongpoint defense by positioning personnel and their weapons systems to maximize their capabilities. Supporting fires are incorporated into the overall defensive plan to provide depth to the engagement area.

(1) The platoon leader organizes the defense into a series of individual, team, and squad fighting positions located to cover avenues of approach and obstacles, and to provide mutual support in order to repel the enemy advance. Snipers should be positioned to support the commander's intent and to allow for the opportunity to engage C2 and key targets.

(2) Depending on the length of the mission, the platoon should stockpile munitions (especially grenades), food and water, medical supplies, and fire-fighting equipment.

5-30. PRIORITIES OF WORK AND DEFENSIVE CONSIDERATIONS

A critical platoon- and squad-level defensive task during defensive urban operations is the preparation of fighting positions. General defensive considerations in urban terrain are similar to any other defensive operations. Fighting positions in urban areas are usually constructed inside buildings and are selected based on an analysis of the area in which the building is located, the individual characteristics of the building, and the characteristics of the weapons system.

a. **Priorities of Work.** The priorities of work are the same as those listed in paragraph 5-13. Specific considerations at platoon level are discussed below.

(1) Select key weapons and crew-served weapon positions to cover likely mounted and dismounted avenues of approach. To cover armored avenues of approach, position antiarmor weapons inside buildings with adequate space and ventilation for backblast (on upper floors, if possible, for long-range shots). Position machine guns/M249s to cover dismounted avenues of approach. Place them near ground level to increase grazing fires. If ground rubble obstructs grazing fires, place machine guns/M249s in the upper stories of the building. Ensure weapons are mutually supporting and are tied in with adjacent units.

(2) Ensure the position is free of noncombatants. Remove them from the area of operations before occupying the position.

(3) Clear fields of fire. Prepare loopholes, aiming stakes, sector stakes, and TRP markings. Construct positions with overhead cover and camouflage (inside and outside).

(4) Identify and secure subsurface avenues of approach (sewers, basements, stairwells, and rooftops).

(5) Stockpile ammunition, food, fire-fighting equipment, and drinking water.

(6) Construct barriers and emplace obstacles to deny the enemy any access to streets, underground passages, and buildings, and to slow his movement. Integrate barriers and or obstacles with key weapons. Cover all barriers and obstacles by fire (both direct and indirect) and or observation. (See Chapter 8 for more information concerning obstacles.)

(7) Improve and mark movement routes between positions as well as to alternate and supplementary positions. Improve routes by digging trenches, if possible; using sewers and tunnels; creating entry holes; and positioning ropes and ladders for ascending and descending.

b. **Considerations.** The following must be considered when establishing a defensive position.

(1) ***Security.*** The first priority is establishing all-around security. Each position should have at least one soldier providing security during all preparations.

(2) ***Protection.*** Select buildings that provide protection from direct and indirect fires. Reinforced concrete buildings with three or more floors provide suitable protection while buildings constructed of wood, paneling, or other light material must be reinforced to provide sufficient protection. One- and two-story buildings without a strongly constructed cellar are vulnerable to indirect fires and require construction of overhead protection for each fighting position. If possible, use materials gathered from the immediate area to build the overhead cover.

(3) ***Dispersion.*** A platoon position should not be established in a single building when it is possible to occupy two or more buildings that permit mutually supporting fires. A position without mutual support in one building is vulnerable to bypass, isolation, and subsequent destruction from any direction.

(4) ***Concealment.*** Do not select buildings that are obvious defensive positions (easily targeted by the enemy). If the requirements for security and fields of fire dictate the occupation of exposed buildings, the platoon will be required to add reinforcement materials to the building to provide suitable protection to the troops inside.

(5) ***Fields of Fire.*** To prevent isolation, individual and crew-served weapons positions should be mutually supporting and have fields of fire in all directions. When

clearing fields of fire, try to maintain the natural appearance of the surrounding area if possible. Removing objects that interfere with the gunner's field of vision may be necessary.

(6) ***Covered Routes.*** Defensive positions should have at least one covered and concealed route that allows resupply, medical evacuation, reinforcement, or withdrawal from the building without being detected, or at least provides protection from direct fire weapons. The route can be established using underground systems, communications trenches, or walls and buildings that allow covered movement.

(7) ***Observation.*** Positions in buildings should permit observation of enemy avenues of approach and adjacent defensive sectors. Upper stories offer the best observation but also attract enemy fire.

