CHAPTER 1 INTRODUCTION

"The rapid growth of the number and size of urban centers, especially in regions of political instability, increases the likelihood that US forces will be called upon to conduct MOUT."

Defense Science Board, October 1996

It is estimated that by the year 2010, seventy-five percent of the world's population will live in urban areas. Urban areas are expected to be the future battlefield and combat in urban areas cannot be avoided. This manual provides commanders, leaders, and staffs at brigade level and below with a discussion of the principles of urban operations and tactics, techniques, and procedures for fighting in urban areas.

Section I. GENERAL CONSIDERATIONS

Urban operations (UO) are not new to the US Army. Throughout its history the Army has fought an enemy on urban terrain. What **is** new is that urban areas and urban populations have grown significantly during the late twentieth century and have begun to exert a much greater influence on military operations. The worldwide shift from a rural to an urban society and the requirement to transition from combat to stability and support operations and vice-versa have affected the US Army's doctrine. The brigade will be the primary headquarters around which units will be task-organized to perform UO. Companies, platoons, and squads will seldom conduct UO independently, but will most probably conduct assigned missions as part of a battalion task force urban operation. This section provides the necessary background information that facilitates an understanding of how higher level commanders plan and conduct UO.

1-1. DEFINITIONS

Terms specific to UO are defined herein.

a. **Urban Operations.** UO are operations planned and conducted in an area of operations (AO) that includes one or more urban areas. An urban area consists of a topographical complex where man-made construction or high population density is the dominant feature. UO usually occur when—

- The assigned objective lays within an urban area and cannot be bypassed.
- The urban area is key (or decisive) in setting and or shaping the conditions for current or future operations.
- An urban area is between two natural obstacles and cannot be bypassed.
- The urban area is in the path of a general advance and cannot be surrounded or bypassed.
- Political or humanitarian concerns require the control of an urban area or necessitate operations within it.
- Defending from urban areas supports a more effective overall defense or cannot be avoided.

• Occupation, seizure, and control of the urban area will deny the threat control of the urban area and the ability to impose its influence on both friendly military forces and the local civilian population. Therefore, friendly forces can retain the initiative and dictate the conditions for future operations.

b. **METT-TC.** The tactics, techniques and procedures (TTP) the commander selects for each mission, whether in open or urban terrain, are always dependent upon the factors of mission, enemy, terrain, troops, and time available. Traditionally, the acronym "METT-T" has been used to help leaders remember this set of factors as they plan a mission. An effect of the increasing importance of urban areas is the addition of civil considerations (METT-TC).

c. Urban Combat. These offensive and defensive operations are the part of UO that include a high density of Infantry-specific tasks. Urban combat operations are conducted to defeat an enemy on urban terrain who may be intermingled with noncombatants. Because of this intermingling, and the necessity to limit collateral damage, the rules of engagement (ROE) and the restrictions placed on the use of combat power may be more restrictive than under other combat conditions.

d. **Categories of Urban Areas.** An urban area is a concentration of structures, facilities, and people that form the economic and cultural focus for the surrounding area. Operations are affected by all five categories of urban areas. Cities, metropolises, and megalopolises with associated urban sprawl cover hundreds of square kilometers. Brigades and below normally operate in these urban areas as part of a larger force. Extensive combat in these urban areas involves units of division level and above.

- *Villages (population of 3,000 inhabitants or less).* The brigade's area of operations (AO) may contain many villages. Battalions and companies bypass, move through, defend from, and attack objectives within villages as a normal part of brigade operations.
- Towns (population of over 3,000 to 100,000 inhabitants and not part of a major urban complex). Operations in such areas normally involve brigades or divisions. Brigades may bypass, move through, defend in, or attack enemy forces in towns as part of division operations.
- *City (population over 100,000 to 1 million inhabitants).*
- *Metropolis (population over 1 million to 10 million inhabitants).*
- Megalopolis (population over 10 million inhabitants).

e. **Conditions of Urban Operations**. Due to political and societal changes that have taken place in the late twentieth century, advances in technology, and the Army's growing role in maintaining regional stability, UO is conducted across the full spectrum of offense, defense, stability, and support. The full spectrum of UO will affect how units must plan and execute their assigned missions. The enemy's actions significantly affect the conditions of UO, which may transition from one condition to another rapidly. Units may be conducting operations under different conditions at two locations at the same time. The following definitions of the three general conditions of UO provide clarity, focus, and a mental framework for commanders and leaders conducting tactical planning for UO.

(1) Urban Operations Under Surgical Conditions. This condition is the least destructive and most tightly focused of all the conditions of UO. Operations conducted under surgical conditions include special-purpose raids, small precision strikes, or

small-scale personnel seizures or arrests, focused psychological or civil affairs operations, or recovery operations. They may closely resemble US police operations by special weapons and tactics (SWAT) teams. They may even involve cooperation between US forces and host nation police. Though conventional units may not be directly involved in the actual operation, they may support it by isolating the area or providing security or crowd control.

(2) *Urban Operations Under Precision Conditions.* Under precision conditions, either the threat is thoroughly mixed with noncombatants or political considerations require the use of combat power to be significantly more restrictive than UO under high-intensity conditions. Infantry units must routinely expect to operate under precision conditions, especially during stability and support operations.

(a) UO under precision conditions normally involve combat action, usually involving close combat. Some of this combat can be quite violent for short periods. It is marked, however, by the conscious acceptance by US forces of the need to focus and sometimes restrain the combat power used. The commander may bring overwhelming force to bear, but only on specific portions of the urban area occupied by the threat. He may choose different TTP in order to remain within the bounds of the more restrictive ROE. Tighter ROE demands strict accountability of individual and unit actions.

(b) When preparing for UO under precision conditions, commanders and leaders must realize that not only may the ROE change, but the TTP may change also. These changes require that soldiers be given time to train for the specific operation. For example, when clearing a room, units may modify the procedure of first throwing a grenade (fragmentation, concussion, stun) into the room before entering. This procedure may be done to lessen the possible casualties among noncombatants interspersed with the enemy. (See Chapter 3 for more information.)

(3) Urban Operations Under High-Intensity Conditions. These conditions include combat actions against a determined enemy occupying prepared positions or conducting planned attacks. UO under high-intensity conditions require the coordinated application of the full combat power of the joint combined arms team. Infantry units must be prepared at all times to conduct violent combat under conditions of high-intensity UO.

(a) An Infantry unit's mission is normally to seize, clear, or defend urban terrain, engaging and defeating the enemy by using whatever force is necessary. Although the changing world situation may have made high-intensity UO less likely, it represents the high end of the combat spectrum, and units must be trained for it.

(b) Urban combat under high-intensity conditions is the most stressful of all operations in urban areas and can be casualty-intensive for both sides. Even though the fully integrated firepower of the joint combined arms team is being used, commanders must still prevent unnecessary collateral damage and casualties among noncombatants.

f. **Stability Operations and Support Operations.** The Army has further categorized military operations other than war (MOOTW) as stability and support operations. Units conduct these operations, which are normally short of actual combat, to support national policy. Recent examples include famine relief operations in Mogadishu, Somalia; evacuation of noncombatants in Monrovia, Liberia; and peace enforcement in Bosnia.

(a) During a stability or support operation, units perform many activities not necessarily contained in their mission-essential task list (METL). Essentially, the unit

accomplishes these activities through execution of tactical missions, such as security patrols, establishing roadblocks and checkpoints, base defense, and so forth.

(b) While stability and support operations can occur anywhere, they will most likely occur in an urban environment. These operations can resemble UO under precision conditions and can easily transition into combat operations. (Additional TTP and lesson plans are contained in Chapter 14 of TC 7-98-1, Stability and Support Training Support Package.)

g. Confusion and Crossover Between Conditions. As in Mogadishu, many types of operations may occur at the same time and certain types of operations can easily be transformed into others by enemy actions. The specific type of conditions may not have much meaning to the individual soldier, but the ROE must be understood and adhered to by all.

