

STUDENT HANDOUT

Urban Warfare

LESSON PURPOSE: The purpose of this period of instruction is to give the student a better understanding of the concept of Modern Urban Warfare as it applies to the Soldier in the theater of operations.

OUTLINE

1. MILITARY OPERATIONS ON URBANIZED TERRAIN (MOUT): Defined as all military actions planned and conducted on a topographical complex and its adjacent terrain where manmade construction is the dominant feature. It includes combat in cities, which is that portion of MOUT involving house-to-house and street-by-street fighting in towns and cities.

2. DISTINGUISHING FEATURES OF URBANIZED TERRAIN: Urbanized terrain is a complex and challenging environment. It possesses all of the characteristics of the natural landscape, coupled with manmade construction, resulting in an incredibly complicated and fluid environment that influences the conduct of military operations in unique ways.

a. Cities: Cities are centers of finance, politics, transportation, communication, industry, and culture. They generally have large population concentrations ranging from tens of thousands to millions of people. Because of their psychological, political, or logistical value, control of cities have often been the scenes of pitched battles.

b. Multiple Avenues of Approach: Urbanized terrain is a unique battlespace that provides both attacker and defender with numerous and varied avenues of approach and fields of fire. The urban battlespace is divided into four basic levels: building, street, subterranean, and air.

(1) Building Level: Buildings provide cover and concealment; limit or increase fields of observation and fire; and canalize, restrict, or block movement of forces, especially mechanized forces.

(2) Street Level: While streets provide the means for rapid advance or withdrawal, forces moving along streets are often canalized by buildings and have little space for off-road maneuver. Because they are more difficult to bypass, obstacles on streets in urbanized areas are usually more effective than those on roads in open terrain.

(3) Subterranean Level: Subterranean systems are easily overlooked but can be important to the outcome of operations. These areas may be substantial and include subways, sewers, cellars, and utility systems. Both attacker and defender can use subterranean avenues to maneuver to the rear or the flanks of an enemy. These avenues also facilitate the conduct of ambushes, counterattacks, and infiltrations.

(4) Air Level: The air provides another avenue of approach in urbanized areas. Aviation assets can be used for high speed insertion or extraction of troops, supplies, and equipment. While aviation assets are not affected by obstacles on the streets, they are affected by light towers, signs, power lines, and other aerial obstructions. They are also vulnerable to the man-portable surface-to-air missile threat, crew served weapons, and small arms fire.

c. Categories of Built-Up Areas: Built-up areas are generally classified as:

- * Villages (populations of 3,000 or less)
- * Strip areas (industrialized zones built along roads connecting towns or cities)
- * Towns or small cities (populations of up to 100,000 and not part of a major urban complex)
- * Large cities with associated urban sprawl (populations in the millions, covering hundreds of square kilometers).

d. Characteristics of Urbanized Areas: A typical urban area consists of combinations of the city core, commercial ribbon, core periphery, residential sprawl, outlying industrial areas, and outlying high-rise areas. Each of the urban area's regions has distinctive characteristics that may weigh heavily in planning for MOUT. Most urbanized areas resemble the generalized model shown in Figure 0303-1.