(8) ***Fire Hazard.*** If possible, avoid selecting positions in buildings that are obvious fire hazards. If these flammable structures must be occupied, reduce the danger of fire by wetting down the immediate area, laying an inch of sand on the floors, and providing fire extinguishers and fire fighting equipment. Ensure that each defender is familiar with the withdrawal routes and that they have the opportunity to rehearse their withdrawal using these planned routes in the event of fire.

(9) ***Tag Lines.*** Tag lines are a flexible handhold used to guide individuals along a route. Tag lines aid in navigation and movement when operating in confined spaces such as buildings, tunnel systems and caverns where visibility is limited and sense of direction can be lost. When preparing defensive positions inside buildings, tag lines can be run from each fighting position back to the command post, or along an egress route. These lines can be made of rope, string, cable, wire and so forth. The most effective item to be used as a tag line is WD-1A communications wire. Along with serving as a tag line it can be used as a primary means of communication between individual fighting positions and leader's positions.

(10) ***Time.*** Time is the one element in METT-TC that the platoon and its leaders have no control over. The most important factor to consider when planning the use of time is to provide subordinate leaders with two-thirds of all available time. The unit TACSOP provides the leaders with their priorities when time does not allow for detailed planning. The platoon will complete defensive preparation IAW the TACSOP and the commander's operational priorities.

c. **Preparation.** Preparation of the platoon's individual fighting positions will normally be conducted inside the buildings the platoon has been assigned to defend. As with all defensive positions, the leader's first task is to establish security. This will normally be in the form of an observation post located within the protection of the platoon's direct fire weapons. The OP should be manned with at least two personnel. Leaders then assign individual or two-man positions to adequately cover his sector. The squad leader will position himself to best control his squad. The platoon leader will designate the level of security to be maintained. The remaining personnel will continue to work preparing the defense. The leaders will continue to make improvements to the defense as time permits. (The preparation of fighting positions is discussed in detail in Chapter 3.)

d. **Other Typical Tasks.** Additional defensive preparation tasks may be required in basements, on ground floors, and on upper floors.

(1) ***Basements and Ground Floors.*** Basements require preparation similar to that of the ground floor. Any underground system not used by the defender that could provide enemy access to the position must be blocked.

(a) *Doors*. Unused doors should be locked or nailed shut, as well as blocked and reinforced with furniture, sandbags, or other field expedients.

(b) *Hallways*. If not required for the defender's movement, hallways should be blocked with furniture and tactical wire (Figure 5-23).

(c) *Stairs*. Unused stairs should be blocked with furniture and tactical wire, or removed. If possible, all stairs should be blocked (Figure 5-23), and ladders should be used to move from floor to floor and then removed.

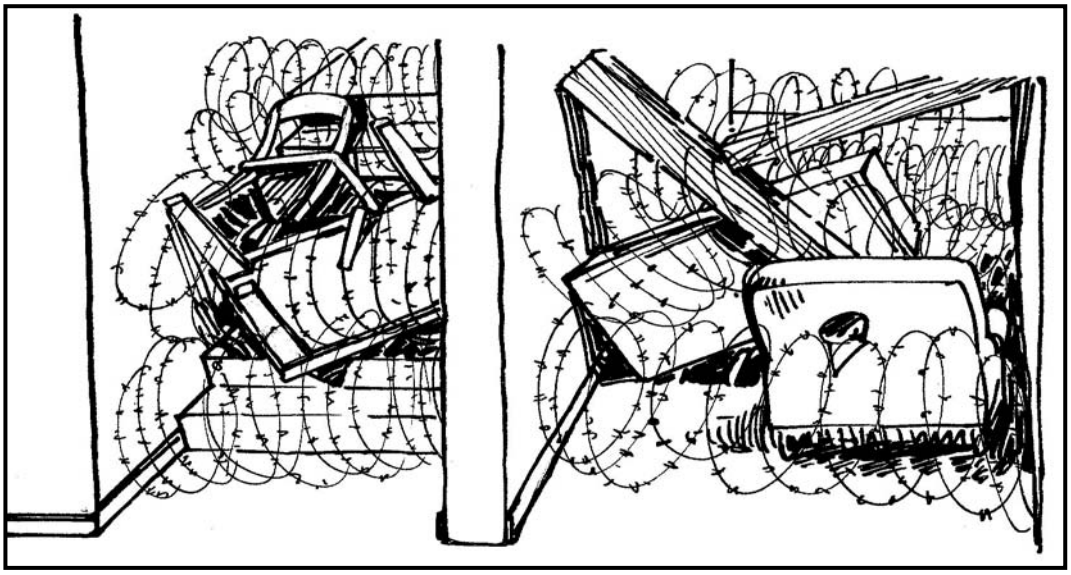

Figure 5-23. Blocking stairs and doorways.