1-2. FULL SPECTRUM OPERATIONS/URBAN OPERATIONS CONCEPT

The UO are conducted within the operational framework of decisive, shaping, and sustaining operations (FM 3-0[FM 100-5]). Army units will conduct offensive, defensive, stability, and support (ODSS) operations within the operational framework shown in Figure 1-1. These operations comprise the spectrum of UO that a brigade must be prepared to conduct (Figure 1-2).

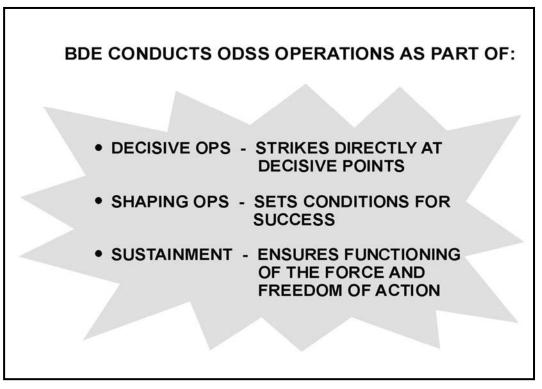


Figure 1-1. Operational framework.

- a. Army operational commanders assigned to conduct UO-
 - Continually *assess* the urban environment to determine effects on operations.
 - Conduct *shaping* operations that emphasize isolation and set the conditions for decisive operations.
 - *Dominate* through simultaneous and or sequential operations that establish and maintain preeminent military control over the enemy, geographical area, or population.
 - Plan for and execute *transitions* between mission types and forces, and ultimately to the control of a non-Army agency.

b. Brigades must plan for and be prepared to conduct UO within the operational concept shown in Figure 1-2, which depicts the potential simultaneity of UO. Brigades must be prepared to transition from one type of ODSS operation to another. How brigades prepare for and execute ODSS operations will be determined by the factors of METT-TC. (Within mission considerations, the ROE will have significant importance.)

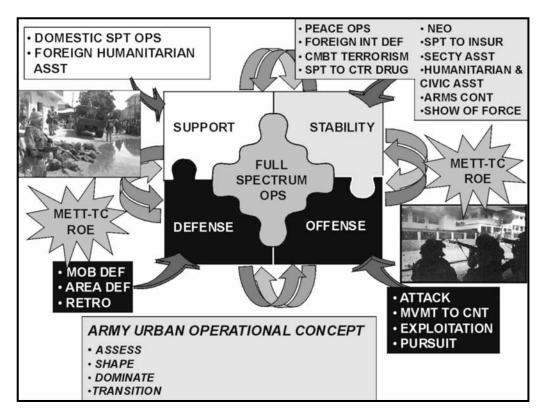


Figure 1-2. UO spectrum of operations/operational concept.

1-3. TACTICAL CHALLENGES

Companies, platoons and squads do not normally operate independently while conducting UO. The battalions to which they are assigned will face a number of challenges during the planning and execution of UO. The most likely challenges that units will face are discussed below.

a. Contiguous and Noncontiguous Areas of Operations. Brigades and battalions must be prepared to conduct ODSS operations in both contiguous and noncontiguous

areas of operations (AO). They may be required to command and control subordinate units and elements over extended distances, which may include deploying subordinate battalions and companies individually in support of operations outside the brigade's immediate AO.

NOTE: Under the IBCT concept companies may operate independently.

(1) Contiguous operations are conducted in an AO that facilitates mutual support of combat, combat support (CS), and combat service support (CSS) elements. They have traditional linear features including identifiable, contiguous frontages and shared boundaries between forces. Contiguous operations are characterized by relatively close distances between subordinate units and elements.

(2) In noncontiguous operations, subordinate units may operate in isolated pockets, connected only through the integrating effects of an effective concept of operations. Noncontiguous operations place a premium on initiative, effective information operations, decentralized security operations, and innovative logistics measures. They make mutual support of combat, CS, and CSS elements complicated, or hinder it by extended distances between subordinate units and elements.

b. **Symmetrical and Asymmetrical Threats.** In addition to being required to face symmetrical threats, the brigade must be prepared to face threats of an asymmetrical nature.

(1) Symmetrical threats are generally "linear" in nature and include those threats that specifically confront the brigade's combat power and capabilities. Examples of symmetrical threats include conventional enemy forces conducting offensive or defensive operations against friendly forces.

(2) Asymmetrical threats are those that are specifically designed to avoid confrontation with the brigade's combat power and capabilities. These threats may use the civilian population and infrastructure to shield their capabilities from fires. Asymmetric threats may also attack the brigade and civilian population with weapons of mass destruction (WMD). Asymmetrical threats are most likely to be based in urban areas to take advantage of the density of civilian population and infrastructure. Examples of asymmetrical threats include terrorist attacks; EW, to include computer-based systems; criminal activity; guerilla warfare; and environmental attacks.

c. Minimization of Collateral Damage and Noncombatant Casualties. A condition that commanders and leaders will be required to confront during urban operations will be minimizing collateral damage and noncombatant casualties. This will have to be balanced with mission accomplishment and the requirement to provide force protection. Commanders must be aware of the ROE and be prepared to request modifications when the tactical situation requires them. Changes in ROE must be rapidly disseminated throughout the brigade. Commanders and leaders must ensure that changes to the ROE are clearly understood by all soldiers within the brigade.

d. Quick Transition from Stability or Support Operations to Combat Operations and Back. Commanders and leaders must ensure that contingencies are planned to transition quickly from stability and support to combat operations and vice-versa. For example, it may be tactically wise for commanders to plan a defensive contingency with on-order offensive missions for certain stability and support operations that may deteriorate. An escalation to combat is a clear indicator that the stability or support operation failed. Units must always retain the ability to conduct offensive and defensive operations. Preserving the ability to transition allows units to maintain initiative while providing force protection. Subordinate commanders and leaders must be fully trained to recognize activities that would initiate this transition.

(1) **Balanced Mindset.** A balance must be achieved between the mindset of peace operations and the mindset of war fighting. Soldiers cannot become too complacent in their warrior spirit, but also must not be too eager to rely on the use of force to resolve conflict. This balance is the essence of stability operations and the fundamental aspect that will enable the unit to perform its mission successfully and avoid an escalation to combat. Proactive leaders that are communicating and enforcing the ROE are instrumental to achieving this mindset.

(2) *Combat Skills Training.* If the stability or support operation extends over prolonged periods of time, training should be planned that focuses on the individual and collective combat tasks that would be performed during transition to offensive and or defensive missions.

1-4. IMPORTANCE OF URBAN AREAS

Urban areas are the centers of finance, politics, transportation, communication, industry, society, and culture. Therefore, they have often been scenes of important military operations, both combat and noncombat. Today, more than ever before, UO will be conducted by joint forces (Table 1-1, page 1-8).

a. All UO do not involve combat. The US military has conducted several joint operations that have not required significant amounts of actual combat. Since the end of the war in Vietnam, the US has averaged about one major joint urban operation every other year. Some of these have been violent, such as in Panama and Mogadishu. Others have been very tense but involved little actual fighting, such as the stability operations conducted in Port au Prince, Haiti and Brcko, Bosnia. Many have been domestic support operations conducted in the US, such as the work done in Florida after hurricane Andrew or during the floods in North Dakota.

