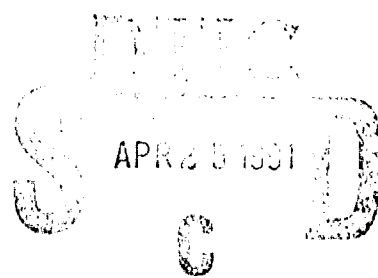


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**Players or Spectators? Heavy Force Doctrine for MOUT**

**A Monograph  
by  
Major John R. Kennedy  
Infantry**



**School of Advanced Military Studies  
United States Army Command and General Staff College  
Fort Leavenworth, Kansas**

**First Term AY 89/90**

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3) COMBINED ARMS (INCLUDING DISMOUNTED INFANTRY AND ARMORED VEHICLES WITH LARGE CALIBER, DIRECT FIRE WEAPONS) ARE NECESSARY FOR SUCCESSFUL MOUT OPERATIONS.

4) THE URBAN DEFENDER SHOULD HAVE A COUNTERATTACK CAPABILITY. PRESENT ARMY MOUT DOCTRINE ADEQUATELY ADDRESSES ONLY PROPOSITION 2.

THE STUDY CONCLUDES THAT MAJOR DISCREPANCIES EXIST BETWEEN THE MOUT DOCTRINE EXPOUNDED IN THE ARMY'S UMBRELLA MOUT MANUAL, FM 90-10, AND THE HEAVY FORCE HOW-TO-FIGHT MANUALS FOR BATTALIONS THROUGH CORPS. IMPROVING THE DOCTRINE IS THE FIRST STEP TO ENHANCING THE ARMY'S ABILITY TO CONDUCT HEAVY FORCE OPERATIONS IN MOUT.


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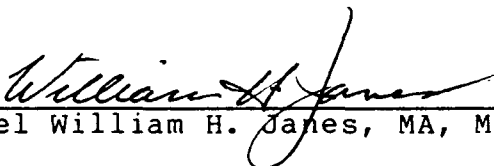
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## ABSTRACT

PLAYERS OR SPECTATORS? HEAVY FORCE DOCTRINE FOR MOUT by  
MAJ John R. Kennedy, USA, 56 pages.

This monograph discusses the proper doctrine for current heavy forces in Military Operations on Urbanized Terrain (MOUT). The urban warfare concepts found in classical military theory, modern military theory, history, and contemporary analysis are examined to develop a set of propositions for current heavy force MOUT doctrine. Present U.S. Army MOUT doctrine for heavy forces is compared to these propositions to determine the adequacy and validity of current doctrine. This paper concludes with implications for the U.S. Army today based on its heavy force MOUT doctrine.

Among the many conclusions which are drawn from this investigation is that current doctrine for heavy forces in MOUT should contain the following four propositions:

- 1) The attack of an urban area is a time consuming operation.
- 2) In most cases, the attacker should attempt to avoid combat in urban terrain.
- 3) Combined arms (including dismounted infantry and armored vehicles with large caliber, direct fire weapons) are necessary for successful MOUT operations.
- 4) The urban defender should have a counterattack capability.

Present Army MOUT doctrine adequately addresses only Proposition 2.

The study concludes that major discrepancies exist between the MOUT doctrine expounded in the Army's umbrella MOUT manual, FM 90-10, and the heavy force how-to-fight manuals for battalions through corps. Improving the doctrine is the first step to enhancing the Army's ability to conduct heavy force operations in MOUT.

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## CHAPTER 1

### INTRODUCTION

The rapid growth of the world's population, especially since World War II, has spawned a parallel increase in urbanization. Major urban areas can be found on every continent. They are most prevalent in Europe and Asia where the vast majority of American forward deployed land forces are located. As contemporary observer John J. Mahan stated, "In the instance of conventional combat in Europe, the term most often used by authoritative sources is 'inevitable.'"<sup>1</sup> Urban combat accounted for forty percent of all combat in Europe in World War II, and fighting on urbanized terrain today will undoubtedly be the rule rather than the exception. An estimated thirty percent of the terrain in the Federal Republic of Germany (FRG) will be urban by the turn of the century. Today, the typical brigade sector in the FRG contains roughly twenty-five villages. Any future combat in Europe will involve extensive urban warfare, and MOUT operations will be probable around the globe.<sup>2</sup>

The validity and adequacy of current Army MOUT doctrine achieves added importance given the near certainty of urban warfare in a future mid- or high-intensity conflict. FM 90-10, Military Operations on

Urbanized Terrain (MOUT), defines MOUT as "all military actions that are planned and conducted on a terrain complex where manmade construction impacts on the tactical options available to the commander."<sup>3</sup> A built-up area is "a concentration of structures, facilities, and population which form the economic and cultural focus for the surrounding area."<sup>4</sup> This paper will develop the theme of MOUT doctrine for heavy forces, which includes mechanized infantry and armor units. This study will seek to answer the question, "What should be the current Army doctrine for heavy forces in MOUT?"

In order to properly respond to this question, I will review classical military theory, modern military theory, historical examples of heavy forces in urban combat, and recent MOUT observations to initially determine and then validate certain propositions appropriate to the topic. These propositions will serve as the basis of what I believe to be the core of what current Army doctrine for heavy forces engaged in MOUT operations should be. Finally, I will survey and critique existing doctrine contained in FM 90-10 and other manuals to recommend implications for the United States Army today. The focus of this paper is on MOUT operations in conventional warfare, using current doctrine and force structure.<sup>5</sup>



## ENDNOTES

1. John J. Mahan, "MOUT: The Quiet Imperative," Military Review, LXIV (July 1984), p. 48.

2. DeMario, CPT Andrew F., "When Will We Ever Learn?" Armor, XCVII (September-October 1988), p. 22; LTC Bloomer D. Sullivan, Ret., "Future European Battlefield," Military Review, LXVIII (July 1988), p. 51; and FM 90-10, Military Operations on Urbanized Terrain (MOUT) (Washington: Department of the Army, 1979), p. 1-3. This is the Army's capstone MOUT manual. CPT Ralph Peters, in his article entitled "The Army of the Future," Military Review, LXVII (September 1987), pp. 38-39 lists cities such as Cairo, Lagos, Managua, and Sao Paulo outside of Europe where future MOUT operations are conceivable.

3. FM 90-10, p. i.

4. FM 90-10, p. 1-2. The phrases "built-up area" and "urbanized terrain" will be used synonymously throughout this study.

5. The primary reason for my focus on mechanized and armored forces is that many believe that the MOUT battle should be fought exclusively by "light" forces. Those adhering to this school of thought point to 1) the historical reverses suffered by heavy forces fighting in cities (two examples will be studied in this paper), 2) the fact that practically all armies stress that heavy forces should bypass and avoid urban areas rather than seek combat therein, and 3) the degradation of heavy force mobility and firepower when engaged in urban warfare. This study will address these issues.

Current Army force structure and location imply that heavy forces will have a major role in future MOUT operations. Eighty percent of the Army's forward deployed divisions are mechanized or armored. The active duty force structure contains eleven heavy and seven light divisions. Fifty-four percent of the Total Army's twenty-eight divisions are heavy. The certainty of urban warfare in any conceivable conventional war coupled with the current force structure leads to the conclusion that heavy forces will play an important part in future MOUT operations.