(d) *Windows*. Remove all glass. Block unused windows with boards or sandbags to prevent observation and access.

(e) *Floors*. Make fighting positions in the floors. If there is no basement, fighting positions can give additional protection from heavy direct-fire weapons.

(f) *Ceilings*. Erect support for ceilings that otherwise would not withstand the weight of fortified positions or rubble from upper floors (Figure 5-24).

(g) *Unoccupied Rooms.* Block rooms not required for defense with tactical wire.

(2) ***Upper Floors.*** Upper floors require the same preparation as ground floors. Windows need not be blocked, but should be covered with wire mesh, canvas, ponchos, or other heavy material, to prevent grenades from being thrown in from the outside. The covering should be loose at the bottom to permit the defender to drop grenades.

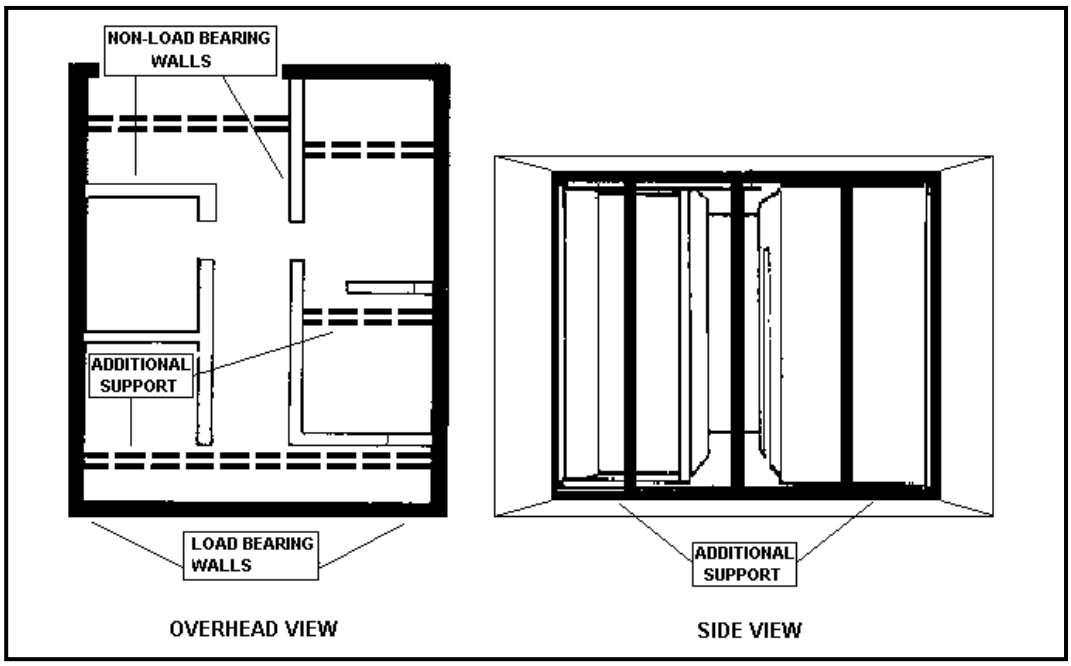

Figure 5-24. Reinforcing ceilings.

(3) ***Interior Routes.*** Routes are required that permit defending fire teams and squads to move within the building (Figure 5-25) to engage enemy forces from any direction. Plan and construct escape routes to permit rapid evacuation of a room or a building. Mouseholes should be made through interior walls to permit movement between rooms. Such holes should be marked to enable defenders to easily locate them during day and night conditions. Brief all personnel as to where the various routes are located. Conduct rehearsals so that everyone becomes familiar with the routes.