CITY	YEAR	CITY	YEAR
RIGA	1917	*SEOUL	1950
MADRID	1936	BUDAPEST	1956
WARSAW	1939	*BEIRUT	1958
ROTTERDAM	1940	*SANTO DOMINGO	1965
MOSCOW	1942	*SAIGON	1968
STALINGRAD	1942	*KONTUM	1968
LENINGRAD	1942	*HUE	1968
WARSAW	1943	BELFAST	1972
*PALERMO	1944	MONTEVIDEO	1972
*BREST	1944	QUANGTRI CITY	1972
*AACHEN	1944	SUEZ CITY	1973
ARNHEM	1945	XUAN LOC	1975
ORTONA	1944	SAIGON	1975
*CHERBOURG	1944	BEIRUT	1975
BRESLAU	1945	MANAGUA	1978
*WEISSENFELS	1945	ZAHLE	1981
BERLIN	1945	TYRE	1982
*MANILA	1945	*BEIRUT	1983
JERUSALEM	1967	NICOSIA	1958
*SAN MANUEL	1945	SIDON	1982
ALGIERS	1954	*COLON	1989
CARACAS	1958	*MOGADISHU	1993
*PANAMA CITY	1989	*KUWAIT CITY	1991
*GRENADA	1983	*MONROVIA	1994
*PORT AU PRINCE	1996	*SARAJEVO	1996
		*BRCKO	1997
*Direct US troop involve	ment.		

Table 1-1. Cities contested during twentieth century conflicts.

b. Operations in urban areas are conducted to capitalize on the strategic and tactical advantages of the city, and to deny those advantages to the enemy. Often, the side that controls a city has a psychological or political advantage, which can be enough to significantly affect the outcome of larger conflicts.

c. Even during normally less violent stability operations, such as peacekeeping, combat can occur in cities. In developing nations, control of only a few cities is often the key to control of national resources. The US city riots of the 1960's and the guerrilla and terrorist operations in Santo Domingo, Caracas, Belfast, Managua, Mogadishu, and Beirut indicate the many situations that can occur as a result of UO.

d. Urban areas also affect military operations because of the way they alter the terrain. In the last 40 years, cities have expanded, losing their well-defined boundaries as they extended into the countryside. New road systems have opened areas to make them passable. Highways, canals, and railroads have been built to connect population centers. Industries have grown along those connectors, creating *strip areas*. Rural areas, although retaining much of their farm-like character, are connected to the towns by a network of secondary roads.

e. These trends have occurred in most parts of the world, but they are the most dramatic in Western Europe. European cities tend to grow together to form one vast urban area. Entire regions assume an unbroken urban character, as is the case in the Ruhr and Rhein Main complex. Such growth patterns block and dominate the historic armor avenues of approach, or decrease the amount of open maneuver area available to an attacker. It is estimated that a typical brigade sector in a European environment includes 25 small towns, most of which would lie in the more open avenues of approach (Figure 1-3). Increased urbanization also has had an effect on Africa and Latin America.

Populations have dramatically increased in existing cities and urban sprawl has led to the increased number of slums and shantytowns within those urban areas. In many cases, this urbanization has occurred close to the seacoast, since the interior of many third world nations is undeveloped or uninhabitable.

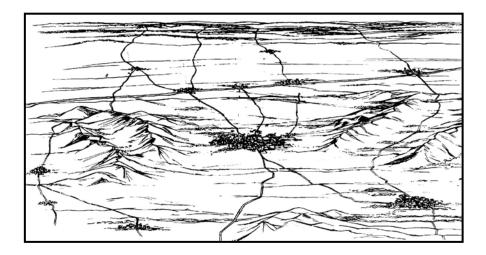


Figure 1-3. Urban areas blocking maneuver areas.

f. Extensive urbanization provides conditions that a threat force can exploit. Used with mobile forces on the adjacent terrain, conventional threat forces with antitank capabilities defending from urban areas can dominate avenues of approach, greatly improving the overall strength of the defense. Asymmetrical threats can use urban areas to offset US technological and firepower advantages.

g. Forces operating in such areas may have elements in open terrain, villages, towns, or small and large cities. Each of these areas calls for different tactics, task organization, fire support, and CSS.

1-5. FUNDAMENTALS OF URBAN OPERATIONS

The fundamentals described in this paragraph apply to UO regardless of the mission or geographical location. Some fundamentals may also apply to operations not conducted in an urban environment, but are particularly relevant in an environment dominated by manmade structures and a dense noncombatant population. Brigade and battalion commanders and staffs should use these fundamentals when planning UO.

a. Perform Focused Information Operations and Aggressive Intelligence, Surveillance, Reconnaissance. Information superiority efforts aimed at influencing non-Army sources of information are critical in UO. Because of the density of noncombatants and information sources, the media, the public, allies, coalition partners, neutral nations, and strategic leadership will likely scrutinize how units participate in UO. The proliferation of cell phones, Internet capability, and media outlets ensure close observation of unit activities. With information sources rapidly expanding, public information system (INFOSYS) can process it. Units can aggressively integrate information operations into every facet and at all levels of the operation to prevent negative impacts. Under media scrutiny, the actions of a single soldier may have significant strategic implications. The goal of information operations is to ensure that the information available to all interested parties, the public, the media, and other agencies, is accurate and placed in the proper context of the Army's mission. While many information operations will be planned at levels above the brigade, tactical units conducting UO may often be involved in the execution of information operations such as military deception, operations security (OPSEC), physical security, and psychological operations. Brigades and battalions must conduct aggressive intelligence, security, and reconnaissance operations that will allow them to properly apply the elements of assess, shape, dominate, and transition to specific UO.

b. **Conduct Close Combat.** Close combat is required in offensive and defensive UO. The capability must be present and visible in stability UO and may be required, by exception, in support UO. Close combat in any UO is resource intensive, requires properly trained and equipped forces, has the potential for high casualties, and can achieve decisive results when properly conducted. Units must always be prepared to conduct close combat as part of UO (Figure 1-4).



Figure 1-4. Soldiers conducting close combat in an urban area.

c. Avoid the Attrition Approach. Previous doctrine was inclined towards a systematic linear approach to urban combat. This approach placed an emphasis on standoff weapons and firepower. It can result in significant collateral damage, a lengthy operation, and be inconsistent with the political situation and strategic objectives. Enemy forces that defend urban areas often want units to adopt this approach because of the likely costs in resources. Commanders should only consider this tactical approach to urban combat only when the factors of METT-TC warrant its use.

d. **Control the Essential.** Many modern urban areas are too large to be completely occupied or even effectively controlled. Therefore, units must focus their efforts on controlling only the essentials to mission accomplishment. At a minimum, this requires control of key terrain (Figure 1-5). The definition of key terrain remains standard: terrain whose possession or control provides a marked advantage to one side or another. In the urban environment, functional, political, or social significance may be what makes terrain key. For example, a power station or a building may be key terrain. Units focus on control of the essential so they can concentrate combat power where it is needed and

conserve it. This implies risk in those areas where units choose not to exercise control in order to be able to mass overwhelming power where it is needed.



Figure 1-5. Military airbase, an example of key terrain.

e. **Minimize Collateral Damage.** Units should use precision standoff fires, information operations, and nonlethal tactical systems to the greatest extent possible consistent with mission accomplishment. Operational commanders must develop unique ROE for each UO and provide necessary firepower restrictions. Information operations and nonlethal systems may compensate for some of these required restrictions, especially in stability operations and support operations. Moreover, commanders must consider the short and long term effects of firepower on the population, the infrastructure, and subsequent missions.

f. **Separate Combatants from Noncombatants.** Promptly separating noncombatants from combatants may make the operation more efficient and diminish some of the enemy's asymmetrical advantages. Separation of noncombatants may also reduce some of the restrictions on the use of firepower and enhance force protection. This important task becomes more difficult when the adversary is an unconventional force and can mix with the civil population.

g. **Restore Essential Services.** Tactical units may have to plan for the restoration of essential services that may fail to function upon their arrival or cease to function during an operation. Essential services include power, food, water, sewage, medical, and security. During planning for and the conduct of UO, the use of nonlethal and less destructive munitions and capabilities can help ensure that potentially vital infrastructure remains intact. Initially, Army forces may be the only force able to restore or provide essential services. However, units must transfer responsibility for providing essential services to other agencies, nongovernment organizations (NGOs), or the local government as quickly as possible.