## CHAPTER 2

### THE THEORETICAL BASIS FOR MOUT DOCTRINE

In order to propose a current MOUT doctrine for the Army's heavy forces, I will first review classical and modern theoretical writings. I will highlight the observations related to MOUT by theorists, and then draw initial propositions based on 1) concurrence among two or more theorists, or 2) on relativity to heavy forces in particular. Admittedly, Napoleonic armies possessed neither tanks nor infantry fighting vehicles, yet the applicability of many of the precepts of Carl von Clausewitz, for example, is nearly universally accepted. The concepts relating to urban warfare found in these theoretical works will be condensed into brief propositions, or statements, which will form the framework for this study.

The desired outcome of this synthesis of classical theory, modern theory, history, and contemporary observations is to determine if current Army doctrine for heavy forces in MOUT is valid and adequate. I will compare the propositions obtained by a survey of theory to the lessons of history and the observations of contemporary writers to determine if they remain valid. Those that pass the test of validity will provide a basis for an authoritative

doctrine for heavy forces in MOUT operations. In order for this military doctrine to be useful, it must link theory with practice and be the condensed expression of the army's approach to fighting. Generally, sound doctrine is 1) authoritative but not directive, 2) a guide to action, 3) flexible in execution, 4) culturally and historically dependent, 5) adaptable to new battlefield and other realities, and 6) visionary in that it anticipates future conflict.<sup>1</sup>

### CLASSICAL THEORY

The classical theorists studied include Sun Tzu, Baron Antoine de Jomini, and Clausewitz. Sun Tzu's work, The Art of War, predates the Napoleonic era by over two millennia in its original form. Jomini's The Art of War contains very little information concerning combat in cities. On War, by Clausewitz, includes many observations regarding both fighting in cities and besieging or defending fortresses which are useful to this study. Generally these classical military theorists focus on the reasons a commander would decide to attack or besiege a city.

Sun Tzu wrote in China at a time (ca. 500 BC) when campaigns against enemy capitals were common and siege warfare was highly advanced. He advised caution when considering the attack of cities, and believed that the prudent commander would select only a capital or an isolated city to attack. He recommended that an

attacker should attempt to surprise and secure a city by fast marches before enemy defenses within the city could be prepared. He admonished invading armies to secure enemy cities and towns along the army's lines of communications. Perhaps his most famous quotation on this topic is, "The worst policy is to attack cities. Attack cities only when there is no alternative."<sup>2</sup> He discussed three reasons for attacking (besieging) cities only as a last resort: 1) such an operation curtailed mobility and freedom of maneuver, 2) it required much time and many soldiers, and 3) initiative was dissipated. Sun Tzu did recognize, however, that the capture of an enemy's cities could lead to his defeat.<sup>3</sup>

Jomini only briefly discussed combat in cities. He observed that capitals and rich cities made the best targets for attack. He also noted that defenders in a town can halt an attacking enemy. Although Jomini addressed siege warfare on occasion, his major concern with cities involved their designation as strategic points, objective points, or bases for operations.<sup>4</sup>

Clausewitz devoted the majority of his writings on this subject to the attack and defense of fortresses which protected cities. He believed that possession of certain cities, such as capitals and those which contained large amounts of supplies, would be valuable in the peace negotiations. He preferred infantry for

combat in difficult terrain of any kind. He stated that the defending commander should concentrate in an area of the country and force the attacker to engage many cities in succession. He asserted that the defender must possess an offensive sortie capability to be most successful.<sup>5</sup>

Clausewitz addressed the attack of a city or a fortress at length. He listed many drawbacks to attacking fortresses, such as the loss of time and combat power. Especially in the pursuit, Clausewitz stated that the attacker should march on the fortress or city and surprise the defender before he could prepare defenses. Like Sun Tzu, he observed that an invading army could not ignore enemy held towns along the army's lines of communications. He proposed many reasons for attacking a city or a fortress, including the city's contribution to the overall objective of defeating the enemy army and the subsequent use of a fortress as a troop billets. Finally, Clausewitz asserted that a pure cavalry force (the equivalent then of modern mounted forces) could not defeat a defender in a village.<sup>6</sup>

#### MODERN THEORY

The modern military theorists researched include John A. English, Richard E. Simpkin, and Chris Bellamy. English detailed the storm group tactics of the Soviets in World War II while advocating the role and

importance of the infantryman on today's battlefield. Simpkin asserted that cities would now be attacked primarily for their political significance. Bellamy argued that the increasing urbanization in Europe would decrease the pace of an attack on that continent. All three theorists recognized the need for combined arms in MOUT operations.

English echoed the earlier statement that urban warfare in contemporary or future Europe was inevitable. He stated that defending a city required fewer troops than attacking. Using the Eastern Front in World War II and the battle of Stalingrad in particular, he explained the combined arms formations adopted by both the Soviets and Germans in urban combat. English cited Soviet General Vasili Chuikov, the Commander of the 62nd Army at Stalingrad, who recommended counterattacks or "bold sallies" as the defender.<sup>7</sup> Chuikov asserted, "Tanks are needed...not as an independent force, but for joint action with other ground arms, and in assault groups."<sup>8</sup> English advocated a web defense integrating village strongpoints and larger cities against attacking armored forces. He also noted that the Soviets attempt to avoid cities when on the offensive.<sup>9</sup>

Simpkin discussed the reasons a force would decide to either attack or defend a built-up area. He proposed defending an urban area when a small number of

defenders could cause a canalized enemy unit to be forced to attack and clear the city. Most types of urban areas, he observed, were vulnerable to surprise attack.<sup>10</sup>

Bellamy realized that an attack against a prepared enemy defending a city would be expensive in terms of time and casualties. He, too, considered urban warfare in contemporary Europe inevitable. Bellamy recognized that tanks in an urban environment required infantry protection, though he regarded the tank as the premier land weapon system. He based his observations concerning an attack of an urban area on current Soviet doctrine. He stated that the Soviets (and the Chinese) prefer to surprise a city before its defenses have been prepared. Like English, Bellamy contended that attacking Soviet units attempt to bypass urban areas with their lead elements.<sup>11</sup>

Classical and modern military theorists differ on several key points. The classical theorists are much more concerned with securing occupied towns and cities along the attacking army's lines of communication. The classical theorists also offer many more reasons to attack a city. For the modern theorists, the only justification for attacking a city is related to some political motive. The admonition for the attacker to avoid urban combat altogether is much more evident in modern theory. Another difference

in emphasis concerns the necessity of combined arms operations in urban combat. While only suggested in classical theory, modern theory clearly considers combined arms in urban warfare a key doctrinal element.

Many similarities exist between classical and modern theory relating to heavy force operations in MOUT, and these form the basis for my theoretical propositions as listed below:

- 1) The attack of an urban area is a time consuming operation.

- 2) The preferred method of attack against a city is a surprise attack.

- 3) A pure mounted force can rarely defeat a defender in an urban area.