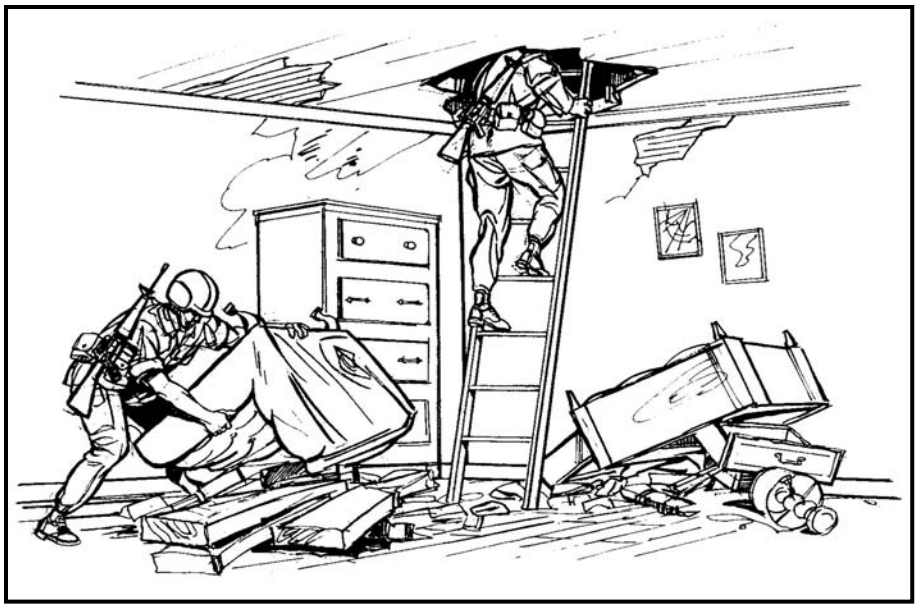

Figure 5-25. Movement routes within building.

(4) ***Fire Prevention.*** Buildings that have wooden floors and rafter ceilings require extensive fire prevention measures. Cover the attic and other wooden floors with about one to two inches of sand or dirt, and position buckets of water for immediate use. Place fire-fighting materials (dirt, sand, fire extinguishers, and blankets) on each floor for immediate use. Fill water basins and bathtubs as a reserve for fire fighting. Turn off all electricity and gas. If available, use any existing fire extinguishers found in buildings.

(5) ***Communications.*** Conceal radio antennas by placing them among civilian television antennas, along the sides of chimneys and steeples, or out of windows that would direct FM communications away from enemy early-warning sources and ground observation. Lay wire through adjacent buildings or underground systems or bury them in shallow trenches. Lay wire communications within the building through walls and floors.

(6) ***Rubbling.*** See paragraph 5-12c(8).

(7) ***Rooftops.*** Platoons must position obstacles on the roofs of flat-topped buildings to prevent helicopters from landing and to deny troops from gaining access to the building from the roof. Cover rooftops that are accessible from adjacent structures with tactical wire or other expedients and guard them. Block entrances to buildings from rooftops if compatible with the overall defensive plan. Remove or block the structure on the outside of a building that could aid the attacker in scaling the building to gain access to upper floors or to the rooftop.

(8) ***Obstacles.*** Position obstacles adjacent to buildings to stop or delay vehicles and infantry. To save time and resources in preparing the defense, platoon leaders must allow the use of all available materials, such as automobiles, railcars, and rubble, to create obstacles. Vehicles can be tied together by running poles through their windows. Leaders must supervise the construction of obstacles to ensure they are tied to buildings and rubble areas to increase effectiveness, and to canalize the enemy into engagement areas selected by the leader. Direct support engineers can provide advice and resources as to the employment of obstacles and mines.

(9) ***Fields of Fire.*** The field of fire is the area a weapon or group of weapons may cover effectively with fire from a given position. After the defensive positions are selected and the individuals have occupied their assigned positions, they will determine what clearance is necessary to maximize their field of fire. Leaders and individuals must view fields of fire from the fighting position and from the view of the enemy. Only selective clearing will be done to improve the field of fire. If necessary, the position will be relocated to attain the desired field of fire. Within the field of fire leaders will designate for each weapons system a primary and an alternate sector of fire. Each weapons system has unique requirements for its field of fire, and the platoon and squad leaders must ensure these requirements are met. Each position is checked to ensure that the fields of fire provide the maximum opportunity for target engagement and to determine any dead space within the sector of fire.

e. **Antitank Weapons Positions.** Employ antitank weapons in areas that maximize their capabilities in the urban area. The lack of a protective transport could require the weapon to be fired from inside a building, from behind the cover of a building, or from behind the cover of protective terrain. Leaders should make every effort to employ antitank weapons in pairs so that the same target can be engaged from different positions. Another consideration is security for the crew and system. This is necessary to allow the gunner to concentrate on locating and engaging enemy armor.

f. **Sniper Positions.** Snipers give the platoon a force multiplier by providing an overwatch capability and by engaging enemy C2 targets. Snipers normally operate in two-man teams, which provides the shooter with security and another set of eyes for observation and to locate and identify targets. Leaders should allow the snipers to select their own positions for supporting the defense. An effective sniper organization can trouble the enemy far more than its cost in the number of friendly soldiers employed. Snipers deploy in positions where they are not easily detected. and where they can provide the most benefit. (See Chapter 6.)