h. **Preserve Critical Infrastructure.** Brigade and battalion commanders and staffs may have to analyze the urban area to identify critical infrastructure. Attempts to preserve the critical elements for post-combat sustainment operations, stability operations, support operations, or the health and well-being of the indigenous population may be required. Urban areas remain in the AO after combat operations have ceased and post-combat UO may be unavoidable. This requirement differs from simply avoiding collateral damage in that units may have to initiate actions to prevent adversaries from removing or destroying infrastructure that will be required in the future. In some cases, preserving critical infrastructure may be the assigned objective of the UO.

i. Understand the Human Dimension. Brigade and battalion commanders and staffs may have to carefully consider and manage the allegiance and morale of the civilian population that may decisively affect operations. The assessment of the urban environment must identify clearly and accurately the attitudes of the urban population toward units. Guidance to subordinates covering numerous subjects including ROE, force protection, logistics operations, and fraternization, is part of this assessment. Brigade and battalion commanders and staffs may also be required to consider the demographic variance in the attitudes of an urban population. Western cultural norms may not be appropriate if applied to a nonwestern urban population. Commanders and staffs must make their assessments based on a thorough understanding and appreciation of the local social and cultural norms of the population. Sound policies, discipline, and consideration will positively affect the attitudes of the population toward Army forces. Additionally, well-conceived information operations can also enhance the position of units relative to the urban population. Even during combat operations against a conventional enemy force, the sensitivity and awareness of units toward the civilian population will affect the post combat situation. The human dimension of the urban environment often has the most significance and greatest potential for affecting the outcome of UO.

j. **Transition Control.** UO of all types are resource intensive and thus commanders must plan to conclude UO expediently, yet consistent with successful mission accomplishment. The end state of all UO transfers control of the urban area to another agency or returns it to civilian control. This requires the successful completion of the Army force mission and a thorough transition plan. The transition plan may include returning control of the urban area to another agency a portion at a time as conditions permit. For brigades and below, transition may also include changing missions from combat operations to stability operations or support operations and vice–versa.

1-6. CHARACTERISTICS OF URBAN OPERATIONS

Many characteristics separate UO from other environments. US technological advantages are often not very useful during UO. Air power may not be of any assistance to an Infantry force fighting from buildings. An adept enemy will use the technique of "hugging" American forces to deny them use of their overwhelming firepower. The training and equipment for the fight against a mobile, armored threat may not necessarily be of much use in urban areas. Urban combat is primarily a small unit Infantry fight, requiring significant numbers of Infantry to accomplish the mission; however, combined arms must support the Infantry. Urban combat is characterized by moment-to-moment decisions by individual soldiers, which demonstrates the importance of ROE training. Commanders and leaders should facilitate this fight by anticipating what subordinates will need to accomplish the mission. Unit goals must be speed, precision, and minimization of soldiers in close combat with the enemy. The greatest threats might be snipers, grenade launchers, booby traps, and rocket-propelled grenades (RPGs). Soldiers can expect booby traps on doorways and windows and on entrances to underground passageways.

a. **Changing Conditions.** Platoons and squads may find themselves executing missions in changing conditions during UO. The change from stability and support operations to combat operations and vice-versa will often change conditions from high-intensity to precision or the opposite. METT-TC factors and the ROE determine this change. ROE changes are normally made at echelons much higher than company and battalion, but they normally require that units modify the way they fight in urban areas. Squads and platoons will be required to select different TTP based on the conditions they face. The ROE will ultimately determine these conditions for the Infantry platoon and squad.

b. **Small-Unit Battles.** Units fighting in urban areas often become isolated or feel like they are isolated, making combat a series of small-unit battles. Soldiers and squad or team leaders must have the initiative, skill, and courage to accomplish their missions while isolated from their parent units. A skilled, well-trained defender has tactical advantages over the attacker in this type of combat. The defender may occupy strong covered and concealed static positions and conduct three-tier ambushes, whereas the attacker must be exposed in order to advance. Greatly reduced line-of-sight ranges, built-in obstacles, and compartmented terrain may require the commitment of more troops for a given frontage. While the defense of an urban area can be conducted effectively with relatively small numbers of troops, the troop density required for an attack in urban areas may be greater than for an attack in open terrain. Individual soldiers must be trained and psychologically ready for this type of operation.

c. **Communications.** Urban operations require centralized planning and decentralized execution. Therefore, effective vertical and horizontal communications are critical. Leaders must trust their subordinates' initiative and skill, which can only occur through training. The state of a unit's training and cohesion are vital, decisive factors in the execution of operations in urban areas.

(1) Structures and a high concentration of electrical power lines normally degrade radio communications in urban areas. Many buildings are constructed so that radio waves will not pass through them. Frequently, units may not have enough radios to communicate with subordinate elements as they enter buildings and move through urban canyons and defiles.

(2) Visual signals may also be used but are often not effective because of the screening effects of buildings, walls, and so forth. Signals must be planned, widely disseminated, and understood by all assigned, attached, or OPCON units. Increased noise makes the effective use of sound signals difficult. Verbal signals may also reveal the unit's location and intent to the enemy.

(3) Messengers and wire can be used as other means of communication. Messengers are slow and susceptible to enemy fire when moving between buildings or crossing streets. Wire is the primary means of communication for controlling the defense of an urban area. It should be considered as an alternate means of communications during

offensive operations, if assets are available. However, wire communications can often be cut by falling debris, exploding munitions, and moving vehicles.

d. **Noncombatants.** Urban areas, by their very nature, are population centers. Noncombatants will be present and will affect both friendly and threat courses of action across the spectrum of UO. Besides the local inhabitants, refugees, governmental and NGOs, and the international media are likely to be present. For example, during the fighting in Grozny, 150,000 refugees were added to a prefight population of 450,000. There were 50,000 civilian casualties during the fight. Units must be prepared to deal with all categories of noncombatants

e. **High Expenditure of Ammunition.** Units conducting UO use large quantities of ammunition because of short ranges, limited visibility, briefly exposed targets, constant engagements, and requirements for suppression. AT4s, rifle and machine gun ammunition, 40-mm grenades, hand grenades, and explosives are high-usage items in this type of fighting. When possible, those items should be either stockpiled or brought forward on-call, so that they are easily available.

f. **Increased Casualties.** More casualties occur because of shattered glass, falling debris, rubble, ricochets, urban fires, and falls from heights. Difficulty in maintaining situational awareness also contributes to this problem because of increased risks of fratricide. Stress-related casualties and nonbattle injuries resulting from illnesses or environmental hazards, such as contaminated water, toxic industrial materials (TIM), and so forth, also increase the number of casualties.

g. Limited Mounted Maneuver Space. Buildings, street width, rubble, debris, and noncombatants all contribute to limited mounted maneuver space inside urban areas. Armored vehicles will rarely be able to operate inside an urban area without Infantry support.

h. **Three-Dimensional Terrain.** Friendly and threat forces will conduct operations in a three-dimensional battle space. Engagements can occur on the surface, above the surface, or below the surface of the urban area. Additionally, engagements can occur inside and outside of buildings. Multistory buildings will present the additional possibility of different floors within the same structure being controlled by either friendly or threat forces.

i. **Collateral Damage.** Depending on the nature of the operation and METT-TC factors, significant collateral damage may occur, especially under conditions of high-intensity UO. Commanders and leaders must ensure that ROE are disseminated and enforced.

j. **Reliance on Human Intelligence.** Until technological advancements provide more effective ways of gathering information, there is an increased need for human intelligence (HUMINT). Reconnaissance efforts of battalion and brigade assets can assist as well as the shaping operations of division or joint task force assets. Companies and below normally have to continue to rely on information provided to them from human sources.

k. Need for Combined Arms. While UO historically have consisted of a high density of Infantry-specific tasks, UO conducted purely by Infantry units have proven to be unsound. Properly tasked-organized combined arms teams consisting primarily of Infantry, engineers, and armor supported by other combat, CS, and CSS assets have proven to be more successful both in the offense and defense. The same concept is true

for stability and support operations, when the main effort may not necessarily consist of combat units.