- 4) In most cases the attacker should attempt to avoid combat in urban terrain.

- 5) Infantry is the best arm for urban combat.

- 6) Combined arms are necessary for successful MOUT operations.

- 7) The urban defender should have a counterattack capability.

These propositions are located at Appendix 1 for easy reference.



## ENDNOTES

1. The definitions and key characteristics of doctrine used here are based on a presentation given by COL William H. Janes, Director of the School of Advanced Military Studies, 25 August 1989.
2. Sun Tzu, The Art of War, trans. Samuel B. Griffith (New York: Oxford University Press, 1963), p. 78.
3. Sun Tzu, pp. 7, 38, 41, 61, 70, 110, 113, 131, and 138.
4. Baron de Jomini, The Art of War, trans. CAPT. G.H. Mendell and LIEUT. W.P. Craighill (Westport, CT: Greenwood Press, originally published in 1862), pp. 69, 79, 97, and 110-111.
5. Carl von Clausewitz, On War, trans. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1976), pp. 181-182, 220, 351, 394-395, 402-403, and 568.
6. Clausewitz, pp. 181-182, 220, 270, 364, 395-397, 483, 497, 504, 509, 526-527, 529, 551, 560, 567-568, and 598-599.
7. Vasili I. Chuikov, The Beginning of the Road, trans. Harold Silver (London: MacGibbon & Kee, 1963), p. 292.
8. John A. English, On Infantry (New York: Praeger Publishers, 1984), p. 204.
9. English, pp. 105-106, 201-205, and 215.
10. Richard E. Simpkin, Race to the Swift: Thoughts on Twenty-First Century Warfare (London: Brassey's Defence Publishers, 1985), pp. 71-72 and 74.
11. Chris Bellamy, The Future of Land Warfare (New York: St. Martin's Press, 1987), pp. 136, 166, 192, and 283.

## CHAPTER 3

### THE HISTORICAL BASIS FOR HEAVY FORCE MOUT DOCTRINE

Given the seven propositions which emerged from a survey of classical and modern theory, I will now look back into history to determine if these statements have a historical foundation. I will discuss three battles: Aachen (1944), Suez City (1973), and Khorramshahr (1980). These battles were selected to fulfill four criteria. First, due to the emphasis on heavy forces all three had to occur during World War II or later. Second, I desired to research battles in which heavy forces played an important combat role. Third, at least one of the battles had to involve the United States Army. Finally, I wanted to research one battle from the current decade to provide a recent account. As a group these battles meet my criteria, and have been analyzed by others for their value in extracting lessons learned from MOUT operations.<sup>1</sup>

#### THE BATTLE FOR AACHEN, 1944

The first American attempt to capture a major German city was the attack on Aachen in October 1944. This operation possessed great political and psychological significance for both sides. Aachen occupied a segment of the vaunted Siegfried Line which

the Germans had to hold at all costs. COL Gerhardt Wilck and his 246th Volksgrenadier Division defended the city, and the German forces inside Aachen totalled approximately five thousand troops and five tanks. MG Clarence Huebner and his 1st Infantry Division received the mission to capture Aachen, but could spare only two battalions of the 26th Infantry to conduct the assault. Nevertheless, the Americans possessed a substantial firepower advantage due to their superiority in tanks, artillery, and aircraft.<sup>2</sup>

On 8 October 1944 American forces began the encirclement of Aachen. The Germans turned down a surrender ultimatum on 10 October and on the following day a massive, though relatively ineffectual, air and artillery bombardment destroyed much of the city. The American assault commenced in earnest on 13 October. Since the majority of the German defenses oriented toward the west and south, the 26th Infantry attacked from the east to surprise the defenders and avoid the principal defensive works.<sup>3</sup>

Tactically, the American forces attempted to seal off an area to be assaulted with indirect fire and then capitalize on the direct fire of tanks, tank destroyers (TDs), and machineguns to drive the defenders into cellars where the infantrymen could kill the enemy with hand grenades and small arms. The commander of the 2nd Battalion, 26th Infantry, LTC

Derrill M. Daniel, organized his battalion into small, combined arms assault teams consisting of one infantry platoon augmented by a tank or TD. The infantry provided close in protection for the armored vehicles while the tanks or TDs laid down covering fire for the infantry assaults. The Americans also used self-propelled 155mm guns in a direct fire role to destroy buildings which the tanks or TDs could not bring down. One 155mm gun killed two of the German tanks and its devastating fire caused COL Wilck to later state that the firing of this weapon, at such a close range, should be prohibited. LTC Daniel wrote, "The firing [of the 155mm gun in the direct fire role] was quite spectacular and satisfying from our viewpoint."<sup>4</sup>

A German counterattack supported by assault guns on 15 October initially succeeded in driving the infantry back exposing two tanks, which German infantrymen destroyed with Panzerfausts. By 16 October, however, the city had been completely surrounded and COL Wilck surrendered his command on 21 October. The 1st Infantry Division captured 3473 Germans within the city during the battle. American casualties were very light in comparison. Total casualties for the two battalions of the 26th Infantry were four hundred and ninety-eight. LTC Daniel attributed the American success at Aachen to "The slow thorough methods employed and the constant stress laid

upon use of all available fire power [which] paid off in extremely low casualties for a tough grueling battle."<sup>5</sup>

How does the battle of Aachen confirm, deny, or modify the seven propositions? Although LTC Daniel believed that the attack proceeded slowly, nine days to capture a city the size of Aachen (with a peacetime population of 165,000) was no small feat. The unanticipated direction of attack enabled the Americans to achieve surprise which shortened the duration of the operation. The American forces never attempted to secure the city using mounted forces alone, yet during the battle when the infantry left their supporting tanks unprotected the tanks became easy prey to hand held antitank weapons. During the Aachen campaign, the Americans did not avoid attacking the city but did encircle the defenders allowing no reinforcements or supplies into Aachen.<sup>6</sup>

Dismounted infantry once again proved its value in the difficult terrain of a large city, yet "few units, German or American, experienced much success unless tanks were on hand."<sup>7</sup> Aachen unmistakably showed the efficacy of combined arms in urban combat, and especially the additional heavy firepower provided by tanks and self-propelled artillery in the direct fire mode. Indirect artillery fire obtained minimal results, and added rubble which could have actually

strengthened the defense. The tank-dismounted infantry combination proved to be much more effective than either arm alone. Finally, the Germans demonstrated the benefits of possessing a counterattack capability. The battle of Aachen substantiated the theoretical propositions and emphasized the importance of firepower as an integral part of combined arms in urban warfare.<sup>6</sup>

#### THE BATTLE FOR SUEZ CITY, 1973

The Israeli attempt to capture Suez City on the west bank of the Suez Canal became the last major battle of the Yom Kippur War. An initial cease fire went into effect at 221852 October 1973 yet the major Israeli thrust occurred on 24 October. Israel considered the city important because: 1) it sat astride the only line of communications from Egypt into the Egyptian 3rd Army east of Suez, 2) it was strategically located at the southern end of the canal and the northern part of the Gulf of Suez, and 3) its capture would prove beneficial to Israel in the upcoming negotiations. MG Avraham "Bren" Adan received orders "to capture Suez City, if it does not become a Stalingrad situation."<sup>7</sup> Adan quickly committed one of the brigades in his division to the attack of the city. Since the initial cease fire had already been proclaimed, a rapid advance was essential to the success of this operation.<sup>10</sup>