5-31. CONDUCT OF THE DEFENSE

The conduct of the defense in an urban area is similar to the conduct of the defense in any other environments.

a. **Occupy Positions.** After planning and preparing for the defense, the platoon moves to the defensive positions using prescribed movement techniques. To establish the defense the platoon will stop short of the actual site and conduct a reconnaissance to ensure the area is free of enemy or noncombatants, and to identify individual and crew served weapons positions. The platoon then establishes security and begins to occupy positions. Once the platoon has occupied, the priorities of work will be performed as established by the platoon leader.

b. **Locate the Enemy.** The platoon establishes and maintains OPs and conducts security patrols as directed by the commander. OPs, patrols, and individual soldiers look and listen using night vision devises, binoculars, and early warning systems to detect the enemy's approach.

c. **Action on Contact.** Once the enemy is detected, the platoon leader—

- Alerts the platoon sergeant, squad leaders and forward observer.
- Reports the situation to the company commander.
- If possible, calls in OP's.
- Initiates indirect fire mission when enemy is at maximum range.
- Initiates long-range direct fires on command.

d. **Fight the Defense.** Determining that the platoon can destroy the enemy from their current positions, the platoon leader—

- Continues with indirect and direct fire engagements.
- Controls fires using standard commands, pyrotechnics, and other prearranged signals.
- Initiates FPF as the enemy closes on the protective wire.

The platoon continues to defend until the enemy is repelled or ordered to disengage.

5-32. CONSOLIDATION AND REORGANIZATION

Once the enemy has been repelled, the order to consolidate and reorganize will be given by the platoon leader.

a. The platoon will—

- Reestablish security.
- Reman key weapons.
- Provide first aid and prepare to evacuate casualties.
- Repair damaged obstacles and replace mines and early warning devices.
- Redistribute ammunition and supplies.

- Relocate key weapons, and adjust positions for mutual support.
- Reestablish communications.
- Prepare for a renewed enemy attack.

b. Squad leaders provide ammunition, casualties and equipment (ACE) report to the platoon leader.

c. The platoon leader—

- Reestablishes the platoon chain of command.
- Provides a platoon ACE report to the commander.

d. The platoon sergeant coordinates for resupply and supervises casualty evacuation.

e. The platoon quickly reestablishes OP's, resumes patrolling and continues to improve the defense.

5-33. COUNTERATTACK

A platoon may be given the mission to counterattack in order to retake a defensive position or key point, to destroy or eject an enemy foothold, or to stop an enemy attack by hitting his flank and forcing him to stop his movement and establish a hasty defense.

a. A platoon counterattack is planned at company level to meet each probable enemy penetration. They must be well coordinated and aggressively executed. Counterattacks should be directed at the enemy's flank and supported with direct and indirect fires.

b. If tank support is available, it should be used to spearhead the counterattack. Tanks have the mobility, firepower, and survivability to quickly execute the counterattack mission. Tanks are ideally suited for destroying enemy armor, heavy weapons, and fortifications with their main gun and engaging enemy infantry with their coaxial machine gun. This capability will assist the infantry in executing their part of the mission.

c. The counterattack mission is planned and coordinated as part of the defensive operation.

(1) Considerations for counterattack planning may include, but are not limited to, the following:

- Location of friendly units.
- Location of noncombatants.
- Critical location in the defense that, if threatened, could collapse.
- Size and type of force required to defeat and eject the enemy.
- Where in the defense do we want the enemy to think he is successful?
- Who determines and initiates the execution of the counterattack?

(2) Control measures needed for the conduct of the counterattack include:

- Assembly area or blocking position.
- Start point, route, and release point, if necessary.
- Attack position.
- Line of departure or line of contact.
- Zone of action, direction of attack, and or axis of advance.
- Objective.
- Limit of advance.