1. Need to Isolate Critical Points. During offensive operations, companies, platoons, and squads will be assaulting buildings and clearing rooms. More often, assets will not exist to isolate large portions of the urban area. Therefore, skillful use of direct and indirect fires, obscurants, and maneuver must occur to isolate key buildings or portions of buildings in order to secure footholds and clear.

m. **Snipers.** Historically, snipers have had increased utility in urban areas. They can provide long- and short-range precision fires and can be used effectively to assist company- and platoon-level isolation efforts. Snipers also have provided precision fires during stability operations. Along with engaging assigned targets, snipers are a valuable asset to the commander for providing observation along movement routes and suppressive fires during an assault.

n. **Support by Fire Positions.** Buildings, street width, rubble, debris, and noncombatants all dictate the positioning and fields of fire for crew-served and key weapons in urban areas.

1-7. URBAN BATTLE SPACE

Urban areas mainly consist of man-made features such as buildings that provide cover and concealment, limit fields of observation and fire, and block movement of forces, especially mechanized or armored forces. Thick-walled buildings provide ready-made, fortified positions. Thin-walled buildings may have fields of observation and fire that may prove important. Another important aspect is that urban areas complicate, confuse and degrade the commander's ability to identify and control his forces. All these factors will influence the urban battle space.

a. Commanders and leaders can enhance situational understanding by maintaining a clear understanding of their urban battle space (Figure 1-6, page 1-16). Urban battle space includes:

(1) *Urban Airspace*. Airspace provides a rapid avenue of approach into an urban area. While aviation assets are unaffected by obstacles such as rubble, vehicles, or constructed barriers, they must consider power lines, towers, sign poles, and billboards when flying. Task force reconnaissance elements can locate, identify, and report these obstacles to allow for improved flight planning.

(2) *Supersurface (Tops of Buildings).* The term "supersurface" refers only to the top, roof, or apex of a structure. These areas can provide cover and concealment, limit or enhance observation and fields of fire, and, depending on the situation, enhance, restrict, canalize, or block movement. Supersurface areas can also provide concealed positions for snipers, automatic weapons, light and medium antitank weapons, and man-portable air defense systems. In many cases, they enable top-down attacks against the weakest points of armored vehicles and unsuspecting aircraft.

(3) *Intrasurface (Interior of Buildings)*. The intrasurface refers to the floors within the structural framework—the area from the surface level (ground) up to, but not including, the structure's permanent roof or apex. Intense combat engagements often occur in this intrasurface area, which is also known for its widely diverse and complex nature. The intrasurface of a building greatly limits what can be accomplished by reconnaissance and surveillance systems, but, at the same time, enhances cover and

concealment. Additionally, the intrasurface areas provide mobility corridors within and between structures at upper levels for both friendly and enemy forces. Intrasurface areas may also provide concealed locations for snipers, automatic weapons, light and medium antitank weapons, and man-portable air defense systems. In many cases, they enable top-down attacks against the weakest points of armored vehicles and unsuspecting aircraft.

(4) *Surface (Ground, Street, and Water Level).* Streets are usually avenues of approach. Streets and open areas provide a rapid approach for ground movement in urban terrain. Units moving along streets can be canalized by buildings and have little space for maneuver, while approaching across large open areas such as parks, athletic fields and parking areas. Streets also expose forces to observation and engagement by enemy elements. Obstacles on streets in towns are usually more effective than those on roads in open terrain since they are more difficult to bypass.

(5) *Subsurface (Underwater and Subterranean).* Common subsurface areas, which include subways, sewers, public utility systems, and cellars, can be used as avenues of movement for dismounted elements. Both attacker and defender can use subterranean routes to outflank or turn the opposition, or to conduct infiltration, ambushes, counterattacks, and sustaining operations. Subsurface systems in some urban areas are easily overlooked but can be important to the outcome of operations.

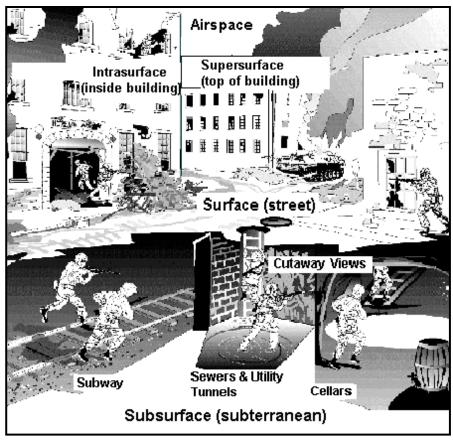


Figure 1-6. Urban battle space.

b. Commanders and leaders must be able to identify building types, construction materials, and building design and must understand the effectiveness and limitations of weapons against these factors. (See Chapters 3 and 8.) They must also understand that urban combat will require them to visualize a three-dimensional battle space. Commanders and leaders must be aware of how their urban battle space is changing as friendly and enemy forces and civilians move, and as weather and environmental conditions change. They can react to changes within the their battle space with the timely movement of assault, support, and breaching elements in the offense; repositioning of platoons and squads in the defense; and synchronization of CS and CSS assets. Other factors that impact battle space are:

- CASEVAC and resupply procedures.
- Handling EPWs and noncombatants.
- Rules of engagement. (See Appendix A.)
- Battlefield obscuration.
- Communications.
- Movement of vehicles. (How will the battle space affect movement and target engagement?)

Section II. SPECIAL CONSIDERATIONS

Employment of weapons, target engagements, munitions and equipment, noncombatants, disease prevention, stress, fratricide avoidance, situational awareness, the media, and unexploded ordnance all require special consideration when conducting combat in urban areas. (See Appendixes B, C, D, and E for additional special considerations.)

1-8. WEAPONS CONSIDERATIONS

The characteristics and nature of combat in urban areas affect the employment of weapons. Commanders and leaders at all levels must consider the following considerations in various combinations when choosing their weapons. (See Chapter 7 for detailed discussion of specific weapons.)

WARNING						
Protecting	personnel	from	backblast	or		
fragmentation effects must be considered when						
fighting in urban areas.						

a. Hard, smooth, flat surfaces are characteristic of urban targets. Rounds rarely impact perpendicular to these flat surfaces, but rather, at an oblique angle. This reduces the effect of a round and increases the threat of ricochets. The tendency of rounds to strike glancing blows against hard surfaces means that up to 25 percent of impact-fused explosive rounds may not detonate when fired into urban areas. Deflected rounds can easily ricochet or "rabbit" causing injury and death from strange angles. (A "rabbit"

round is a round or fragment that strikes a surface at such a steep angle that it glances off and continues to travel parallel to that surface.)

b. Engagement ranges are close. Studies and historical analyses have shown that only 5 percent of all targets are more than 100 meters away. About 90 percent of all targets are located 50 meters or less from the identifying soldier. Few personnel targets will be visible beyond 50 meters and they usually occur at 35 meters or less. Engagement times are short. Enemy personnel present only fleeting targets.

c. Depression and elevation limits for some weapons create dead space. Tall buildings form deep canyons that are often safe from indirect fires. Some weapons can fire rounds to ricochet behind cover and inflict casualties. Target engagement from oblique angles, both horizontal and vertical, demands superior marksmanship skills.

d. Smoke from burning buildings, dust from explosions, shadows from tall buildings, and the lack of light penetrating inner rooms all combine to reduce visibility and increase a sense of isolation. Added to this is the masking of fires caused by rubble and manmade structures. Targets, even those at close range, tend to be indistinct.

e. Urban fighting can become confused mêlées with several small units attacking on converging axes. The risks from friendly fires, ricochets, and fratricide must be considered during the planning phase of operations, and control measures must be adjusted to lower these risks. Soldiers and leaders must maintain a sense of situational awareness.

f. The soldier and target may be inside or outside buildings, or they may both be inside the same or separate buildings. The enclosed nature of combat in urban areas means that all the weapon's effects including the muzzle blast and backblast, must be considered as well as the round's impact on the target.

g. Usually the man-made structure must be attacked before enemy personnel inside are attacked. Therefore, the decision to employ specific weapons and demolitions will often be based on their effects against masonry and concrete rather than against enemy personnel.

h. Modern engineering and design improvements mean that most large buildings constructed since World War II are resilient to the blast effects of bomb and artillery attack. Even though modern buildings may burn easily, they often retain their structural integrity and remain standing. Once high-rise buildings burn out, they may still have military utility and are almost impossible to damage further. A large structure can take 24 to 48 hours to burn out and become cool enough for soldiers to enter.