The Egyptian forces in the city planned to

allow the attacking Israeli force to penetrate into kill zones in the center of the town before opening fire. The lack of Egyptian response to an Israeli reconnaissance by fire led the Israelis to believe the enemy did not occupy the city in strength. Therefore, the Israelis planned to assault the city with tanks in the lead, moving rapidly and firing their weapons in every direction to overwhelm the defense. MG Adan intended to call off the attack if it proved too difficult or costly.<sup>11</sup>

At 241330 October 1973, after a limited aerial and artillery bombardment, an armored brigade from Adan's division reinforced by a two hundred man battalion of paratroopers assaulted Suez City along two axes. Attacking at high speed with tanks leading and in column, the Israelis penetrated into the center of the city where RPGs destroyed the lead three tanks and tanks at the rear of the column. With routes further into and out of the city almost completely blocked, the remaining armored vehicles fled into side streets. A combination of RPGs, Molotov cocktails, SAGGER missiles, and Hosam shaped charge grenades soon destroyed the entire force. The paratroopers, which followed the tanks in M113 armored personnel carriers (APCs) and halftracks, found themselves surrounded in the town. With their battalion commander wounded, most of the infantrymen laid low until dark and then

exfiltrated back to friendly positions outside of the city. Israeli losses included from eighty to one hundred and twenty-five men and twenty-eight armored vehicles. Egyptian losses were minimal. The fight for Suez City finally terminated on 28 October with the town still firmly under Egyptian control.<sup>12</sup>

The Israelis developed their tactics for armored assaults on urban areas from previous conflicts. MG Adan believed that to properly attack a city one must: 1) cut off the enemy and encircle him, 2) attack briskly with armored columns abreast to create a shock effect, 3) secure key positions inside the city such as government buildings or key intersections, 4) send the armored forces to other parts of the city to track down and defeat enemy centers of resistance, and 5) use the infantry to clear the area house to house. Israel successfully employed these tactics in Gaza in 1956 and several times in the Six-Day War.<sup>13</sup>

The battle for Suez City confirmed and, in some cases, amplified the theoretical propositions earlier postulated. The Israelis attempted to capture the city in one afternoon and thereby circumvent the proposition that attacks on urban areas require a large investment of time. Although MG Adan launched the major attack on Suez City soon after forces reached the vicinity of the town, the attack was not a surprise because the



Egyptians were ready for the assault. Israeli intelligence proved poor. The anticipated armored assault on weak forces became a hasty attack against alert defenders in well prepared defensive positions.<sup>14</sup>

Combined with the lack of accurate intelligence, the ineffective use of Israeli infantry caused the assault to fail. The battalion of Israeli paratroopers that fought in Suez City did not belong to Adan's division, and had not conducted combined arms training with tanks. Adan wrote, "neither their equipment ...vehicles...training nor their inclinations fitted them for armored action...in the field they had soon separated themselves from the armored forces."<sup>15</sup>

This fight also demonstrated the necessity of combined arms for successful MOUT operations. The unsupported assault of armor into the middle of the city resulted in the destruction of the entire column. MG Adan concluded after the war that combat in cities required task organized units with armor, mechanized infantry, and combat engineers. He advocated combinations of these elements at the lowest levels, such as one tank followed by one APC, etc. Chaim Herzog concluded that the "attack on Suez proved to be a very grave error indeed."<sup>16</sup>

#### THE BATTLE FOR KHORRAMSHAHR, 1980

After numerous incidents along the Iran-Iraq border during the first eight months of 1980, Iraq

invaded Iran on 22 September. The Iraqis believed that the seizure of Khorramshahr would demonstrate its military might to Iran. The Iraqi Army placed an armored division opposite Khorramshahr and ordered it to capture the city. The Iraqis thought (like MGs Adan and Huebner) that the week-long air and artillery bombardment would greatly diminish the physical defenses and morale of the defenders. On 28 September the division attacked on a broad front and encountered numerous ambushes in the suburbs of Khorramshahr. The Iraqi ruler, Saddam Hussein, initially resisted committing infantry forces into the battle for fear of the political repercussions that would result from heavy losses. "Like the Israeli experience in Suez...Iraq was quick to learn...that urban areas are death traps for armour-heavy forces which can easily fall prey to determined infantry anti-tank teams..."<sup>17</sup>

Iraq instituted a feverish MOUT training program for its Special Forces regiment and the elite Republican Guard. By 6 October, the Iraqis had surrounded the city and begun methodical street by street clearance of the Iranian defenders. Iran rushed several Pasdaran elements to Khorramshahr early in the fight. Roughly comparable to Hitler's SA or SS, the Pasdaran contained no regular Iranian officers and fought separately from the army. Considering themselves the "Guardians of the Revolution," the

Pasdaran units fought tenaciously. Incapable of conducting maneuver warfare, Pasdaran units excelled in urban combat and "made a significant operational impact."<sup>18</sup> After nearly four weeks of bitter fighting the Iraqis captured the city on 24 October. Casualties were extremely high. Both sides lost an estimated seven thousand men. Iraq also lost more than one hundred tanks and armored vehicles. Both countries subsequently referred to Khorramshahr as the "City of Blood."<sup>19</sup>

The battle of Khorramshahr was very costly in terms of time and casualties. The Iraqis made no attempt to surprise the Iranians at Khorramshahr, although Iran itself was unprepared for war. Iraq confirmed that a pure mounted force can rarely defeat a defender in a city. While Iraq occupied the city at the end of the battle, Khorramshahr cannot be considered a sweeping Iraqi victory. In fact, Iraq subsequently became reluctant to attack any defended town for the duration of the war. Like the Israelis at Suez City, the Iraqis would have fared much better if they had chosen to avoid combat in Khorramshahr.<sup>20</sup>

Both sides demonstrated that infantry is the best arm for urban combat. Iraq learned an important and enduring lesson concerning the necessity for combined arms operations in MOUT. Iran never possessed a true combined arms force and consequently had a

limited counterattack capability.<sup>21</sup>

### THE LESSONS OF HISTORY

The seven propositions developed from classical and modern theory stood the test of the historical examples examined. Every battle proved time consuming; the twenty-seven day struggle for Khorramshahr was the most illustrative example. The only real surprise attack among these three battles was Aachen, and not surprisingly it resulted in the most notable victory for the attacker. In both Suez City and Khorramshahr the attackers unsuccessfully attempted to secure cities using almost exclusively mounted units. The American victory at Aachen showed that the attack of an urban area can be warranted. The battle of Suez City demonstrated the danger of a hastily conceived attack based on poor intelligence and executed with inappropriate tactics.<sup>22</sup>

In all three battles dismounted infantrymen demonstrated their great value in urban warfare. The success of the Americans in Aachen and the failure of the Israelis and Iraqis exemplified the necessity of combined arms. The Germans confirmed that the urban defender should have a counterattack capability although the Egyptians at Suez City defended successfully without resorting to an offensive counterstroke. The Iranians did not possess the

necessary forces to mount a counterattack against the Iraqis at Khorramshahr and eventually lost the city.