5-34. DEFENSE AGAINST ARMOR

Urban terrain is well suited to an infantry's defense against mechanized infantry and armored forces. Mechanized infantry and armored forces will attempt to avoid the dense, canalizing urban areas but may be forced to pass through them. Well-trained infantry can inflict heavy casualties on such forces.

a. Urban areas have certain traits that favor antiarmor operations.
   - Rubble in the streets can be used to block enemy vehicles, conceal mines, and cover and conceal defending infantry.
   - The buildings restrict and canalize armor maneuver, fields of fire, and communications, reducing the enemy's ability to reinforce.
   - Buildings provide cover and concealment for defending infantry.
   - Rooftops, alleys, and upper floors provide good firing positions.
   - Sewers, drains, and subways provide underground routes for infantry forces.

b. When preparing for antiarmor operations in urban areas leaders should:

(1) ***Choose a good engagement area.*** Enemy tanks should be engaged where most restricted in their ability for mutual support. The best way for infantrymen to engage tanks is one at a time, so they can destroy one tank without being open to the fires of another. Typical locations include narrow streets, turns in the road, "T" intersections, bridges, tunnels, split-level roads, and rubbled areas. Less obvious locations can include using demolitions or mines to create obstacles.

(2) ***Select good weapons positions.*** The best weapons positions are places where the tank is weakest and the infantry is most protected. A tank's ability to see and fire is limited, to the rear and flanks, if the tanks are buttoned up. Figure 5-26, on page 5-52, shows the weapons and visual dead space of a buttoned-up tank against targets located at ground level and overhead. The TRPs should be clearly visible through the gunner's sights and resistant to battle damage (for example, large buildings or bridge abatements, but not trees or cars). The leader of the antiarmor operation should specify what type of engagement should be used such as frontal, crossfire, or depth. Frontal fire is the least preferred since it exposes the gunner to the greatest probability of detection and is where armor is the thickest. (For more information on target engagement techniques, see FM 7-91 and or FM 23-1.)

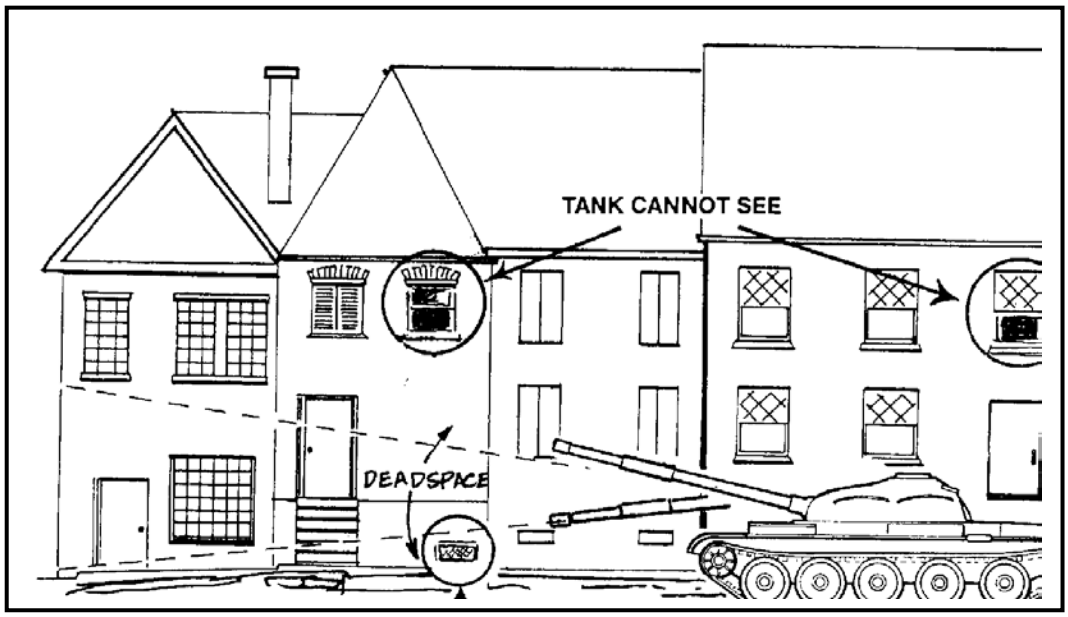

Figure 5-26. Tanks cannot fire at close-range, street-level, and overhead targets.

(a) The best places to fire on tanks from the dismounted infantry perspectives are at the flanks and rear at ground level or at the top of tanks if the force is in an elevated position in a building (See Chapter 11 for minimum arming distance). A suitable antiarmor defense might be set up as shown in Figure 5-27.

(b) The best place to engage a tank from a flank is over the second road wheel at close range. This can be done using a corner so the tank cannot traverse the turret to counterattack.

(c) For a safe engagement from an elevated position, infantrymen should engage the tank from a range three times the elevation of the weapons.

(d) To engage at a longer range is to risk counterfire since the weapon's position will not be in the tank's overhead dead space. Overhead fire at the rear or flank of the tank is even more effective. Alternate and supplementary positions should be selected to enforce all-round security and to increase flexibility.

