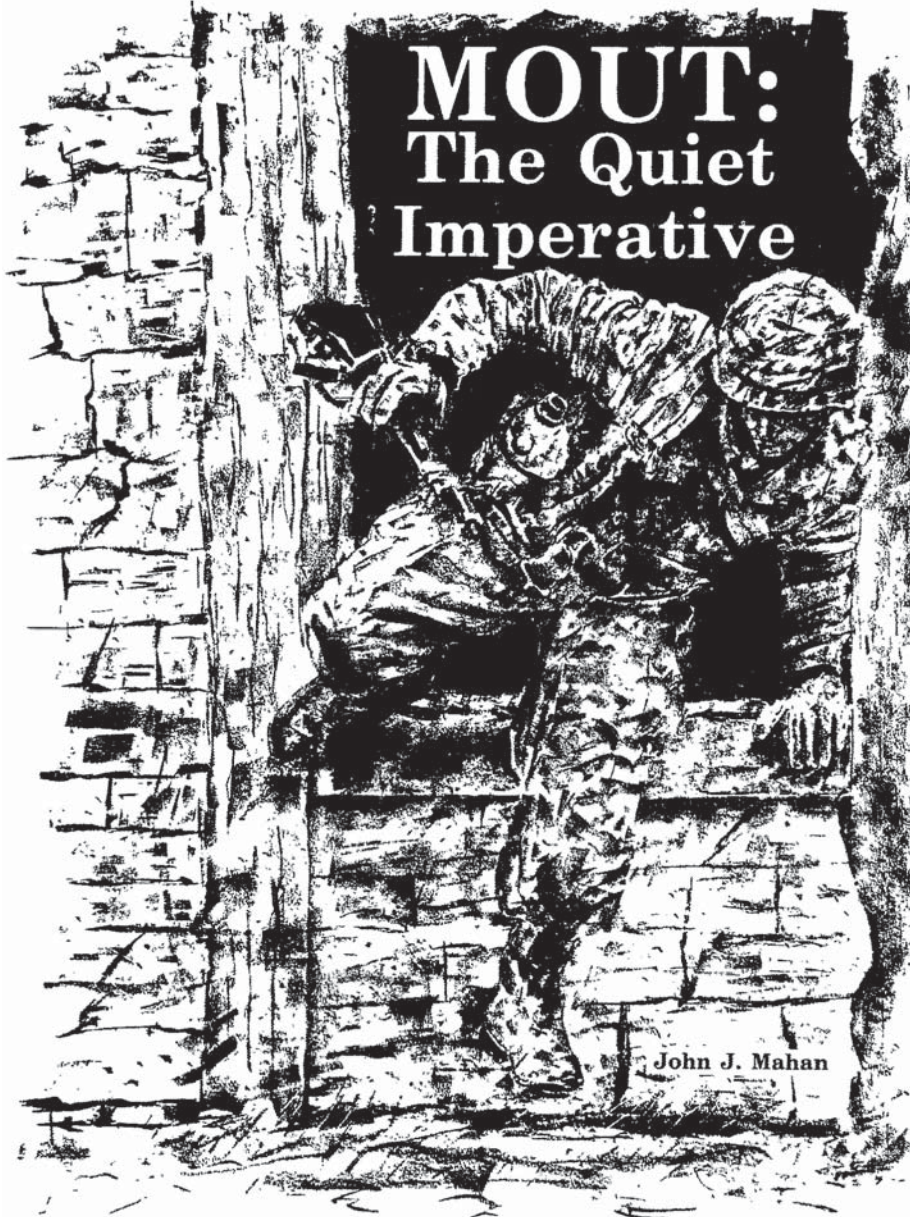


MOUT: The Quiet Imperative



John J. Mahan

Chances are good that, in future conflicts, Army units will be called upon to fight in urban areas. Steps have been taken in recent years to upgrade abilities for this task, but there is much more that needs to be done.

WHERE WE STAND WITH MOUT

WITH the close of military operations in Vietnam in the early 1970s, the attention of the US defense establishment was turned once again to Western Europe and to the threat posed there by Warsaw Pact forces. While by no means the most important, one area which began to receive attention was the changed terrain of Western Europe and its potential impact upon combat operations. It had been recognized as an important factor in any future combat in Europe¹—perhaps as a result of the difficult fighting which took place in Huế during the 1968 Tet offensive—but little was done during the mid-1970s to deal with this growing phenomenon.

By 1977, an ad hoc study group, tasked by the Army Science Board, conducted an exhaustive study of how new technologies might contribute to the effective conduct of military operations in builtup areas (MOBA).² This report seems to have coincided with a renewed interest in this particular area resulting in some thoughtful efforts both within the Army and in academic circles. It would be overstating the case, however, to say that this interest was more than moderate and, at best, demonstrated only sporadically.

In its efforts to establish tactics for fighting in urban areas, the Army has done reasonably well. It tipped its hat to the growing importance of the subject by devoting 11 pages of its 1976 Capstone manual on operations to MOBA.³ The

fact that the most recent edition of Field Manual (FM) 100-5, *Operations*, contains only one page⁴ should not be criticized inasmuch as the Army has recently published two separate volumes on military operations on urbanized terrain (MOUT)⁵—MOUT being the currently preferred term in lieu of MOBA. Videotape films have also been prepared and distributed which describe the tactics to be used in urban warfare—an excellent use of a new training aid media in an area that otherwise receives little attention.