## ENDNOTES

1. For instance, R.D. McLaurin et.al. wrote a recent report entitled "Modern Experience in City Combat." (Aberdeen, MD: U.S. Army Human Engineering Laboratories, 1987), which studied twenty-two historical MOUT battles looking back as far as World War II. Aachen, Suez City, and Khorramshahr were among those examined.
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3. MacDonald, pp. 307 and 309 and MAJ Adolf Carlson, "Tanks in Urban Combat," Armor, XC (March-April 1981), p. 32.
4. LTC D.M. Daniel, "The Capture of Aachen (Personal Experience of a Battalion Commander)," (Ft. Leavenworth, 1947), pp. 5-6 and 13-14 and MacDonald, pp. 310 and 312.
5. MacDonald, pp. 311, 313, and 316-317; Daniel, p. 16; Russell F. Weigley, Eisenhower's Lieutenants: The Campaigns of France and Germany, 1944-1945 (Bloomington: Indiana University Press, 1981), I, p. 535; and CPT Monte M. Parrish, "The Battle of Aachen," Field Artillery Journal, 44 (September-October 1976), p. 29.
6. Daniel, p. 17.
7. Carlson, p. 32.
8. Daniel, p. 17.
9. Avraham (Bren) Adan, On the Banks of the Suez: An Israeli General's Personal Account of the Yom Kippur War (Jerusalem: Presidio Press, 1980), p. 427.
10. MAJ Glenn F. Rogers, Jr., "The Battle for Suez City," Military Review, LIX (November 1979), pp. 29 and 32 and Adan, pp. 426-427.
11. Rogers, p. 32 and Adan, pp. 426 and 428.
12. Adan, p. 428.
13. Rogers, pp. 32-33; Adan, pp. 429 and 431; MAJ Kenneth J. Strafer, "A Recapitulation of Contemporary MOUT Techniques," Military Review, LXI (February 1981), p. 54; and Chaim Herzog, The Arab-Israeli Wars (New York: Vintage Books, 1982), p. 282.

14. Rogers, p. 33; Adan, pp. 426, 428, and 431; and Strafer, p. 54.
15. Adan, p. 430.
16. Herzog, p. 282; Rogers, p. 33; Adan, pp. 429 and 431; and Carlson, pp. 33-34.
17. Edgar O'Ballance, The Gulf War (London: Brassey's Defence Publishers, 1988), p. 37; Shahram Chubin and Charles Tripp, Iran and Iraq at War (Boulder, CO: Westview Press, 1988), p. 54; and Efraim Karsh, The Iran-Iraq War: A Military Analysis (London: The International Institute for Strategic Studies, 1987), pp. 35-36.
18. Karsh, pp. 20-21.
19. O'Ballance, pp. 37-38, 40, and 47.
20. O'Ballance, p. 38.
21. O'Ballance, p. 209.
22. McLaurin, pp. 18 and 85.

## CHAPTER 4

### RECENT MOUT OBSERVATIONS

Having examined theory and history, I will now review recent commentaries (since the battle of Khorramshahr) to examine the latest analysis concerning heavy forces in MOUT. Two writers discussed the aspect of time in urban warfare. One stated that the attacker's momentum suffers in urban combat. Another commentator, R.D. McLaurin, asserted that "A well planned defense, even if cut off, or lacking in air, armor or artillery weapons, can consume inordinate amounts of the attacker's time."<sup>1</sup> He suggested two ways for the attacker to shorten the duration of combat. These methods included encircling the city to cut off supplies and reinforcements and applying more combat power.<sup>2</sup>

Regarding the issue of a surprise attack, one author asserted that the degree of surprise directly affected the combat power needed by the attacker to be effective in MOUT.<sup>3</sup>

Pertaining to an attack by a purely mounted force, two articles contained the statement that tanks without infantry support will not survive in an urban battle.<sup>4</sup>

Several commentators addressed the Soviet



doctrine which advises bypassing urban terrain to avoid combat in cities. Two of the authors surfaced possible exceptions to this statement for the Soviets. Evidence now indicates that the Soviets consider the best terrain for tanks to be locations devoid of antitank weapons. Undefended urban areas seem to fit that description. Secondly, one writer postulated that the increase of "smart" weaponry may force the Soviet armored forces to take advantage of urbanized terrain. American doctrine since the 1941 FM 100-5 has advised armored formations to avoid urbanized terrain when possible. There remain instances, however, when an attack is warranted such as the successful attack of the 3rd Armored Division on Cologne in World War II.<sup>5</sup>

Most authors viewed infantry as vitally important to success in urban warfare, and some believed that the importance of the infantryman on the increasingly urban battlefield has grown. None of the commentators expressed satisfaction with the number of infantrymen defending NATO. CPT Andrew F. DeMario wrote, "Lack of infantry is perhaps the single most damning proof of our force planners [sic] lack of insight, or their acceptance of the realities of actual combat."<sup>6</sup> Three writers recommended an infantry variant somewhere between the current "light" and mechanized infantry, equipped with greater firepower or mobility than the typical dismounted soldier. LTG

William R. Desobry, Retired, stated that using strictly light infantry in MOUT was "great theory but lousy practice."<sup>7</sup> Suggested improvements to the dismounted infantryman ranged from equipping him with SWAT weaponry to mounting him on wheeled vehicles similar to those contained in the 9th Infantry Division (Motorized).<sup>8</sup>

The recent periodical literature overwhelmingly focused on the need for combined arms in MOUT. Only three of the eleven authors who commented on this subject qualified their full agreement with the concept. One stated that tanks and infantry fighting vehicles (IFVs) had little utility in urban warfare, yet he did advocate the use of helicopters in city fighting. The other two commentators believed that the primary contribution of armored forces occurred outside of the urban area to prevent enemy forces from bypassing the city. Several writers highlighted the Soviet emphasis on combined arms in MOUT operations, including the liberal use of direct fire artillery. Since the Soviets will surely fight in cities with their heavy forces, American units must be able to defeat Soviet armor and to provide protection from Soviet tank fire.<sup>9</sup>

Many authors wrote about the interplay of tanks and infantry in urban warfare. Some recognized the need for individual tanks and tank sections supporting

infantry squads and platoons. Several directly attacked those who believe that armor does not belong in urban warfare. McLaurin wrote, "The belief that armor has no role in city fighting is erroneous."<sup>10</sup> These writers emphasized the requirement for armored protection and large caliber, direct fire weapons in urban combat. One commentator specifically mentioned the usefulness of IFVs providing support for tanks in MOUT.<sup>11</sup>

Contemporary observers also addressed other forces needed in MOUT to fully exploit the advantages of combined arms. In addition to infantry and armor, they deemed the integration of field artillery, engineer, aviation (both Army and Air Force), and air defense units essential for success in urban warfare. Using indirect fire artillery and airpower outside of the urban area could help to isolate the city, yet the greatest value of these fires within a built-up area would probably be their psychological impact on the defenders. Engineer forces, especially if utilizing the combat engineer vehicle, could provide direct fire support in addition to mobility and countermobility tasks.<sup>12</sup>