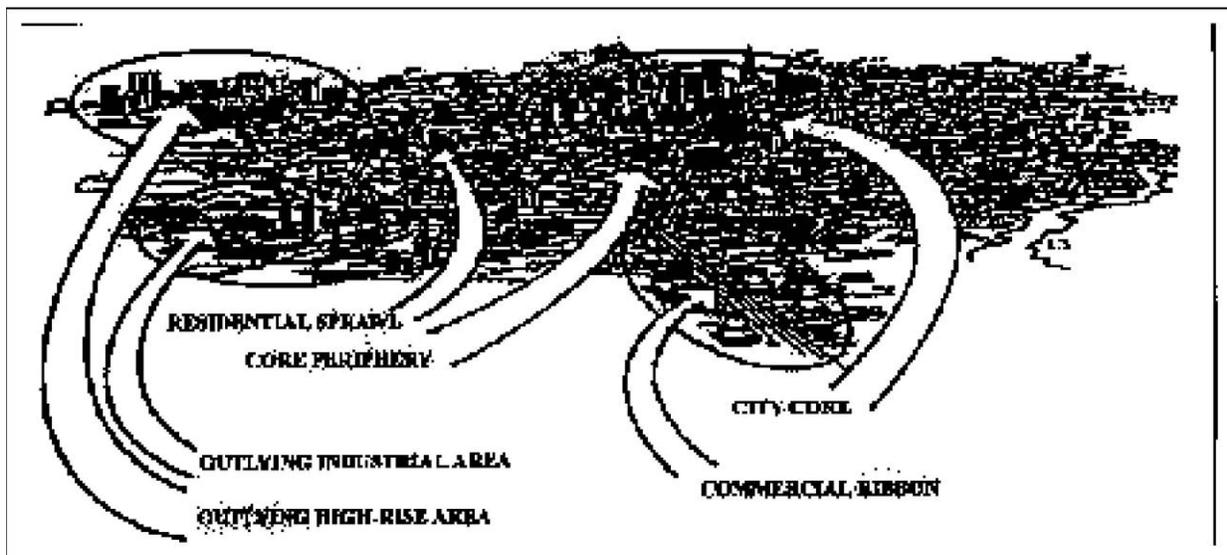


Figure 0303-1. Typical Urban Area

(1) City Core: In most cities, the city core has undergone more recent development than the core periphery. As a result, the two regions are often quite different. Typical city cores are made up of high-rise buildings which vary in height. Modern urban planning for built-up areas allows for more open spaces between buildings than in old city cores or in core peripheries

(2) Commercial Ribbon: Commercial ribbons are composed of rows of stores, shops, and restaurants that are built along both sides of major streets through built-up areas. Typically, such streets are 25 meters wide or more. The buildings in the outer areas are uniformly two to three stories tall—about one story taller than the dwellings on the streets behind them

(3) Core Periphery: The core periphery generally consists of streets 12 - 20 meters wide with continuous fronts of brick or concrete buildings. The building heights are fairly uniform—2 or 3 stories in small towns, 5 to 10 or more stories in large cities .

(4) Residential Sprawl: Residential sprawl areas consist mainly of low houses or apartments that are one to three stories tall. The area is primarily composed of detached dwellings that are usually arranged in irregular patterns along streets, with many smaller open areas between structures.

(5) Outlying Industrial Areas: These areas generally consist of clusters of industrial buildings

varying from one to five stories in height. Buildings generally vary dramatically in size and composition. Industrial parks are good examples of this category.

(6) Outlying High-Rise Areas: These areas are similar in composition to city core areas, but may be composed of clusters of more modern multistory high-rise buildings in outlying parts of the city. Building height and size may vary dramatically. Generally, there is more open space between buildings located in the outlying high-rise areas than is found within the city core area.

3. MODERN BATTLES FOR URBANIZED TERRAIN: Geography, politics, and economics dictate that cities will continue to be an objective of armies in warfare. From the armies that invaded and liberated Europe twice during the 20th century, to the forces that fought in Korea and Vietnam, to our most recent urban battles in the Middle East and Southwest Asia, the basic principles of combat in built-up areas have essentially remained unchanged in this century. While the principles remain the same, the introduction of helicopters, fixed-wing aircraft, armor, and precision-guided munitions (PGMs) has altered some of the techniques associated with urban combat.

4. MODERN URBAN BATTLE ANALYSIS AND OBSERVATIONS: Urban warfare experience has caused us to reevaluate old factors and consider new developments that affect the way we fight in this environment. Factors that have had an impact on the manner in which urban warfare has been conducted are:

a. Intelligence: A review of modern urban battles discloses that the attacker will usually win. Failures to win generally reflect classic military errors not characteristically unique to cities. However, of the battles studied, battles lost were attributed to errors in initial intelligence. The battles of Arnhem and Suez City probably would never have occurred had the attacker known the strength and locations of the defender's forces.

b. Surprise: Surprise is a combat multiplier and can substantially reduce the cost of urban warfare. It can be achieved through deception, stealth, and ambiguity. Surprise can be an important asset to increase leverage, but, not necessarily a decisive one. In urban areas, tactical surprise by the attacker can be used to preempt effective defensive preparation of a city.

c. Combined Arms: The use of combined arms places the enemy in a dilemma. Any action the enemy takes to avoid one combat arm makes him more vulnerable to another:

(1) Infantry: Combat in urban areas is primarily a small-unit, infantry intensive operation. Restrictions on maneuver, particularly for mechanized units, increases opportunities for infiltration. Urban combat requires small-unit leadership, initiative, and skill. Infantry units can be organized, trained and equipped to negotiate urbanized terrain that restricts observation, fields of fire, and mechanized movement.