While the Army has done much in the "how to fight" area, much remains to be done. Current doctrine and tactics have probably been too little studied and tested to assure its validity. What exists is the Army's best thinking based upon the experiences of World War II and combat in urban areas which has occurred subsequently. In no instance, however, has there been urban combat in which the major portion consisted of combined arms operations such as might be expected if war were to occur in Europe today. Without substantial testing, therefore, there is little assurance that existing doctrine and tactics are adequate.

It is also questionable whether there is adequate training, whether adequate thought has been given to the adaptation of new weapons, equipment and munitions to the requirements of MOUT and, perhaps most importantly, whether the career soldier has come to an acceptance of the importance of MOUT. A brief review of these areas should help our understanding of how the Army, in general, views MOUT.

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Let us begin with the last point which suggests that, in general, the Army professional is not as concerned with MOUT as perhaps he should be. Here, only circumstantial evidence can be used as it would be impossible to survey the entire Army. One of the best means for measuring concern and interest is to review the literature on a subject. For this particular subject, it stands to reason that, if such interest and concern existed throughout the Army, there would be numerous articles appearing in the professional journals of the Army's senior schools—the US Army Command and General Staff College and the US Army War College—the Association of the United States Army and the combat arms branches. A search for articles dealing in any way with MOUT over the five-year period from 1978 through 1982 revealed the following:

- The US Army Command and General Staff College—*Military Review*—two articles.⁶
- The US Army War College—*Parameters*—no items.
- The Association of the United States Army—*Army*—two articles.⁷
 - The infantry branch—*Infantry*—five articles.⁸
 - The armor branch—*Armor*—two articles.⁹
 - The artillery branch—*Field Artillery Journal*—two articles.¹⁰

The review of the articles further discloses that one deals, in part, with a training facility at the 9th Infantry Division Headquarters at Fort Lewis, Washington, and one with Soviet MOUT operations. Three articles were written by individuals either with or recently departed from the Berlin Brigade where MOUT preparations and training are a way of life. Thus, in 260 issues of professional journals for which the subject of

MOUT is relevant, a total of 13 articles were published. Two of these do not address the subject except indirectly, and three are no doubt a result of direct and daily exposure to the subject by the authors. This can hardly be said to demonstrate great interest and thought on the subject. Clearly, there seems to be a disconnection between those who generate doctrine and tactics and those who would use it.

This is not to say that there are no good reasons for this demonstrated lack of interest. Those cloistered away to concern themselves exclusively with doctrine and tactics have demonstrably shown their appreciation for the importance of MOUT, even though it came largely during the development of a new Army combat doctrine. Meanwhile, the remainder of the Army has been overwhelmed by the problems and new developments which have come in recent years. More recent developments, including the AirLand Battle (which has only recently begun to be aired in an effort to come to understand the new doctrine), Division 86, force modernization and the regimental system, promise to continue to suppress the importance of MOUT in the consciousness of the Army's professional soldiers.

Once the manner of fighting has been prescribed and learned, it is then necessary to train and practice. There has been some movement in this area but not much. The Army Science Board Report recognized the need for including MOUT tactics in Army Training and Evaluation Program (ARTEP) 7-15, *Infantry Battalion*, and ARTEP 7-45, *Combined Arms*.¹¹ This evaluation has been included in the ARTEPs in recent years. However, the lack of facilities forces most units to resort to such measures as laying engineer tape to represent exterior and in-

terior building walls—hardly a realistic representation. One of the conclusions reached by the Army Science Board's ad hoc group was that the lack of "field training facilities poses the greatest problem in MOBA training."¹²

Today, there exists the facility at Fort Lewis and the recently built facility at Fort Bragg, North Carolina, in the Continental United States and the West German urban training area at Hammelburg. The Berlin Brigade, of course, has its own facility, and a new area at Hohenfels is to be opened soon. With few exceptions, the 9th Infantry Division is the only user of the Regensburg facility at Fort Lewis,¹³ and the 82d Airborne Division is virtually the sole user of the Fort Bragg area. Fifteen company-size units train at the "overbooked" Hammelburg training facility each year, and not all of these are combat units. In all cases, there is no opportunity for realistic combined arms training. At the Fort Lewis facility, trucks are commonly used in the combined arms ARTEP in lieu of tracked vehicles.

Even for those units able to use these facilities, they simulate only a part of the type of urban terrain in which one can expect to have to fight if war in Europe or most other parts of the world were to occur. They best simulate the villages which would be the most common urban terrain encountered.¹⁴ The manner of fighting in large cities where a vertical dimension is added both by high buildings and underground sewers, conduits and passageways will require still different facilities.

Today, the best that can be done are terrain walks through cities with knowledgeable leaders pointing the way in the terrain study. Brigade, division and corps commanders who must make the decision whether to enter a city and fight for it are better served in that they can work from

maps and sand table-type simulations to rehearse their decisionmaking processes. Clearly, there are many shortcomings in our training regime to prepare us to fight on urban terrain.