McLaurin discovered that mobile defenses which utilized "storm groups" to harass the attacker were generally more successful than other types of urban defenses. He qualified this assertion by stating that

normally the defenders able to utilize such a counterattack force possessed a relatively favorable force ratio vis-a-vis the attacker. McLaurin contended that the key factor to a successful urban defense was the antithesis of the surprise attack, time to prepare the defense of the city.<sup>13</sup>

## ENDNOTES

1. R.D. McLaurin, et.al., "Modern Experience in City Combat," (Aberdeen, MD: U.S. Army Human Engineering Laboratories, 1987), p. 3.
2. John J. Mahan, "MOUT: The Quiet Imperative," Military Review, LXIV (July 1984), p. 52.
3. McLaurin, p. 3.
4. LTC Curtis V. Esposito, "Armor Operations in Built-up Areas," Armor, XCI (July-August 1984), p. 26 and McLaurin, p. 5.
5. Mahan, p. 52; CPT Ralph Peters, "The Army of the Future," Military Review, LXVII (September 1987), p. 39; Christopher Donnelly, Red Banner (Coulsdon, UK: Janes's Information Group, 1988), p. 259; LTC James B. Hollis, Ret. and LTC Lowry A. West, Ret., "Fighting Close-Terrain Battles in the Year 2000," Armed Forces Journal International (October 1988), p. 76; and MAJ John M. House, "Armor Takes Cologne," Armor, XCVII (September-October 1988), pp. 33-34.
6. CPT Andrew F. DeMario, "When Will We Ever Learn?" Armor, XCVII (September-October 1988), p. 23.
7. LTG William R. Desobry, Ret., "Brute Strength, Not Finesse," Infantry, 77 (July-August 1987), p. 9.
8. Edward Foster, "Feet on the Ground: Infantry in the Central Region," The RUSI Journal, 134 (Spring 1989), p. 46; Peters, pp. 38 and 40; and LTC Bloomer D. Sullivan, Ret., "Future European Battlefield," Military Review, LXVIII (July 1988), p. 55.
9. Peters, pp. 39 and 41; Hollis, p. 80; Mahan, p. 58; and MAJ Adolf Carlson, "Tanks in Urban Combat," Armor, XC (March-April 1981), p. 33.
10. McLaurin, p. 4.
11. DeMario, p. 22; Esposito, p. 26; Simon Dunstan, Vietnam Tracks: Armor in Battle 1945-75 (Novato, CA: Presidio Press, 1982), p. 159; and Foster, p. 45.
12. Esposito, p. 30; McLaurin, p. 4; and Carlson, pp. 35-36. See also Desobry, pp. 9-10 and 12 for an excellent account of how American tanks, self-propelled artillery firing in the direct fire mode, TDs, mortars, and armored infantry combined to attack and seize villages in World War II.

13. Mahan, p. 52 and McLaurin, pp. 3, 19, and 27.

## CHAPTER 5

### A PROPOSED DOCTRINE FOR HEAVY FORCES IN MOUT

Based on the previous analysis of history and contemporary observations regarding heavy forces in MOUT, I need to modify the original seven theoretical propositions in order to state what current Army MOUT doctrine should be. I will then review existing Army doctrine and discuss its strengths and weaknesses. Finally, I will suggest implications for today's Army based on its current MOUT doctrine.

The key tenets of the Army's doctrine for heavy forces in MOUT should be founded on the four propositions (and corollaries) listed below:

1) The attack of an urban area is a time consuming operation.

Corollary 1) The preferred method of attack against a city is a surprise attack.

Corollary 2) The isolation of urban defenders should hasten the fall of the city.

2) In most cases the attacker should attempt to avoid combat in urban terrain.

Corollary 1) MOUT operations in a conventional war are inevitable.

3) Combined arms (including dismounted infantry and armored vehicles with large caliber, direct fire

weapons) are necessary for successful MOUT operations.

Corollary 1) A pure mounted force can rarely defeat a defender in an urban area.

Corollary 2) Infantry is the best arm for urban combat.

4) The urban defender should have a counterattack capability.

These propositions are listed at Appendix 2 for easy reference.

#### CURRENT ARMY MOUT DOCTRINE

The current Army doctrine for heavy forces in MOUT can be found in doctrinal manuals dealing either with Army doctrine in general, MOUT doctrine in particular, or with heavy units. Ideally, the broadest doctrine concerning MOUT should be found in FM 100-5, the keystone doctrinal manual. More specific doctrine and many tactics, techniques, and procedures should appear in FM 90-10, Military Operations on Urbanized Terrain (MOUT); and the applicable MOUT doctrine for each size unit should be in the battalion through corps how-to-fight manuals.

At least one of the publications listed addresses each of the four propositions. The two capstone publications, FM 100-5 and FM 90-10, contain the majority of the MOUT doctrine. The how-to-fight manuals mention MOUT only briefly and generally. I will now examine the salient points of the Army's



current MOUT doctrine concerning heavy forces using the four MOUT propositions (and corollaries).

Proposition 1 states that the attack of an urban area is a time-consuming operation. Current doctrine only indirectly supports this proposition by contending that the momentum of the attacker can be slowed if he is forced to fight through a built-up area. In fact, doctrine admonishes the attacking commander to attempt to secure a town without resorting to street fighting which is costly in time and casualties. Additionally, the defending commander is encouraged to avoid a time-consuming urban battle.

Conversely, the Soviets seem prepared to accept the fact that reducing a defended urban area will be costly in terms of time. They are willing to besiege a city with second echelon forces while the first echelon continues the attack and maintains the momentum.

Current doctrine on this point falls short in three areas. First, there are few short cuts to fighting in cities; our doctrine should clearly state that attacks of urban areas are typically lengthy operations. The corollaries address two possible exceptions, a surprise attack and an attack on an encircled and isolated enemy. Current doctrine exhorts commanders to destroy the enemy force before he has an opportunity to occupy and defend built-up areas, but does not address the benefits of surrounding the urban

area before attacking.

Second, should the commander desire to maintain the momentum of the attack and bypass the urban area with his lead elements, no specific doctrine exists directing follow-on units to seize the bypassed built-up areas. Classical theory warns the attacking commander that he must secure those towns along his lines of communications (LOCs), so ignoring a bypassed and occupied urban area in this instance should not be a viable option. The follow-on unit must either conduct an assault against a prepared urban defender or besiege the city. The former may be too expensive in terms of casualties (or some other precious commodity) and the Army possesses no doctrine for the latter.

Third, FM 90-10 provides contradictory guidance regarding the length of time the commander should desire to defend. In one place it states the defender should avoid a time consuming urban battle yet later contends that the defender can slow the momentum of the attacker. Obviously, the longer the defender fights the more momentum and initiative the attacker squanders. Our doctrine should encourage defending commanders to defend for as long as possible.<sup>5</sup>

MOUT operations consume more than just time, especially for the attacker. As Sun Tzu wrote, "When troops attack cities, their strength will be exhausted."<sup>4</sup> Armies require more soldiers to fight in

urban terrain than in open areas, and the high casualty rates common to urban warfare may cause an attacker to avoid the attack of a city. If the attacker can successfully surprise and/or isolate the urban defenders, he can then decrease his expenditure of time, strength, soldiers, and other resources.