1-9. TARGET ENGAGEMENT

Most target engagements in urban areas are at ground level and above ground level. The following characteristics are considered when engaging targets.

a. **Ground Level.** At ground level the ranges of observation and fields of fire are reduced by structures as well as by the dust and smoke of battle. The density of urban terrain limits the ability of soldiers to employ their weapons out to the weapon's maximum effective range. Historically, engagements have been very close, often 100 meters or less. In urban areas, the ranges of observation and fields of fire are reduced by structures as well as by the dust and smoke of battle. As a result, urban engagements consist mostly of close, violent firefights. This situation requires an increase of precision/accurate small arms fire as well as strict fire control and proper identification of

friend or foe. The Infantry uses mostly light and medium antitank weapons, automatic rifles, machine guns, and hand grenades. Opportunities for using antitank guided missiles may be restricted because of the short ranges involved and the many obstructions that interfere with missile flight. Danger close is normal for use of indirect fires in most firefights.

b. Above Ground Level. Tall buildings and aircraft provide opportunities to observe and engage targets from much longer ranges than from ground-level positions. However, target exposures may still be very short because of the multiplicity of cover available to the enemy on the ground. Observers positioned on very high buildings sometimes feel that they are able to observe everything in their area of operations and experience a false sense of security. In fact, even observers in good above-ground positions are often limited in their ability to see much of what is occurring. Aerial observers are very useful during urban operations. Helicopters and fixed-wing aircraft, such as the AC 130 Spector gunship or the P-3 Orion, carry sophisticated sensors that can greatly improve the ability to observe in the urban area. They can vary their viewing angles and altitudes to obtain a better view around and over buildings, but they cannot remain stationary for any length of time and must depart the area periodically to refuel. A commander's best course of action is to integrate both ground level and above ground level observers to obtain the most complete picture of the situation.

1-10. MUNITIONS AND EQUIPMENT

Because of the recurring need for reconnaissance by fire and intense suppression, the short engagement ranges, and limited visibility, forces engaged in fighting in urban areas use large quantities of munitions. In appropriate situations, nonlethal munitions and devices, such as stun grenades, riot control agents (when authorized by the national command authority), pepper spray, and personnel restraints, may also be high use items. Units committed to combat in urban areas may need special equipment such as: grappling hooks, rope, snaplinks, collapsible pole ladders, rope ladders, poleless litters, construction material, axes, sledge hammers, pry bars, and sandbags. Protective equipment such as knee and elbow pads, heavy gloves, and ballistic eyewear will significantly increase the mobility of Infantrymen in urban combat. When possible, those items should be stockpiled or brought forward on-call, so they are readily available to soldiers.

1-11. NONCOMBATANTS

Unless combat has been taking place in an urban area for an extended period of time, units will encounter large numbers of noncombatants. Noncombatants may be encountered during offensive operations as a result of clearing buildings and city blocks or when preparing for defensive operations. The nature of stability and support operations will most likely result in having to deal with noncombatants. Units will have to know whether to expect noncombatants to be friendly, neutral, or hostile and know how to deal with them. Handling noncombatants can be as simple as moving them out of immediate harm's way or as complicated as noncombatant evacuation operations (NEO).

a. **Definitions.** Definitions that apply are discussed below.

(1) *Combatants.* Combatants are uniformed enemy forces and other individuals who take an active part in the hostilities in a way that poses a direct threat to US personnel.

(2) *Noncombatants.* Noncombatants are civilians in the area of operations who are not armed and are not taking an active part in the hostilities in a way that poses a direct threat to US personnel. Noncombatants can include refugees, local inhabitants affected by operations, civilian personnel belonging to US governmental agencies, civilian personnel from NGOs, and media personnel. Military chaplains, medical personnel, prisoners of war, and the wounded and sick are also noncombatants.

(3) *Prisoners of War.* A prisoner of war (PW) is an individual, such as a member of the armed forces or militia, a person who accompanies the armed forces without being a member, or other category of person defined in the Geneva Convention Relative to the Treatment of Prisoners of War, who has fallen into the power of the enemy.

(4) *Detained Personnel.* A detained person is any individual who is in custody for committing hostile acts against US forces or committing serious criminal acts.

(5) *Dislocated Civilian.* This is a broad term that includes a displaced person, an evacuee, an expellee, or a refugee (Figure 1-7).

(a) *Displaced Person*. A displaced person is a civilian who is involuntarily outside the national boundaries of his country.

(b) *Evacuee*. An evacuee is a civilian removed from a place of residence by military direction for reasons of personal security or the requirements of the military situation.

(c) *Expellee*. An expellee is a civilian outside the boundaries of the country of his nationality or ethnic origin who is being forcibly repatriated to that country or to a third country for political or other purposes.

(d) *Refugee*. A refugee is a civilian who, by reason of real or imagined danger, has left home to seek safety elsewhere.



Figure 1-7. Dislocated civilians.

NOTE: Experience in Somalia has shown that noncombatants can be hostile, friendly, or neutral. Hostile noncombatants do not necessarily become detained personnel if they are not perceived as a threat to friendly forces. For example,

political opponents of US involvement may be hostile towards the US military presence but do not pose a threat to US forces.

b. Noncombatants and Rules of Engagement. All leaders and soldiers must understand the potential urban battlefield and the fact that they will most likely encounter noncombatants. If soldiers must deal with noncombatants, they should refer to their ROE. ROE should be very specific on treatment of each type of noncombatant [paragraph a(2)].

c. Communication with Civilians. Soldiers should learn basic commands and phrases in the language most common to their area of operations. When giving these commands or phrases, they should speak loudly and clearly at a normal rate and use gestures whenever possible. All soldiers should be given a basic language translation card. (See example in Table 1-2.)

ENGLISH WORD OR PHRASE	FOREIGN WORD OR PHRASE	PRONUNCIATION
HALT		
WHAT IS YOUR NAME?		
STAND UP		
WALK		
SIT DOWN		
YOU WILL BE SEARCHED NOW		
DON'T TALK		
YES		
NO		
NOT PERMITTED		
MEDICAL AID		
FOOD		
WATER		
USE THE LATRINE?		

Table 1-2. Example of basic language translation card.

d. **Cultural Issues.** Soldiers must be educated on the types of cultural issues that may offend the local inhabitants. For example, a gesture that may be innocent to Americans may deeply insult the inhabitants.

e. **Considerations for Handling Noncombatants.** Commanders and leaders should consider using CA, PSYOP, MPs, chaplains, and civil leaders and authorities, when available, if their mission involves handling noncombatants. Other considerations include the following:

(1) Carefully analyze the ROE concerning when deadly force can be used and what type of weapons may be employed (for example, using lethal as opposed to nonlethal weapons and capabilities).