Besides attitudes toward and training in MOUT, there are also weapons and equipment difficulties. Attitudes in the weapons development community encountered by the Army Science Board in 1977 "showed a curious lack of enthusiasm for MOBA-oriented equipment."¹⁵ Over the years, emphasis has been upon the development of weapons systems to counter the Warsaw Pact armor threat and rightly so. But, even if the major monies must continue to go into tank-killing systems, it is short-sighted to fail to adapt them to the possibility that they may have to be used in urban areas. For safety reasons, antitank missile, artillery and tank gun rounds do not arm themselves until they are a considerable distance from the firing weapon—commonly 30 to 65 meters' distance. Many situations in urban areas will call for effect at less than half of those distances.

Of course, most tank gun rounds are now kinetic energy rounds, and antitank missile rounds have the shaped charge—neither of which is very effective against a wall or bunker. Artillery rounds, on the other hand, are mostly antipersonnel types and would have little effect unless they could be placed in a direct-fire situation. The most effective offensive weapon in an urban environment is the combat engineer vehicle with its 165mm main gun and obstacle-clearing round. Unfortunately, there are not many such vehicles on the battlefield, and the engineer battalion commanders are not likely to be willing to risk sending them into a city to help dig out an enemy force armed with antitank weapons. The only weapon in service to specifically support urban com-

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bat is the M67 90mm recoilless rifle which remains in service with the 9th Infantry Division and the Berlin Brigade.¹⁶

The importance of such weapons in urban combat had to be relearned at Hué in 1968.¹⁷ Interestingly, some of the most effective weapons for denuding a building or fortification and to break up an assault down a street are air defense artillery. Both the Lebanese and the Syrians used such weapons to great effect in the battle for Beirut.¹⁸ Among the weapons used by the Lebanese was the M42 Duster.

When then Army Vice Chief of Staff General John W. Vessey Jr. was briefed on its use in 1979, he asked, "How many do we still have in the system?" After the number was mentioned, he responded, "Well, let's keep them."¹⁹ Other older weapons which would prove effective are the old rocket launchers and 106mm recoilless rifles. The usefulness of both types is somewhat limited, of course, by their back blast and the need for a minimum area from which to fire. While a serious handicap, these weapons would be more useful than most of those currently in the inventory—as the Marine Corps found out at Hué.

WHY IS MOUT IMPORTANT?

While it may appear that some important steps have been taken in terms of preparing the Army for MOUT, it is clear that there is much to be done. Each of the three areas discussed earlier—attitudes, training and weapons—is important to being able to fight MOUT, and shortcomings in any of the three would probably have a synergistic, deleterious effect on the other two. The most important place to begin, if the Army's ability to conduct MOUT is to be improved, is with attitude

because a change in that will lead to change in the others. Unfortunately, the attitude encountered by the Army Science Board has probably changed little today. The panel stated that, while:

*... most of the higher level Army people with whom we talked in the course of the program review are convinced that city fighting will be inevitable in any likely contingency—and most importantly in a conventional confrontation in Europe—the Army as a whole seems not to regard it as a really serious problem.*²⁰

"So, what of it?," one might ask. "Why must we burden ourselves with this in addition to all the rest we have to put up with?"

The most important reason is that the face of the world is changing. Urbanization is one of the most significant sociological changes occurring around the world. Throughout much of the less-developed countries, there is a general pattern of movement from rural areas to small towns and villages and from the towns and villages to the largest city—most often the nation's capital. In Western Europe, urbanization continues to occur at a rate of 1 to 2 percent each year.

To be even more specific, some 85 percent of West Germans now live in urbanized areas, and this is projected to increase to more than 90 percent by 1988.²¹ Containing this population are 49 cities of 100,000 or more (four over one million), 235 towns and villages of 3,000 to 100,000 and, most common, some 21,000 builtup areas with fewer than 3,000.²² As a result, by 1985, approximately 15 percent of the Federal Republic of Germany's land area will be urbanized, and that figure will double by the end of the century.²³ For the brigade commander, this translates into an average of 25 towns and villages in his 12 by 25-kilometer sector.²⁴ Conversely, the Warsaw

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Pact division commander in breakthrough attack formation will have to contend at any one time with roughly 10 to 15 towns and villages. This number will vary with the Soviet division frontage which could be from 8 to 12 kilometers.

Almost as important as the fact of urbanization is the pattern of development. Prevalent in the western part of the Federal Republic of Germany is a pattern of conurbation which will result in regional wall-to-wall cities. The Ruhr-Dutch Randstad area will form a 300-kilometer "urban wall" which would have frustrated the von Schlieffen plan of World War I.²⁵ The pattern is also evident

in the Hamburg-Bremen, Hannover and Rhine-Main areas.

It has been said that, whereas it once would take 4 to 6 hours for a mechanized force to bypass Frankfurt, it would now take 4 to 6 days and, in the future, it will be impossible. The more common pattern encountered throughout most of the Federal Republic of Germany is the strip area connecting the towns and villages with thin lines of residences, commercial establishments and light industry. This development is most often "concentrated in natural corridors of movement—the same corridors in which military operations are most likely to occur."²⁶



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What all of this is intended to suggest is that, wherever US Army forces may be sent in the world, whether for combat operations, military advisory assistance or peacekeeping, they are likely to have to operate in and around villages, towns and cities. One need only to watch the world's "hotspots"—Lebanon, El Salvador and Afghanistan—to see that at least portions of the combat in these countries are occurring in towns and cities. In the instance of conventional combat in Europe, the term most often used by authoritative sources is "inevitable."²⁷ Precisely how much of the total combat would occur in builtup areas is impossible to forecast because it will be so dependent upon tactics employed by each side.