Proposition 2 states that in most cases the attacker should attempt to avoid combat in urban terrain. Current Army doctrine embraces this statement wholeheartedly. FM 90-10 states that isolating and bypassing urban areas "are the goals of urban offensive operations."<sup>5</sup> Doctrine cautions commanders to avoid combat in urban areas when possible, and to attack built-up areas "only as a last resort."<sup>6</sup>

Current doctrine is sound in its admonition to avoid urban combat. It also recognizes the inability to completely avoid urban warfare on the modern battlefield. FM 100-5 states, "Combat in built-up areas will be unavoidable in most theaters of war."<sup>7</sup> FM 90-10 lists four general reasons to attack a built-up area, yet other specific reasons need to be added. Strategic or political considerations, a diversion, the reduction of isolated or bypassed forces, and the elimination of enemy-occupied towns along one's LOCs are all potential reasons to attack an urban area.

The pervasive impact of urban terrain, especially in Europe, is missing from current doctrine.

English wrote, "Urban concentrations, to the extent that they exert a distinct controlling effect over their surrounding areas, are fast becoming the dominant features of all terrain."<sup>6</sup> A similar statement should appear in Army doctrinal publications to emphasize the influence of urban terrain on today's battlefield.<sup>7</sup>

Proposition 3 states that combined arms (including dismounted infantry and armored vehicles with large-caliber, direct fire weapons) are necessary for successful MOUT operations. FM 90-10 purports to provide doctrine for combined arms conducting operations in urbanized terrain. It provides lengthy explanations of Soviet combined arms doctrine concerning the attack and defense of urban areas. Our doctrine states that the combined arms of armor, engineers, air defense, air cavalry, and attack helicopters add combat power and survivability to the infantry fighting in MOUT. Tankers must prepare to fight on urbanized terrain. Commanders may attach tank platoons to infantry companies, yet only rarely are tanks attached down to the infantry platoon level. In the attack, doctrine recommends that tanks provide overwatching fires for the attacking infantry, and then remain outside of the city. Doctrine also states that maneuver forces may receive one or two sections of howitzers to engage targets too hard for other weapons, but when the specific mission is completed these

howitzers should return to their parent battery outside the city. None of the how-to-fight manuals task heavy forces with the MOUT mission.<sup>10</sup>

Current doctrine falls far short of the intent of Proposition 3 and its corollaries in at least nine specific areas:

1) It inappropriately emphasizes the lack of mobility armored forces in urban areas possess. The Soviets stress that the mobility these forces do have is a strength. FM 100-5 contends that mechanized infantry units are hampered in urban terrain because they cannot engage from the maximum effective range of their weapons. This statement is misleading. The only weapon found exclusively in mechanized units and not "light" infantry units is the Bushmaster cannon. Neither type of unit can expect to engage at maximum range with its organic weapons.<sup>11</sup>

2) Our doctrine should make it clear that forces engaged in urban warfare need armored protection like forces fighting in any other type of combat. The Soviets base their urban warfare capability on the Motorized Rifle Battalion, which provides each combat soldier with an armored vehicle for protection.<sup>12</sup>

3) Self-propelled howitzers should be attached to maneuver units for the duration of the operation, not just for each individual fire mission. As with any other arm, the commander on the ground cannot afford to

wait until the proper combat or combat support asset can be located and forwarded to him. To maintain the momentum of the attack, ground commanders must have the needed arms attached or under their operational control.

4) The attachment of tanks to infantry units should routinely be a section of tanks to an infantry platoon. The optimum task organization often may be one tank to an infantry squad or platoon. Urban warfare is a greatly decentralized affair, and the common tendency is to maintain centralized control at too high a level of command. In practically all cases, the infantry unit commander should be the commander for the small, task organized units formed to fight the urban battle.

5) The combined arms team should include chemical detection units; cities are vulnerable to chemical attack. The Soviets routinely include chemical detection units within their storm groups and detachments. Cities are good targets for chemical attacks primarily because the attacker may be able to capture the urban area and its facilities relatively intact using chemical weapons.<sup>13</sup>

6) The how-to-fight manuals hardly address MOUT, and no doctrine exists in these publications concerning the use of air defense, air cavalry, attack helicopters, and close air support in urban combat. Air defense guns have historically been used to great effect on

ground targets in urban areas. Air cavalry units can place observation posts on the tops of buildings in excellent vantage positions, and then quickly move these observers to other locations. Attack helicopters have never been used inside a built-up area, yet are becoming more survivable and may have a combat role within a city in addition to their traditional role outside the city. Aerial medical evacuation is feasible. The Israelis capitalized on the accuracy of fixed wing aircraft munitions during their operation in Beirut in 1982. Aircraft can add substantially to the important urban firepower equation and should not be ignored by Army doctrinal publications.<sup>14</sup>

7) Some manuals still imply that tanks will remain almost exclusively outside of the urban area in MOUT operations. LTG Desobry wrote, "In sum, present MOUT doctrine isn't all that bad except that it seems to lead to finesse and the exclusion of some kinds of firepower such as tanks and artillery."<sup>15</sup> Tankers tend to avoid urban combat for understandable reasons, but doctrine must unequivocally state that tanks are vitally important to the success of warfare within cities.<sup>16</sup>

8) Doctrine recognizes the need for the augmentation of "light" units with heavy antitank weapons and engineer support, but substantial problems remain in the actual attachment process. For the reasons a pure

mounted force can rarely defeat a defender in an urban area, a pure dismounted infantry force will probably lose the urban battle. "Light" divisions possess neither tanks, self-propelled artillery, nor engineers with the capability to clear rubble, etc. These forces must be provided by units outside of the division, and the chances for combined arms training are remote. The how-to-fight manuals contain much doctrine on the heavy-light mix, which presupposes a combination of these two types of units at the division and corps level. Only one of the current corps in the active Army includes heavy and "light" infantry divisions. The root of this problem is the lack of dismounted infantrymen in the heavy divisions. Exacerbating the situation is the lack of suitable, man-portable anti-tank weapons in the current inventory for urban combat.<sup>17</sup>

9) Nowhere does doctrine specifically task heavy forces with the MOUT mission. In fact, the only types of infantry units considered capable of conducting MOUT operations according to doctrine are the "light" infantry and the infantry (like the 2nd Infantry Division) units. Mechanized, motorized, airborne, air assault, and Ranger units are never mentioned in conjunction with MOUT operations. McLaurin concluded that "several of the cases reaffirm the necessity for the various branches to plan, train, and develop



doctrine together. Infantry requires fire support against strongpoints no more or less than armor and SP artillery need protection by infantry."<sup>16</sup> A great chasm separates the current doctrine in FM 90-10 which recognizes the requirement for heavy forces in MOUT, and the how-to-fight manuals for these same forces which advocate the use of "light" units in urban combat.