(3) ***Coordinate target engagement.*** The first task of the tank-killing force is to force the tanks to button up using all available direct and indirect fire because tanks are most vulnerable when buttoned up. The next task is to coordinate the fires of the antitank weapons so if there is more than one target in the engagement area, all targets are engaged at the same time.

c. Often armored vehicles are accompanied by infantry in built-up areas so antiarmor weapons must be supported by an effective all-round antipersonnel defense (Figure 5-28).

d. At a planned signal (for example, the detonation of a mine) all targets are engaged at the same time. If targets cannot be engaged simultaneously, they are engaged in the order of the most dangerous first. Although tanks present the greatest threat, threat armored personnel carriers (APCs) are also dangerous because their infantry can

dismount and destroy friendly antiarmor positions. If the friendly force is not secured by several infantrymen, priority of engagement might be given to threat APCs.

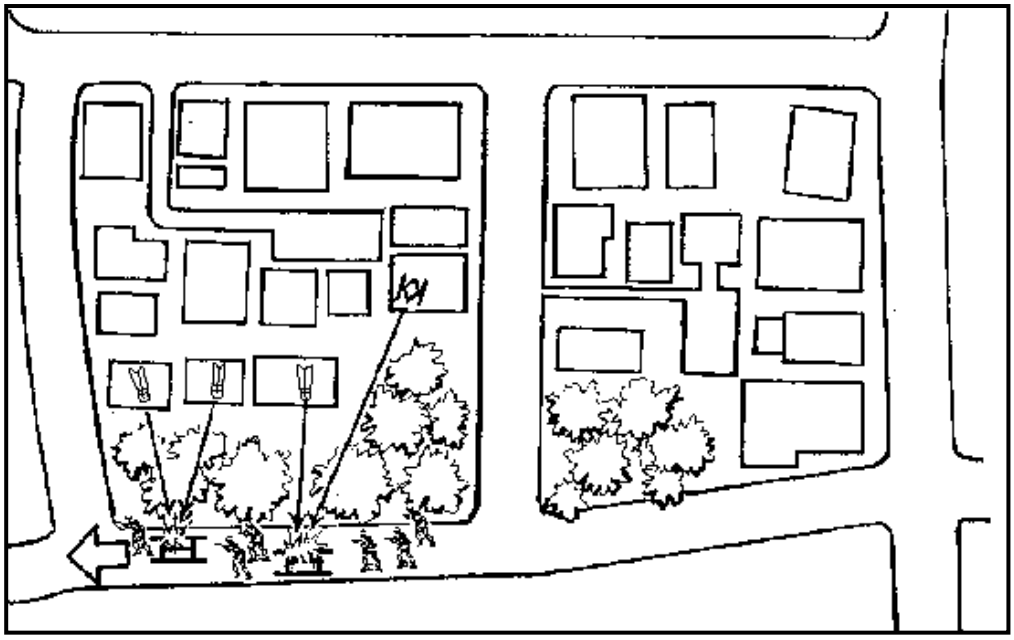

Figure 5-27. A platoon's antiarmor defense.