It is frequently pointed out, however, that, in World War II, 40 percent of the combat operations in which the Allied forces were involved in Europe was in urban areas.²⁸ The hope is, of course, that this will be a different kind of war in which the Warsaw Pact forces are contained at or near the inter-German border before NATO forces have to fall back into the more densely urbanized areas of central and western Germany. One estimate that anticipates that "combat in urbanized areas will consume about 60 percent of our efforts"²⁹ evidently takes a more sanguine view.

Some "hard noses" will say that, when the platoon and squad leaders and the individual soldier have to learn MOUT techniques, they will, even if it is the hard way. The difficulty with accepting that point of view is that it is an attrition-type solution, and we cannot afford that. In an interview with the company and battalion commanders at Hué, the main point made was that "this is not a subject for OJT [on-the-job training]." Major General Ernest C. Cheatum Jr., US Marine Corps, further remarked that, "if the VC [Vietcong] had

made one smart move, they would have had our ass, hat and cufflinks."³⁰ Clearly, it is not something one would want to go into unprepared, nor can the United States afford to pay the cost of having to depend upon local innovation.

NEW FACTORS IN THE MOUT EQUATION

Having made the case for the probability that any future combat involving US forces will, in some manner, involve MOUT and that there is, therefore, an imperative to prepare for MOUT, we will turn to some considerations that are either new or too little discussed in their relationship to MOUT. While literature on MOUT obviously does not abound, there is a basis—most of which was used to support the earlier portions of this article and are annotated in the footnotes. There are, however, considerations which would seem to argue for an increased need for attention in the area of MOUT which have not been addressed in the literature insofar as I can determine. In passing, much of the thought devoted to the more commonly treated areas will also be touched upon.

Soviet Doctrine—*Desant* and OMGs

The Soviets possess eight airborne divisions and some five naval infantry brigades which are planned for use in tactical, operational or strategic parachute assault—*desant*—operations. The most likely targets consist of air bases, sea-ports, nuclear storage sites and delivery means, bridgeheads, air-landing and river-crossing areas, and key terrain features which will provide security for and/or facilitate the advance of Warsaw Pact ground forces.³¹

It is notable that most of these potential targets are often related to urban areas. Certainly, seaports are. Air bases are generally adjacent to or in urban complexes as are bridgeheads, especially those crossing the Rhine River. The importance to the Soviet attack of capturing and securing bridges over the Rhine has often been stressed. Should the allied forces be driven back beyond the Rhine, it would be extremely difficult for the Warsaw Pact to force a crossing without holding some of the bridges.

A more recent but perhaps more important development in Soviet doctrine is the operational maneuver group (OMG). While this doctrine is still under development, it has evidently been integrated into Soviet planning based upon open literature.³² This concept places forces at the disposal of *front* and army commanders—a force as large as a reinforced division for the army commander and perhaps as large as an army for the *front* commander.³³

The role of the OMG is to serve as a large raiding force in the defender's rear areas. It is expected that, when an OMG is to be used, it will move close behind first-echelon forces until a gap or weak point in the defense is identified. At that point, the OMG will drive toward objectives in the defender's rear, avoiding decisive engagements but, nevertheless, disrupting the continuity of the defender's operations. Through rapid, deep exploitation, they would first seek to collapse NATO's defensive system quickly from its depths. They would then strive to seize key *political and economic centers* in NATO's rear, thereby reducing the utility of continued resistance.³⁴ Again, the targets are based largely on urban areas.

This nightmare of every commander—to have a substantial enemy force creating havoc behind him and possibly encir-

cling him—is only the beginning of his troubles. Whether it is a sea or an airborne assault force or an OMG, or perhaps two or more linking up, the force must be found, fixed and destroyed. Otherwise, the continued disruption to command and control and logistical support will very quickly degrade NATO's capability to fight.

The easy answer is to let the West German Territorial Army take care of these Warsaw Pact forces which have reached the rear areas. The security of the rear areas is their job, after all. Except for the six brigades of the Territorial Army, this is a lightly armed force which will not contend well with the heavy, mobile forces of an OMG or even the airborne assault forces with their *BMDs* and assault guns. It is, in fact, probable that substantial reserves would have to pursue such a force.

Assuming the best—that NATO can find and cut off this force and defenses have stabilized the situation at the forward edge of the battle area—the *desant* and/or OMG forces have only one logical place to go. As suggested earlier, many of their targets are either in or adjacent to buildup areas. They could attempt to break out and return to the battle area, but that is not their role. By remaining in the rear, they continue to pose a serious threat, and their very presence would probably cause extreme disruptions. It is probable, therefore, that they would withdraw into the outskirts of towns or cities and organize the defense around strong-points.³⁵

In this situation, the greatest threat, especially to an armor-heavy OMG, would be from the air. Even then, the presence of civilians as well as the use of buildings for cover might provide adequate protection. In the cities and towns, they might find sufficient petroleum, oils

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and lubricants and food to prepare for further operations or to continue to defend until help arrived. In any case, it would be an unhappy task to have to try to dig out such a force.