(2) Do not assume that noncombatants will be predisposed for or against US troops. Always treat civilians with dignity and respect. Use force against civilians only in self-defense or, otherwise, in accordance with the ROE. Detain civilians only in accordance with command directives. (3) When conducting offensive operations, plan to move any noncombatants away from firefights. Normally this task will be given to the support element after rooms and buildings have been secured. When available, PSYOP, CA, and MPs can assist with this task. A covered and concealed location away from the immediate combat area should be chosen. Noncombatants should be controlled and not permitted to enter the immediate combat area, unless they have been cleared to do so and will not compromise combat operations (for example, media personnel or governmental or NGO personnel that have a reason and authority to enter the combat area).

(4) When conducting defensive operations, plan to move noncombatants away from the immediate combat area. Companies and below are normally escort personnel to a designated location where they are turned over to civil authority, battalion, or higher control. In many cases, friendly or nonhostile civilians may be directed to a clearing point and allowed to go there without escort.

(5) Security is not normally provided for media or NGO personnel if they are permitted in the immediate combat area. Security requirements for civilians should be clarified at the mission briefing.

(6) Based on the factors of METT-TC, units may have to render some type of immediate humanitarian assistance (medical attention and feeding). Any plan that provides for the provision of medical care to the civilian population must be developed in conjunction with the staff judge advocate. If this type of assistance is necessary, clarify questions in the mission briefing. Battalion and brigade staffs can plan for and bring forward additional Class VIII and Class I, as appropriate.

f. Determining the Status of Personnel. Companies and below do not determine the status of individuals in the combat area. Any persons that are initially detained should be treated as PWs, and higher headquarters should be notified with a request for assistance in evacuating these individuals.

1-12. DISEASE PREVENTION

Many third world countries have poor sewage and refuse removal, as well as low-quality water supplies. Even cities with the most modern facilities revert quickly to substandard sanitation and have problems with disease when utilities are interrupted by natural catastrophes or urban combat. Exposure to disease can decimate a unit as quickly as combat. Normal field sanitation may be difficult due to lack of water and the inability to dig. Water utilities may not be working due to destruction of the water facilities, lack of power, or the lack of experienced personnel to run them. Even if the water is running, it cannot be expected to have been properly treated. Commanders and leaders must ensure that soldiers drink water only from designated sources or utilize water purification methods. Additionally, first sergeants must coordinate with the battalion S4 for waste removal and latrine facilities, if applicable. Medics must constantly monitor soldiers in an urban area for signs of disease or illness, and provide appropriate medical attention.

1-13. STRESS

The confusion, stress, and lethality of the modern battlefield place a burden on the individual soldier's endurance, courage, perseverance, and ability to perform in combat. Continuous close combat, intense pressure, high casualties, fleeting targets, and fire from a concealed enemy produce psychological strain and physical fatigue. Such stress

requires consideration for the soldiers' and small-unit leaders' morale and the unit's esprit de corps. Rotating units that have been committed to heavy combat for long periods can reduce stress. Soldiers conducting combat operations must perform complex collective and individual tasks without adequate sleep and under stress. Commanders and leaders must be aware of what can cause stress, minimize those factors to the extent possible, and take every opportunity to rest soldiers. The following cause stress in combat and may be intensified in the urban environment.

a. **Anxiety.** The fear and anticipation of the unknown can have devastating effects on the mental and physical wellbeing of a person. Soldiers may experience the fear of death or being wounded or, because of the three-dimensional battlefield, the possibility of being engaged from all directions simultaneously. A lack of communication with others may cause a feeling of isolation and vulnerability.

b. **Intense Noise, Limited Visibility, and Low Light Levels**. Smoke, darkness, fog, rain, snow, ice, and glare make it hard to see. The extended wear of night vision goggles, protective masks, or laser protective lenses causes stress. Intense noise not only causes stress by itself, but it further isolates the soldier from human contact and interferes with situational awareness.

c. **Disrupted Wake/Sleep Cycle.** A soldier's performance suffers during normal sleeping hours due to the disruption of the normal schedule.

d. **Decision Making and Responsibility for Others.** Mental stress results from making vital decisions with little time and insufficient information. It is increased during times of great confusion and exposure to danger. Leaders are especially affected by the heavy load of responsibility they carry.

e. **Physical Fatigue and Illness.** Working the muscles faster than they can be supplied with oxygen and fuel can cause soldiers to function poorly without rest. Minor illnesses that do not completely disable the soldier add to his stress and hinder his ability to function at his full potential.

f. **Physical Discomfort.** Extreme cold, heat, wet, or thirst add greatly to the level of individual stress. Minor injuries or wounds can cause constant pain that, while not incapacitating to the soldier, add to his stress.

g. **Psychological Stress.** Commanders and leaders must remain alert for the signs of psychological stress. During the fighting in Grozny, 72 percent of the Russian soldiers demonstrated some kind of psychological disorder symptoms such as insomnia, lack of motivation, high anxiety, neuro-emotional stress, fatigue, and hypochondria. Brigade and battalion surgeons must be prepared for soldiers exhibiting signs of psychological stress.

1-14. FRATRICIDE AVOIDANCE

The overriding consideration in any tactical operation is accomplishing the mission. Commanders and leaders must consider fratricide in their planning process because of the decentralized nature of execution during UO. However, they must weigh the risk of fratricide against losses to enemy fire when considering a given course of action. Fratricide can be avoided by sound doctrine; proper selection and application of tactics, techniques, and procedures; detailed planning; disciplined execution; and rigorous, in-depth rehearsals. a. **Doctrine**. Doctrine provides the basic framework for accomplishing the mission. Commanders and leaders must have a thorough understanding of US doctrine and, if operating with other services or nations, joint, combined, and host nation doctrine.

b. **Tactics, Techniques, and Procedures.** TTP provide a "how-to" that everyone understands. TTP are disseminated in doctrinal manuals and standing operating procedures (SOPs).

(1) *Tactics.* Tactics are the employment of units in combat or the ordered arrangement and maneuver of units in relation to each other and or the enemy to use their full potential. For example, a company employing support by fire elements from a secured foothold (intermediate objective) prior to conducting the assault on the objective.

(2) *Techniques.* Techniques are the general and detailed methods used by troops or commanders to perform assigned missions and functions. Specifically, techniques are the methods of using weapons and personnel. Techniques describe a method, but not the only method. An example is using precision room clearing techniques

(3) *Procedures.* Procedures are standard, detailed courses of action that describe how to accomplish a task. Examples might be using green colored squares to mark cleared rooms during an assault of a building, or marking each soldier with clear, identifiable markings that are IR visible as well.

c. **Planning.** A simple, flexible maneuver plan that is disseminated to the lowest level will aid in the prevention of fratricide. Plans should make the maximum use of SOPs and battle drills at the user level. They should incorporate adequate control measures and fire support planning and coordination to ensure the safety of friendly troops and allow changes after execution begins.

d. **Execution.** The execution of the plan must be monitored, especially with regard to the location of friendly troops and their relationship to friendly fires and the effects of those fires on the structural integrity of the building. For example, a fragmentation grenade used in a weakly constructed building may cause grenade fragments to pass through walls and injure friendly troops. Additionally, subordinate units must understand the importance of accurately reporting their position.

e. **Rehearsals and Training.** The most important factor in preventing fratricide is effective individual and collective training in the many tasks that support UO. Often the only combined arms training that will occur are the rehearsals with attached or OPCON assets such as engineers or armored vehicles.

1-15. SITUATIONAL AWARENESS

Situational awareness is the degree to which one is able to maintain a common operating picture of all aspects of the tactical situation. This picture includes an understanding of the friendly and enemy situation and the urban battle space. Since units will have to conduct operations in changing mission environments, it is imperative for commanders and leaders at all levels to achieve and maintain the best possible degree of situational awareness. Enhanced situational awareness will enhance lethality, survivability, and operational tempo.

a. Urban Battle Space. See paragraph 1-7 for detailed information.

b. **Questions.** To the company level leaders situational awareness means being able to answer certain questions:

• Where am I (in respect to the urban area or my assigned sector)?