Proposition 4 states that the urban defender should have a counterattack capability. Current doctrine does not include this statement. FM 71-2 does acknowledge the need for mobile forces to support the dismounted defense. The Soviets plan to utilize strongpoints augmented by local counterattacks according to FM 90-10, yet no specific US doctrine proposes a counterattack capability for the urban defender.<sup>17</sup>

Although current doctrine mentions mobile forces behind but not inside of the urban defense, there is no specific recommendation to the defending commander to form a counterattack force. Army MOUT doctrine should plainly document this need, and specify that this counterattack force should be a combined arms force similar to the storm groups used by the Soviets in World War II.

Two additional defensive principles should be a part of US Army MOUT doctrine. First, a defender can

rapidly deplete the attacker's strength by placing urban defenses in depth. Second, the defender should utilize strongpoints within a city. The urban defender which possesses strongpoints and an offensive counterattack force has a good chance of success.<sup>20</sup>

#### IMPLICATIONS FOR TODAY'S ARMY

The deficiencies of the current doctrine for heavy forces in MOUT are significant, and the Army needs to correct these shortcomings as an initial step to improve the ability of heavy forces to fight in urban terrain. A serving Army officer recently wrote, "Certainly, our doctrine for combat in urban environments is hopelessly inadequate and carefully neglected by the ambitious."<sup>21</sup> This statement makes two indictments, ignorance and apathy. In this paper I have attempted to educate in order to ultimately change the attitudes of those "ambitious" soldiers who have "carefully neglected" MOUT operations. In this section I will address the implications for today's Army based on the inadequacies of its current heavy force MOUT doctrine.

Since current doctrine does not explicitly state that the attack of an urban area is a time consuming operation, commanders may become involved in ill-advised operations reminiscent of Adan at Suez City or Hussein at Khorramshahr. If time is short and the attacking American commander cannot surprise or isolate

the defenders, then he should avoid the city altogether or change his plan. Without adequate guidance concerning the length of the typical attack of an urban area, commanders may commit themselves to overly ambitious plans.

The Army's offensive MOUT doctrine attempts to balance the avoidance of combat in cities with the inevitability of urban warfare, as it should. The lack of MOUT doctrine found in the battalion through corps manuals implies that the balance presently favors the avoid to the detriment of the how-to-fight side of the scales. Heavy force commanders may attempt to avoid urban warfare simply because it is urban warfare, not because combat on urban terrain fails to enhance mission accomplishment. On occasion a force can reap genuine benefits from combat in cities, and commanders must consider this fact before summarily rejecting urban warfare. The commander must remember that in modern warfare the attack of a city need not make sense militarily. The political decision-maker may overrule strictly military logic and order an otherwise avoidable attack of a built-up area.

The issue of combined arms in MOUT is the greatest weakness in current Army doctrine for heavy forces. The umbrella MOUT doctrinal manual, FM 90-10, speaks of the integration of several different arms into MOUT operations, but the how-to-fight manuals do

not discuss or amplify this concept. Doctrinal conflicts exist concerning the role and necessity of heavy forces fighting inside a built-up area. The silence on this issue in the battalion through corps manuals implies a lack of consensus among the various branches. MAJ Adolf Carlson stated, "The only place in which we may be lacking is in interest-the mutual desire of the armor and infantry communities to solve the urban combat problem together."<sup>22</sup> The lack of emphasis in the heavy force field manuals will lead to mission essential task lists devoid of MOUT tasks. Consequently, heavy forces will rarely train for MOUT operations. If "light" forces are to play such an important role in MOUT, the necessity for these forces to train with non-organic armor, artillery, and engineer assets becomes even more critical.

Before combined arms operations in MOUT become viable, heavy force commanders must change their aversion to urban warfare. A Bundeswehr general best stated the mindset of many armored and mechanized infantry commanders when he observed his units were trained for mobile warfare, equipped for mobile warfare, and manned for mobile warfare.<sup>23</sup> When forced to fight in urban terrain such units will rarely be successful, especially against a potential adversary whose MOUT doctrine consistently emphasizes the use of combined arms formations.

The dearth of MOUT defensive doctrine is especially surprising, considering the advantages urban terrain provides to the defender. Maximum utilization of the obstacle value of defended built-up areas could significantly multiply the combat power of a numerically inferior force. Commanders may not consider or realize the inherent advantages of defending urban terrain. The absence of doctrine recommending that the urban defender possess a counterattack capability implies that such a force is not important. This omission could jeopardize success in a defense of a built-up area.

Urban warfare will be inevitable in any future conventional conflict literally anywhere in the world. The Army can no longer afford to blindly assign the urban battle exclusively to "light" forces. Currently, there is no doctrine discussing the integration of armor, mechanized infantry, field artillery, air defense, Army and Air Force aviation, combat engineer, and chemical units into an urban combined arms team capable of winning the modern MOUT battle. MOUT publications do not address basic tenets of combat in cities. FM 100-5 needs to substantially increase its one page discussion of urbanized terrain. FM 90-10 is years behind Army doctrine in general and does not emphasize many of the doctrinal propositions derived in this study for heavy forces in MOUT. It should be

completely rewritten as soon as possible. The heavy force how-to-fight manuals for battalion and larger units must be revised to task heavy forces with the MOUT mission. Each of these manuals has a chapter devoted to "Other Tactical Operations," which should include MOUT operations.

The army trained to employ its heavy forces in the MOUT battle will have the edge in the next war. Heavy forces are players in MOUT. The Army must update its doctrine and train its soldiers and units to obtain the necessary edge in urban warfare.

## ENDNOTES

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12. FM 90-10, p. 2-4.
13. FM 90-10, p. 3-10.
14. R.D. McLaurin, et.al., "Modern Experience in City Combat," (Aberdeen, MD: U.S. Army Human Engineering Laboratories, 1987), pp. 29 and 31 and LTG William R.

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## APPENDIX 1

### THE SEVEN THEORETICAL MOUT PROPOSITIONS

- 1) The attack of an urban area is a time consuming operation.
- 2) The preferred method of attack against a city is a surprise attack.
- 3) A pure mounted force can rarely defeat a defender in an urban area.
- 4) In most cases the attacker should attempt to avoid combat in urban terrain.
- 5) Infantry is the best arm for urban combat.
- 6) Combined arms are necessary for successful MOUT operations.
- 7) The urban defender should have a counterattack capability.

## APPENDIX 2

### THE FOUR DOCTRINAL MOUT PROPOSITIONS

1) The attack of an urban area is a time consuming operation.

Corollary 1) The preferred method of attack against a city is a surprise attack.

Corollary 2) The isolation of urban defenders should hasten the fall of the city.

2) In most cases the attacker should attempt to avoid combat in urban terrain.

Corollary 1) MOUT operations in a conventional war are inevitable.

3) Combined arms (including dismounted infantry and armored vehicles with large caliber, direct fire weapons) are necessary for successful MOUT operations.

Corollary 1) A pure mounted force can rarely defeat a defender in an urban area.

Corollary 2) Infantry is the best arm for urban combat.

4) The urban defender should have a counterattack capability.