There is one further area which deserves attention in terms of enemy forces in NATO's rear area. FM 90-10, *Military Operations on Urbanized Terrain*, suggests that combat service support (CSS) units are finding it increasingly desirable to locate in urban areas.³⁶ It also suggests that CSS units are "high-priority" targets for Soviet/Warsaw Pact forces.³⁷ It has been suggested that CSS units would be well structured to defend their particular urban areas if necessary. Their limited manpower and light weapons make MOUT one of the most effective types of combat operations the CSS units could conduct.

CSS units are also organized as squads and platoons, and MOUT is a small-unit activity. Despite the suitability of CSS units for MOUT, there has been little training for such units. In addition, CSS ARTEPs and exercises are based upon field and not urban operations.³⁸ Quite clearly, there is a growing requirement identified here. One method of OMG operations is to send out tactical raiding units.³⁹ Certainly, division and corps support commands would be excellent targets for these raiding parties.

AirLand Battle

Just as the Soviet army is implementing probably the most revolutionary doctrinal change since the advent of nuclear weapons,⁴⁰ the US Army is moving toward a new operational concept which some would consider just as revolutionary as the Soviets'. Put simply, this new AirLand Battle doctrine suggests that the superior forces of the attacking enemy can be defeated by wresting the

initiative from them and keeping them "off balance" thereafter through retention of the initiative.

Perhaps the aspect of AirLand Battle which has been most frequently discussed is the "deep battle." The purpose of the deep battle is to disrupt enemy forces in the rear—a functional mirror image of the Soviet OMG. The importance of "timely and well-executed deep actions against enemy forces not yet in contact" is deemed "necessary for effective operations" by the new doctrine.⁴¹

Such action is designed to disrupt the flow of follow-on attacking forces into the main battle area (MBA), thereby creating "windows of opportunity" in the MBA—that is, periods of favorable friendly force ratios so the defender can take the initiative by going on the offensive. If attacking follow-on forces reach the MBA, according to doctrine, the "correlation of forces" makes it unlikely that the initiative can be won by the defense. To the contrary, Warsaw Pact force ratios will rise, and NATO forces will most probably be overwhelmed.

On the defense, the new doctrine states that the deep battle is to begin before the attacker reaches the MBA. Principal strike assets will be air and artillery interdiction.⁴² Unconventional forces and nuclear strikes are also available for use as are, almost as an afterthought, maneuver forces.⁴³ For miscellaneous reasons, each of these assets has limitations in the deep battle, especially early on in a European conflict. Nuclear weapons can be ruled out early for political reasons. Artillery is limited by its range and unconventional forces by their limited numbers. While some battlefield air interdiction might be available, more probably, most air assets will be involved in the fight for air superiority during the early days of the conflict.

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This leads to the belief that the deep attack will have to be prosecuted primarily by maneuver forces. Such forces are not likely to be small units. Divisions are slated to fight the second-echelon regiments in the deep battle and corps the second-echelon divisions.⁴⁴ Consequently, minimum brigade-sized units could be imagined in such a role.

It is readily apparent that there is a strong synergistic effect between the deep battle and the battle in the MBA. Should the Soviet/Warsaw Pact forces make an early and strong penetration, especially in the form of an OMG (and OMG exploitation operations are doctrinally scheduled for the first one to two days of combat), any force designated and withheld for the deep battle may have to be used, in addition to the reserve, to counter the penetration. Without the deep battle, Warsaw Pact follow-on forces reach the MBA, and the ratio of Warsaw Pact to US forces begins to increase probably followed by further penetrations, and so forth. The deep battle is, therefore, dependent upon the blunting of the first-echelon attacks in the MBA and vice versa.

One could make the argument that the US commander would withhold his force designated for the deep battle from a decisive engagement and commit it to the deep battle at the appropriate moment, in any case. Before such a decision was reached, however, he must answer the question: To whom does the greater advantage accrue in this instance? The answer would seem to turn upon the answers to two further questions: Is the reserve force adequate to deal with the penetration, and who is most dependent upon reinforcements arriving from its communication zone?

The answer to the first question is probably "no" if it is a strong penetration and/

or if it involved an OMG. The old doctrine of active defense lost consistently and early in most wargaming simulations.⁴⁵ Granted that the AirLand Battle requires fewer forces in the MBA, the US commander must still find a substantial deep battle force in addition to the covering force, main force, rear area protection and reserves.⁴⁶ And he has no further resources out of which to build this deep



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battle force. It is difficult to imagine that a corps reserve of one brigade or even a division could fix and defeat the quicker and more mobile Soviet division or army that was avoiding decisive combat.

As is so frequently the case in discussions about combat doctrine, the answer to the second question is scenario-dependent. However, virtually all scenarios except the long buildup indicates that the US/NATO forces are the more dependent upon the arrival of reinforcements. In such circumstances, the United States and NATO cannot afford to allow an enemy force to create havoc in its rear area. If an OMG were to get into the rear, it would demand attention.