- Where are my soldiers? What is their current status/activity?
- Where are friendlies (adjacent and supporting units)? What is their current status/activity?
- Where is the enemy? What are the enemy's capabilities?
- **NOTE:** Recent experimentation has shown that situational awareness can be enhanced at the company level and below by using a technique known as "Go Firm." If situational awareness is unclear, the platoon leader or company commander can issue the command "Go Firm" over the radio during lulls in contact. Subordinate platoons or squads would assume a hasty defensive posture and ask for situation reports (SITREPs) from their squads or fire teams. The information would be sent up the chain of command and clear situational awareness would be regained prior to continuing the mission.

1-16. MEDIA

Media presence may be pervasive and information management a critical component of urban operational success.

a Accessibility and Presence. In comparison to other environments (jungles, deserts, mountains, and cold weather areas), urban operations are more accessible to the media and, therefore, more visible to the world. This is due largely to the presence of airports, sea and river ports, and major road networks; ready access to power sources and telecommunications facilities; as well as access to existing local media structures.

b. **Complex Relationships.** A complex relationship exists among information, the public, and policy formulation. Although the degree and manner in which public opinion shapes government policy is uncertain, it has been shown that negative visual images of military operations presented by the news media can change political objectives and, subsequently, military objectives. As important, media reporting can influence civilian activity in an urban AO to either the advantage or disadvantage of commanders conducting UO.

c. Management of Information. Commanders do not control the media; however, they must manage the flow of information that the news media receives and subsequently presents to the public. Consequently, operational commanders must plan and execute public affairs (PA) operations that will induce cooperation between the media and subordinate units. Brigade and battalion staffs will also become involved with public affairs operations either by directly planning them or executing PA operations that were planned at the division or joint task force (JTF) level. Successful relations between units and the news media evolve from regular interaction based on credibility and trust. To this end, more information is usually better than less, except when the release of such information may jeopardize security and threaten the safety and privacy of soldiers. However, commanders cannot simply withhold information to protect the command from embarrassment. Generally, brigade and battalion commanders must consider media interest as part of the normal planning process and work to ensure that information presented to the news media is accurate, timely, and consistent with operational security (OPSEC). Since the media will likely arrive in the urban area before the conduct of operations, early deployment of PA assets by the division or JTF headquarters may be critical

d. **Media Engagement.** Failure to provide sufficient information can hamper a commander's ability to conduct the mission. Poor relationships with the media can result in inaccurate and even biased reporting, which may cause a public reaction that influences the ability to achieve operational objectives. During the Russian battle against Chechen separatists in Grozny in 1994, for example, the Russian military refused to communicate with reporters. Consequently, the media reported primarily from the perspective of the Chechen rebels. This encouraged both local and international support for the rebels. It also allowed the Chechens, who lacked sophisticated command and control equipment, to use the media to broadcast operational guidance to their forces. On the other hand, successful engagement of the media can serve as a force multiplier. The Army's open and responsive interaction with the media during peacekeeping operations in Bosnian urban areas helped to explain the challenges and successes of units in the Balkans to the public. This helped maintain domestic, international, and local political support for NATO operations, and in conjunction with a successful command information program, helped maintain the morale of soldiers serving in the Balkans.

1-17. UNEXPLODED ORDNANCE

During combat a certain percentage of munitions will always fail to function properly. The result is unexploded ordnance (UXO), which is often found in unexpected locations. During UO, there is a high probability that units will encounter UXO from both friendly and enemy weapons. The UXO is produced from many different sources. Artillery and mortar rounds and even large aerial bombs sometimes fail to explode, as do rocket warheads and grenades. Cluster bombs and improved conventional munitions (ICM) are major producers of UXO. After a battle, munitions and explosives may be found that have been lost or dropped. These should all be treated with care since it is impossible to know how they might react to being handled or moved. Unless the leader on the ground decides that it is vital to mission accomplishment to move or destroy UXO in place, such items should be marked and left alone until they can be dealt with by trained specialists.

a. Brigade and Battalion Staff Planning Considerations. Offensive, defensive, stability and support operations all require analysis of UXO.

(1) *Offensive and Defensive Operations.* During offensive operations, mobility and survivability may be affected by the presence of UXO on mounted and dismounted avenues of approach to the objective. UXO may exist in intermediate (footholds) and final objectives. While it is difficult to anticipate the location of UXO during the assault, identification, marking, and bypassing UXO should be planned depending on METT-TC factors. During defensive operations, mobility, countermobility and survivability are also affected. The reconnaissance and occupation of sectors or battle positions within and between buildings may require the removal of UXO. The battalion and or brigade engineer should anticipate these requirements and plan for the marking, removal, or disposal of UXO, as applicable. Explosive ordnance disposal (EOD) teams, if available, are used to assist in the removal or destruction of UXO.

(2) *Stability Operations and Support Operations.* Marking, removal, or disposal of UXO becomes important in the planning and execution of stability operations or support operations. Often the purpose of stability or support operations is to facilitate the return of civil control of the urban area. Therefore infrastructure and utilities must remain intact or be brought back to functioning levels. The identification, marking, removal or disposal

of UXO becomes important to mission accomplishment. Again, the battalion and or brigade engineer should anticipate these requirements and plan the coordination with EOD teams for the detailed identification, removal, and or disposal of UXO, as applicable. Explosive ordnance disposal (EOD) teams, if available, should be used for the removal and or disposal of UXO. The battalion and or brigade engineer should plan to provide support to assist EOD teams with large-scale UXO operations.

b. **Company Team and Platoon Planning Considerations.** At the company level and below, the primary concern should be the identification and marking of UXO. Company teams and below should not attempt to move or destroy UXO. They may provide security to EOD teams and engineers during removal and or disposal operations. To assist in planning, the nine-line UXO spot report listed below should be used. (See FM 4-30.16.)

Line 1. Date-Time Group: DTG item was discovered.

Line 2. Reporting Activity: (Unit identification) and location (grid of UXO).

Line 3. Contact Method: Radio frequency, call sign, point of contact (POC), and telephone number.

Line 4. Type of Ordnance: Dropped, projected, placed, or thrown. If available, supply the subgroup. Give the number of items, if more than one.

Line 5. NBC Contamination: Be as specific as possible.

Line 6. Resources Threatened: Report any equipment, facilities, or other assets that are threatened.

Line 7. Impact on Mission: Provide a short description of the current tactical situation and how the presence of the UXO affects the status.

Line 8. Protective Measures: Describe any measures taken to protect personnel and equipment.

Line 9. Recommended Priority: Recommend a priority for response by EOD technicians or engineers.

Leaders at the company level and below must ensure that clear instructions are provided to the soldiers with reference to not handling any UXO. The UXO itself may not look particularly menacing and curiosity may lead soldiers to want to pick-up or move UXO. Soldiers must be briefed on the potential lethality of such actions. Proper reaction to UXO takes on increased significance during stability operations and support operations when soldiers are conducting missions in close proximity to noncombatants. (See Figures 1-8 through 1-11, pages 1-28 through 1-29.)

c. Toxic Industrial Materials (TIM). See Appendix F. Often UO are performed in areas that contain TIM. For example, damage or destruction of chemical or petroleum production facilities can produce extremely hazardous conditions and may actually prevent or seriously hamper mission accomplishment. Many of the UXO planning factors discussed in paragraphs a and b also apply to TIM. Battalion and or brigade chemical officers should coordinate with engineer officers and EOD battalion and or brigade elements to plan appropriate preventive or reactive measures in the event of a release of TIM. (See FM 4-30.16 for further information on UXO.)



Figure 1-8. Example of a threat ammunition supply point.



Figure 1-9. Unexploded rocket-propelled grenades (RPGs).



Figure 1-10. Unexploded foreign air delivered bomb.



Figure 1-11. Unexploded submunition on a street.