(2) Armor: Of the 22 battles studied, armor participated in 21. In three-fourths of these battles, organic tank support was a central element when special assault teams were employed. Overall, special assault units supported by tanks were more successful than any other task organization. The use of tanks to the attacker inside a city has been effective only when they were protected by infantry.

(3) Artillery: Artillery has played an important role in most major urban conflicts. At Aachen, U.S. forces combined infantry with antitank teams and artillery (in a direct-fire role) down to the squad and fire team level. Also, artillery firing shells with "delay" fuses in an indirect-fire role were used to penetrate one or more floors before exploding, thus driving the enemy to the ground where infantry and armor could attack. Artillery was also positioned to fire perpendicular to the direction of

movement of assaulting forces. Thus, fratricide from artillery range errors was alleviated. Artillery has two distinct roles: outside the built-up area to isolate or prevent isolation with indirect-fire; and within the built-up area to provide direct-fire support. Artillery employed in the indirect-fire role has been effective in disrupting defenders in half of the studied battles.

(4) Mortars: The mortar is the most used indirect-fire weapon in urban combat. The mortar's high angle of fire allows the round to reach the street level accurately without being masked by surrounding structures.

(5) Antiaircraft Artillery: Antiaircraft artillery (AAA) was extremely useful in a ground fire role in some urban battles. AAA has been used more frequently in more recent events, but against buildings rather than people. The high rates of fire of modern AAA make it excellent in terms of shock and destructive potential. However, ammunition supply can be a problem because the volume of fire.

(6) Aviation: Historically, aviation assets have played an important role in helping to isolate the objective and to interdict the flow of the defender's supplies and reinforcements. However, aviation has been relatively ineffective when not used in conjunction with ground forces. In future urban warfare, aviation will be even more effective due to advances in fixed- and rotary-wing aircraft, unmanned aerial vehicles, precision guided munitions, improved munitions, communications, sensors, and targeting systems. Battle studies already indicate a trend toward more extensive aviation participation in MOUT.

d. Combat Forces: Whether attacking or defending, the size of the force relative to the enemy can be critical to success. When provided with adequate forces, the attacker can isolate and encircle the defender and prevent a breakout or linkup. The defender can use them to create a mobile defense or to create strong reserves for counterattacks.

e. Special Assault Teams: In these battle studies, "shock units" or "special assault teams" have been used by attackers (and often by defenders) with great success. These organizations were characterized by the integration of combined arms at the battalion level and below. Assault teams typically contained infantry with various combinations of armor, artillery, and engineers.

f. Time: In most cases, successful conclusion of an urban battle took two to three times longer than the initial estimates. This often had adverse affects on the overall campaign. Well-planned urban defense, even if the defender is isolated or lacking in aviation, armor, or artillery weapons, can be time consuming to the attacker. Time can allow the defender to reorganize, redeploy, or marshal resources in other areas.

g. Isolation: The attacker won all urban battles where the defender was totally isolated. Even the partial isolation of the defenders resulted in attackers enjoying a success rate of 80 percent. Conversely, attackers won only 50 percent of the battles in which defenders were not significantly isolated, and those victories came at great cost.

h. Cost: The cost of conducting urban warfare is relative to the percentage of total expended resources, the time elapsed, and the results achieved. The cost to the attacker was considered high in the majority of urban battles. A high cost does not necessarily imply that the results were not worth the price. The attacker and defender must thoroughly evaluate the overall cost prior to committing to an urban battle.

i. Rules of Engagement (ROE): The nature of the military operation may restrict our use of weapons. The majority of urban battles since 1967 have had one or more of the following restrictions

imposed on the attacking force:

(1) Minimizing civilian casualties and/or collateral destruction in order to:

- * Avoiding alienation of the local population
- * Reducing the risk of adverse world or domestic opinion
- * Preserving facilities for future use
- * Preserving cultural facilities and grounds.