To reiterate, the whole purpose of this discussion is to indicate that success in the deep battle is probably dependent upon success in the MBA. At the same time, the commander must exercise economy of force in the MBA to build his deep battle force. It is my contention that the economy-of-force measures in the MBA require that maximum advantage be taken of *man-made* as well as natural terrain features to splinter, fragment, disrupt and delay the attacking forces.

The new doctrine certainly takes cognizance of this requirement.⁴⁷ It indicates that, in the defense, a continuum exists emphasizing a dynamic defense of maneuver and fire at one end and a static defense of fire and maneuver at the other. The former is oriented on the destruction of enemy forces, while the latter retains terrain.⁴⁸ Commanders will be left with the choice of emphasizing one or the other, but one should not be emphasized at the exclusion of the other. Therein lies a danger against which every commander in this situation must guard. With predominantly heavy, mobile forces at his disposal, the temptation may be to over-emphasize maneuver and fire defense. To

do so would be to forgo one of his greatest force multipliers.

Urban areas, in themselves, offer advantages to the defender. It is well-known that Warsaw Pact doctrine dictates that, when on the attack, urban areas are to be bypassed if at all possible. The danger to the attacker is that, by entering a buildup area, he slows his momentum, thereby decreasing the shock effect of the attack.

Nevertheless, once having moved from the march into attack formation, the frequency of the urban areas will, in itself, somewhat blunt the attack by splintering and fragmenting the attacking forces and canalizing them into the gaps between. In some instances, they will become for NATO more manageable, "bite-size" pieces which can be engaged by armored forces in the areas between the towns, villages and strip areas. One authority on tank warfare even suggests that, in the confusion of combat, company-size units of the attacker will become disoriented and lost in the unfamiliar terrain.⁴⁹

There are several ways that urban areas may be used by the defense depending upon their size and its relation to other terrain. A good example is the Fulda corridor in the area of the US V Corps. Historically, this is a principal invasion route from east to west and vice versa. Today, there are two major east-west routes through the corridor—Autobahn E-4 and Route 40. Between the autobahn on the north and Route 40 on the south, the terrain is rugged and difficult for rapid cross-country movement. It also contains many villages throughout.

Use of the autobahn would make attacking forces extremely vulnerable from the air and the flanks which are not easily protected because of the terrain. This situation all but forces the attacker to use the Route 40 approach, a densely urbanized corridor which will continue to

thicken in the future.⁵⁰ The potential for the defense is good even with the exercise of economy-of-force measures on the defense and a very heavy tank ratio favoring the Soviets.

According to a former deputy commander of the Army's Combined Arms Combat Development Activity, Fort Leavenworth, Kansas, US forces must attempt to:

—Control avenues of approach into, around, over and through organized areas.

—Use dismounted infantry and obstacles in built-up areas to hinder the movement of enemy mechanized and armored forces.

—Retain key transportation centers.

—Deny the enemy control of strategic and political objectives.

—Conceal our forces and support facilities in villages, towns, and cities.⁵¹

In support of these goals, the commander can choose to use the urban areas in the defense in any one or a combination of three ways.⁵² One way is to support maneuver forces. They can, for example, secure the flank of maneuver forces. On the average, there is a village, town or city every 3 to 4 kilometers in Germany.⁵³ At these ranges, the TOW antitank guided missile and even artillery⁵⁴ can be used to provide interlocking fire on one or both flanks of the maneuver force.

A second manner of using urban areas, especially one such as the Route 40 approach through Fulda, is by building a defense in depth through the corridor. The Germans made use of this in World War II in what has become known as Operation Goodwood. In that action, an overwhelmingly superior British armored force of 850 tanks with air support was stymied by a primarily infantry force (100 tanks) using villages to create a defense in depth. German 88mm antitank guns

within the villages served to keep the British armor out of the open spaces in between.

The British have evidently not forgotten the lesson they learned from the Germans in 1944. In Exercise *SPEARPOINT*—part of *REFORGER 80*—the 2d Armored Division was on the attack against British infantry. The British established a Goodwood-type defense to good effect.

*Entrenched pockets of resistance in the towns . . . armed with long-range antitank weapons, initially exacted the attention of numerically superior forces and imposed very heavy casualties.*⁵⁵

While the 2d Armored Division eventually overcame the light forces, it is implied that, if mobile forces had been available, a much more effective defense would have been the result. This seems to suggest the importance of combined arms operations in urban defense.

The third manner of using the urban areas in defense is through the use of strongpoints for the purpose of retaining an important urban area. In this defense, strong infantry forces should be used with, ideally, a mobile reserve to lend fire support at critical points in the battle. Even if bypassed, or if occupied by the defense after lead elements of the attack have passed, it offers interesting possibilities. Of course, it would have intelligence value, and it could perhaps conduct limited raiding attacks. It would also deprive the enemy of the freedom of maneuver, disrupt the momentum of the attack and make difficult his combat and logistical support.⁵⁶

The strongpoint can also be used as the anvil in a "hammer and anvil"-type operation. As suggested by a recognized authority on mechanized warfare, the strongpoint would serve to fix the attacker. Meanwhile, the tank-heavy hammer swings in a wide arc in the open area

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between villages to strike the attacker with the momentum attained in the arcing movement. In a series of blows of this type—although the anvil is not necessarily anchored on an urban area—the defender disrupts and destroys the attack.⁵⁷

The advantage to the defense of using urban terrain is too great to be denied. With some 25 towns and villages plus strip areas in his sector, each brigade commander should have ample opportunity to establish what could become a bewildering array of defensive tactics based on these urban areas. The specific use the brigade commander might make of any one or a combination of urban areas would depend upon such factors as their proximity to one another, the terrain, the types of structures, and so forth, and the breadth of his and his staff's imagination.