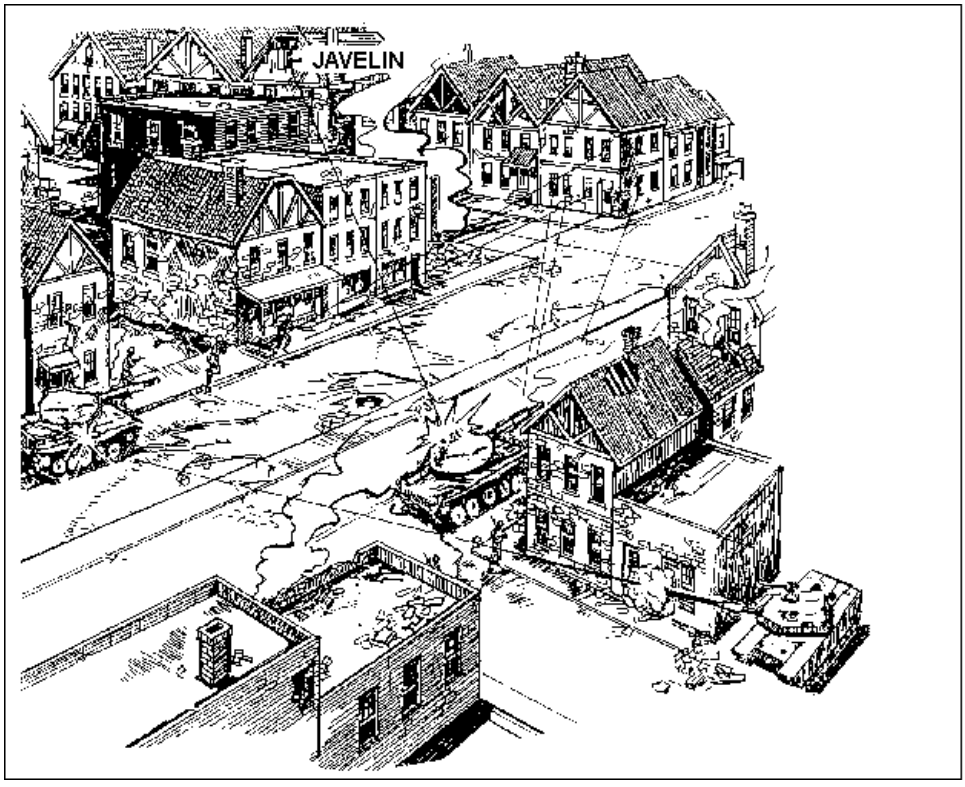

Figure 5-28. Coordinated antiarmor ambush.

5-35. CONDUCT OF ARMORED AMBUSH

A rifle company can use an attached tank platoon to conduct an armored ambush in a built-up area (Figure 5-29). To do so, the tank platoon should be reinforced with a BFV and one or two squads from the rifle company. The ambush can be effective against enemy armor if it is conducted in an area cleared and reconnoitered by friendly forces.

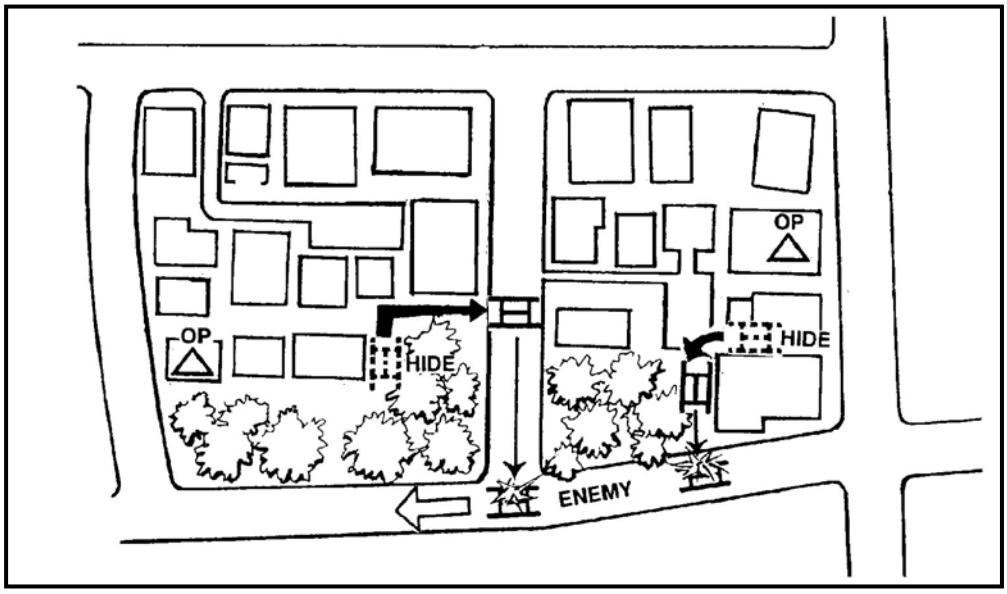

Figure 5-29. Armored ambush.

a. The ambushing tank platoon must know the area. The operation involves maneuver on a road network that is free of obstacles. Obstacles outside the ambush area can be used to canalize and delay the enemy.

b. The ambushing tanks should be located in a hide position about 1,000 meters from the expected enemy avenue of approach. A security post, located at a choke point, observes and reports the approach, speed, security posture, and activity of the enemy. This role is assigned to scouts, if available, or Infantrymen who use the BFV to move from OP to OP; or a series of dismounted OPs are established. When the enemy is reported at a trigger point or TRP, the tank platoon leader knows how much he must move his tanks to execute the ambush.

c. Tanks move quickly from their hide positions to firing positions, taking advantage of all available concealment. They try for flank shots on the approaching enemy at an average range of 300 to 400 meters. These ranges do not expose tanks to the enemy infantry. Once the enemy is engaged, tanks break contact and move to a rally point with close security provided by an infantry squad and moves to a new ambush site.