(2) Limiting the use of specific ground or air weapons.

j. Logistics: Timely combat service support, particularly in the areas of ammunition resupply and casualty treatment and evacuation, is a critical element in MOUT.

(1) Logistics Support: Historically, combat in urban environments has seen a dramatic increase in the amounts of Class IV (shoring, sandbags, concertina wire), Class V (ammunition), and Class VIII (medical material). Unique items, such as rope, grappling hooks, and ladders are required for operations on urbanized terrain. Intense close-quarter combat requires a continuous flow of ammunition, particularly small-arms, tank, antitank, mortar, and artillery ammunition, as well as mines, grenades, and demolition explosives. Medical supplies must be readily available to treat the anticipated increase in casualties.

(2) Health Service Support (HSS): Responsive treatment and evacuation plans should be established to handle the expected increase in casualties, both physical and mental. Immediate treatment and evacuation are critical in maintaining the morale and confidence of forces engaged in urban warfare.

5. IMPLICATIONS OF URBAN WARFARE: The commander charged with making decisions needs to understand the operational and strategic implications of a tactical struggle in an urban area. Three urban battles illustrate the importance of seeing beyond the tactical nature of the battle.

* The battle for Stalingrad had major operational and strategic implications. The entanglement of German forces at Stalingrad bought time for the Soviets to mobilize and prevent a major combined effort of two German Army Groups in the south. While Stalingrad resulted operationally in the destruction of the German Sixth Army, the strategic results were even greater. Stalingrad caused a complete change of German strategy in the east. Hitler made major changes in his General Staff, and from this point on in the war, he was a man estranged from his military leadership. The loss of enough men and equipment to field one-fourth of the German Army shook the foundations of the Third Reich.

* The Battle for Hue, although only one of over one hundred different attacks of the Tet Offensive of 1968, had a negative impact on the will of both the American people and their political leadership. Hue marked a revolution in the coverage of war by modern mass media. It was the first time Americans could watch an ongoing battle from their living room on the evening news. Hue was a television bonanza for almost a month. When North Vietnamese leadership directed that Hue be held for at least seven days, it was clearly not their intent to win a tactical battle, but to strike at the strategic center of gravity—in this case, the will of the American people. Although the battle for Hue was a tactical victory for the U.S., the North Vietnamese had achieved their strategic goal of making the American public question the costs associated with the war.

* During the battle of Beirut II, the IDF's objective was to drive the PLO from Lebanon. The ability of the PLO to leverage the media to gain an advantage was one of the most

significant weapons in their arsenal. Despite an Israeli tactical victory, the costs in image, prestige, allies, and, most importantly, its own national will were enormous. The results of this battle eventually caused a change of political leadership at the highest levels of government.

6. **KEY INSIGHTS:** Consideration of these key insights are required in order to effectively and efficiently plan and execute MOUT:

- a. MOUT is infantry intensive.
- b. A tactical battle may have far-reaching implications, creating the situation where tactical actions can have operational and possibly strategic repercussions
- c. Commanders at all levels must understand the impact that media representation will have on the accomplishment of operational and strategic objectives.
- d. Maneuver warfare doctrine must be applied to the environment.
- e. Intelligence is imperative to success in urban warfare.
- f. Surprise is a combat multiplier.
- g. Armor, artillery, and aviation are effective at the outer perimeter of built-up areas for causing isolation or preventing reinforcement.
- h. Armor operating inside a built-up area must be protected by infantry.
- i. Artillery providing direct fire inside a built-up area can be effective in the reduction of strong points.
- j. As force ratio increases in favor of the attacker, combat duration decreases.
- k. Urban warfare is time consuming.
- l. Isolation of an urban defender ultimately ensures his defeat.
- m. Attack of an urban area is costly to the attacker in terms of resources and casualties.