This multifaceted use of urban areas to launch attacks and/or defend key areas should serve not only to confuse the attacking commander but also to further splinter his forces into manageable sizes vulnerable to destruction by defending armor in the spaces between the towns and villages. Herein lies an opportunity to blunt a Soviet/Warsaw Pact attack, disaggregate the attacking commander's forces and disrupt his timetable.

Returning to the synergistic effect between the deep battle and the battle in the MBA, it was pointed out earlier that the principal strike assets for the deep battle are air and artillery interdiction. These types of assets, including weapon systems resulting from new technologies, are intended for use in NATO's new "strike deep" strategy⁵⁸ as well as in the AirLand Battle to disrupt Warsaw Pact follow-on forces. It was suggested earlier that air assets would be otherwise engaged in the early battle and that artillery has the range to produce only local impact. Air assets should begin to be

freed after two to three days for use in battlefield air interdiction. Their effectiveness in the deep battle role could be substantially enhanced by success in the MBA.

Soviet doctrine establishes the movement of forces into the battle area on a fairly rigid schedule. The purposes are to have fresh forces to continue the momentum of the attack, even if the first echelon is stymied, and/or to exploit gaps and weaknesses in the defense. An effective defense in the MBA will serve to reduce the momentum of the attack and canalize the attack into areas in which the defense wants it to go. Should the momentum be stalled for two or three days, buildups of follow-on forces will begin to occur. Such a situation would present NATO aircraft and missiles, and possibly even artillery, with a very lucrative target array close behind the MBA. This buildup of Warsaw Pact second-echelon forces will, in part, alleviate the well-recognized shortcoming of intelligence assets to "see deep."

There is an additional consideration which argues for the maximum use of the towns, villages and strip areas arrayed along the inter-German border. It has to do with Soviet/Warsaw Pact passive antitank measures. It is quite obvious that the United States and NATO are heavily dependent upon the antitank guided missile to counter Soviet armored attacks. The Soviets recognize that this is the case and are taking measures against this NATO threat. One such measure is the addition of compound armor which offers high levels of protection against shaped charges as are used in antitank missiles.⁵⁹

This being the case, the probability-of-kill ratio for antitank guided missiles will be substantially depreciated. It will, therefore, be important to put antitank missile launchers into positions which

will provide them the most lucrative opportunities to destroy Soviet tanks. This would seem to be from a flank or rear shot inasmuch as the front turret and hull will probably have the compound armor added. Clearly, one of the better opportunities would seem to be from towns or villages as the Soviet/Warsaw Pact forces exercise their doctrine to bypass. Because of flank security forces, it may have to be a "shoot and scoot"-type action. In this instance, the improved TOW vehicle would serve well in such a role.

The US III Corps

The United States, in recent years, has designated the III Corps as reinforcement for the Northern Army Group (NORTHAG) area of NATO's Central Region. Sites are being constructed for pre-positioning of materiel configured to

unit sets of the three armor-heavy divisions which constitute the III Corps. In the event of war in Europe, they would be called to join in the battle for the North German plain, an area that makes up the northern two-thirds of the NORTHAG area.

Traditionally, this is thought of as excellent terrain for the cross-country movement of mobile forces. More recent observations about the area indicate this is no longer the case. Perhaps the 1980 REFORGER experience of the 2d Armored Division serves to make the point best. In the Exercise SPEARPOINT of REFORGER 80, General George S. Patton's old division returned to the scene of its exploits 35 years earlier. One of the brigade operations officers describes the area as follows:

The plain has been described as a tabletop, an unimpeded route for massed ar-



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mor. The Spearpoint experience of the 2nd Armored Division soldiers refute that preconception. Northern Germany is becoming increasingly urbanized and a network of villages and industrial areas permeate the sector and dominate the terrain. Rivers, canals, and lowlands impeded cross-country movements, road networks orient on the ever increasing number and size of villages. 'Combat in cities' must be the military modus operandi.⁶⁰

The same officer goes on to state that, "Towns were and are key terrain."⁶¹ That this is the case should not be surprising. The fact of the matter is that most of the NORTHAG area is more densely settled than is most of the area of the Central Army Group, Central Europe (CENTAG). There are four NORTHAG corps sectors under the responsibility of the Dutch, German, British and Belgians (north to south). The German and British corps areas are most heavily urbanized, with the Belgian sector not far behind. The northernmost sector—that of the Netherlands—includes Hamburg and Bremerhaven. Bremerhaven is one of the most important ports in NATO's logistic support operations and is a logical Warsaw Pact target.

The conclusion one must reach is that, like the US V and VII Corps, the III Corps is bound to become involved in MOUT operations whatever missions might be assigned. Much of the discussion about the AirLand Battle applies to the III Corps as well, even though it may be difficult to execute the new doctrine in all of its particulars. Nevertheless, the same advantages that accrue to the defender's use of urban areas in CENTAG will apply in NORTHAG as well.

Unfortunately, the units that constitute the III Corps have even less opportunity to train in and to think about MOUT than do those units in CENTAG.

The elements of the CENTAG corps do have an opportunity to train, on occasion, at Hammelburg. They are also dealing daily with planning the defense of and operating in a sector about which they are at least aware of the urbanized terrain, whether or not they choose to take advantage of it.

Visits to planned operating areas in Europe and terrain studies will help overcome these shortcomings to an extent. However, it may mean little if these units had to operate in Europe. Personnel turbulence, the likelihood of having to operate in areas other than those planned and, most importantly, the almost total lack of training will be severe handicaps to be overcome. As the situation exists today, they would have to pay a substantial penalty while forgoing some significant advantages.

CONCLUSIONS

The most common notions we hold of MOUT are either of defending cities or of trying to take them. As I hope I have shown here, there is much more to it than that. In fact, MOUT may be somewhat of a misnomer. More appropriate would be military operations on and out of urban terrain. While there will undoubtedly be considerable combat within urban areas, there will also be considerable opportunity for combat inaugurated out of towns and villages against bypassing Soviet/Warsaw Pact forces. Should war in Europe ever reach the point where predominant combat matches most preconceived ideas of what MOUT is, we will be defending the large conurbations in the western portions of the Federal Republic of Germany with our backs to the Rhine River. Unfortunately, that is the scenario



with which NATO would be confronted if it fails in the defense of the forward areas.

"Our conviction is that our inability to carry out conventional combat in the MOBA environment is a deficiency of the first order and one that demands a deliberate program response."⁶² This conclusion of the ad hoc panel of the Army Science Board six years ago stands today based upon evidence that I am able to gather. Overall, there simply has been little or no movement in most of the areas which would indicate a capability greater than that of the late 1970s.

The best fix has been in the area of tactics. Nonetheless, there is no doubt still much to be done. One professional interested in getting the "tankers" thinking more about the subject suggests that there is a significant place for combined arms operations in urban combat. Yet, he concludes that, "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."⁶³

And, of course, interest is at the bottom of all matters such as this. Certainly, the Soviet analyst tasked with reviewing US Army professional literature for doctrinal material—and I am sure there must be such an individual—cannot be very convinced that the US soldier is interested in the subject. The conclusions of his literature content analysis have no doubt been conveyed to Soviet/Warsaw Pact combat commanders.

Another area the Soviets no doubt watch closely is training. One observer suggests that:

*...the single best indicator as to whether or not a national military force takes urban warfare seriously is the degree to which they appear willing to expend assets of time and material on training and training facilities.*⁶⁴

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This comment was made in the context of what the Soviets are doing, but it fits here very appropriately. In contrast to the US Army, the Soviet army takes the subject very seriously despite its doctrine to bypass builtup areas. The Soviet soldier does not want to have to fight there, but he is not fatalistic about it, saying, "Well, if I have to I will, but I'm not going to concern myself with it until I have to." They have the facilities, including one which is 2 kilometers deep with the characteristics of a city, and they train hard at learning to fight in urban areas, to include combined arms tactics.⁶⁵

The Soviet approach to fighting in urban areas is based upon the motorized rifle battalion, but it will have tanks, air defense and engineer units, and artillery in a direct-fire role, attached and under the command of the battalion commander. Whatever one might say about the rest, the Soviet army is ready in terms of doctrine, tactics and training and is better prepared than its US counterpart.

While no one would contend that it is necessary to mirror image everything the Soviets are doing, some things are simply in our best interests. We can have the best doctrine possible given the constraints on resources and fail miserably because we have failed to follow up with appropriate training and equipment.

While the intention here is not to be prescriptive, there is one simple measure

that would enhance US Army capabilities substantially. At this time, maneuver units in the Active Army in the Continental United States periodically train at the National Training Center at Fort Irwin, California. Exercises there are limited, however, to the maneuver and fire end of the continuum discussed in the new FM 100-5.

For a limited investment—measured perhaps in millions of dollars and at most in the tens of millions—a substantial urban training facility could be constructed to duplicate typical urban terrain features in Europe. The exposure to such a facility would not only serve to train units in urban warfare, but it would also sensitize the Army's professional corps to the need for greater attention to the subject and suggest to them that the senior Army leadership believes it is an important subject as well. This step alone could have far-reaching consequences which might alleviate several of the problems associated with MOUT.

There can be no doubt, should war come in Europe and remain at a conventional level for any length of time, that virtually every US combat soldier and probably many noncombat types will be engaged in combat in, through or out of builtup areas. It would be unfortunate, indeed, if they have not had prior training in MOUT. However, that is the direction in which current indicators would seem to point.

NOTES

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John J. Mahan is the senior NATO analyst in the West Europe/NATO Branch, Vice Directorate for Production, Defense Intelligence Agency, Washington, D.C. He received an M.A. from The American University and is a graduate of the US Army War College. Active military service included assignments with the 7th and 3d Special Forces Groups.