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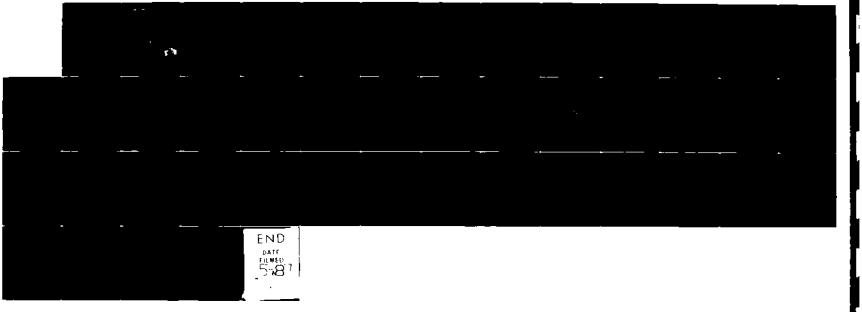

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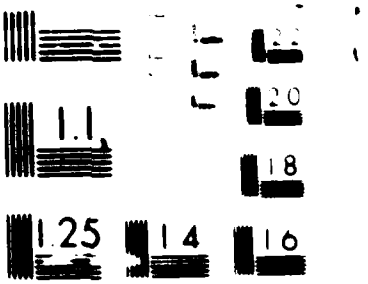
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This monograph discusses the intricacies of liquidating tactical encirclements and bypassed pockets of enemy resistance. Operational employment of U.S. Army doctrine will lead to tactical encirclements in most instances. Contemporary doctrine, however, fails to acknowledge the probability of encirclement. Additionally, doctrine fails to address methods of dealing with enemy pockets. History argues that encircled enemy units often refuse to capitulate and usually require reduction by force. Furthermore, four brief examples of encirclement from the Russo-German front of World War II demonstrate that reduction operations are often difficult and complex.

An encircling commander must foresee the consequences of encirclements and attempt to create the most favorable conditions for the reduction of encircled enemy forces. He must select a method and technique of reduction. He must base his selection on the situation, the threat posed by the enemy, the requirement for speed, the available resources, and the likely costs. (continued on other side)

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Regardless of the method and technique chosen, the encircling commander must also consider the following: pausing to organize, establishing maneuver and fire control measures, isolating the enemy, nuclear weapon employment, and psychological operations.

This paper concludes that the Army must acknowledge its doctrinal void, research and develop a reduction methodology, and amend its doctrine.

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ABSTRACT

TACTICAL ENCIRCLEMENT REDUCTION, by Major Rick Gutwald, USA, 37 pages.

This monograph discusses the intricacies of liquidating tactical encirclements and bypassed pockets of enemy resistance. Operational employment of U.S. Army doctrine will lead to tactical encirclements in most instances. Contemporary doctrine, however, fails to acknowledge the probability of encirclement. Additionally, doctrine fails to address methods of dealing with enemy pockets. History argues that encircled enemy units often refuse to capitulate and usually require reduction by force. Furthermore, four brief examples of encirclement from the Russo-German front of World War II demonstrate that reduction operations are often difficult and complex.

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This paper concludes that the Army must acknowledge its doctrinal void, research and develop a reduction methodology, and amend its doctrine.

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I Introduction

Tactical employment of the U.S. Army's AirLand Battle doctrine promises the appearance of enemy pockets of resistance and encirclements on future battlefields. AirLand Battle doctrine, however, ignores the likelihood of these tactical pockets and encirclements occurring, and fails to address appropriate measures for their reduction. History as well as logic suggests these liquidations are often difficult and complex operations requiring their own "reduction" methodology. As a result of this doctrinal oversight, commanders and units are unprepared to conduct reduction operations, and face grave, if not catastrophic, outcomes on future battlefields. Consequently, the Army must acknowledge its doctrinal void, research and develop a reduction methodology, and amend its doctrine.

The U.S. Army's AirLand Battle doctrine emphasizes tactical maneuver as the key to setting the terms of combat in a battle or engagement. According to the Army's field manual *on operations*:

> [Tactical Maneuver] . . . is the means of gaining and sustaining the initiative, exploiting success, preserving freedom of action, and reducing the vulnerability of friendly forces. . . . effective maneuver is vital to achieving superior combat power.[1]

Effective tactical maneuver secures or retains a positional advantage over the enemy's forces. This "positional advantage," often refers to the concentration of superior combat power on the enemy's flanks and rear. Flank and rear attacks provide the attacking force with the advantage of forcing the enemy to spread his attention and strength in two or more directions. Furthermore, flank and rear attacks usually threaten or

interrupt the enemy's lines of communications. This, in turn, interferes with his ability to sustain combat.

The U.S. Army employs four forms of maneuver for the purpose of attaining tactical positional advantage. These maneuver forms are the penetration, the envelopment, the turning movement, and the infiltration.[2] Although many of the U..S. Army's doctrinal publications explain the employment of these maneuver methods, they do not adequately discuss the subsequent actions that an attacking force should take after achieving a positional advantage.[3] This omission is significant because attaining the advantage is, most likely, only half the battle. If an attacking force secures a positional advantage and the enemy surrenders, the battle ends. On the other hand, if the enemy refuses to capitulate, the attacking force must continue to fight for victory by exploiting its advantage. As a result of achieving positional advantage, future battlefield commanders may often find their opponents defending from small pockets such as strongpoints or from larger encirclements.

If the tactical or operational situation dictates reducing the enemy's position, how does the commander decide upon the most effective course of action? In most tactical situations, the commander can refer to his army's tactical doctrine and his own experience to help him make his decision. In the case of today's U.S. Army commanders, however, tactical doctrine does not exist and most do not have reduction experience or training.[4] Furthermore, experienced World War II commanders often had difficulty reducing pockets and encirclements, regardless of the fact that their armies possessed reduction doctrines and methodology. Consequently, the

probability of a U.S. Army commander's success in a tactical reduction operation is doubtful.

This study will demonstrate that contemporary operational doctrine will lead to encirclements in almost all cases. It will argue that reduction doctrine is either inadequate or nonexistent. It will turn to history, specifically to the Russo-German front in World War II, to demonstrate that reduction operations are often difficult and complex, and that an apparent positional advantage does not always preclude the need for hard, skilled fighting. Finally, it will address the special methods and techniques which should form the basis for reduction operations.

II Dealing With Encircled Forces

The Army's doctrinal emphasis on maneuvering to achieve positional advantages increases the probability of pockets and encirclements occurring on the battlefield. One example is the penetration. The Army considers the penetration as a method which seeks to break through the enemy's defensive position, widen the gap created, and destroy the continuity of enemy positions.[5] Figure 1, below, is a doctrinal example of a penetration based on a sketch in the Army's Field Circular 100-15, Corps Operations.[6] It shows the attacking force punching through the enemy's defense in order to reach objectives in the opponent's rear. The Army expects this maneuver to destroy the continuity of the enemy's defense in order to "... divide the enemy force, to disorganize its remaining defenses, and to either defeat the enemy in detail or launch exploitation forces deep into his rear."[7]

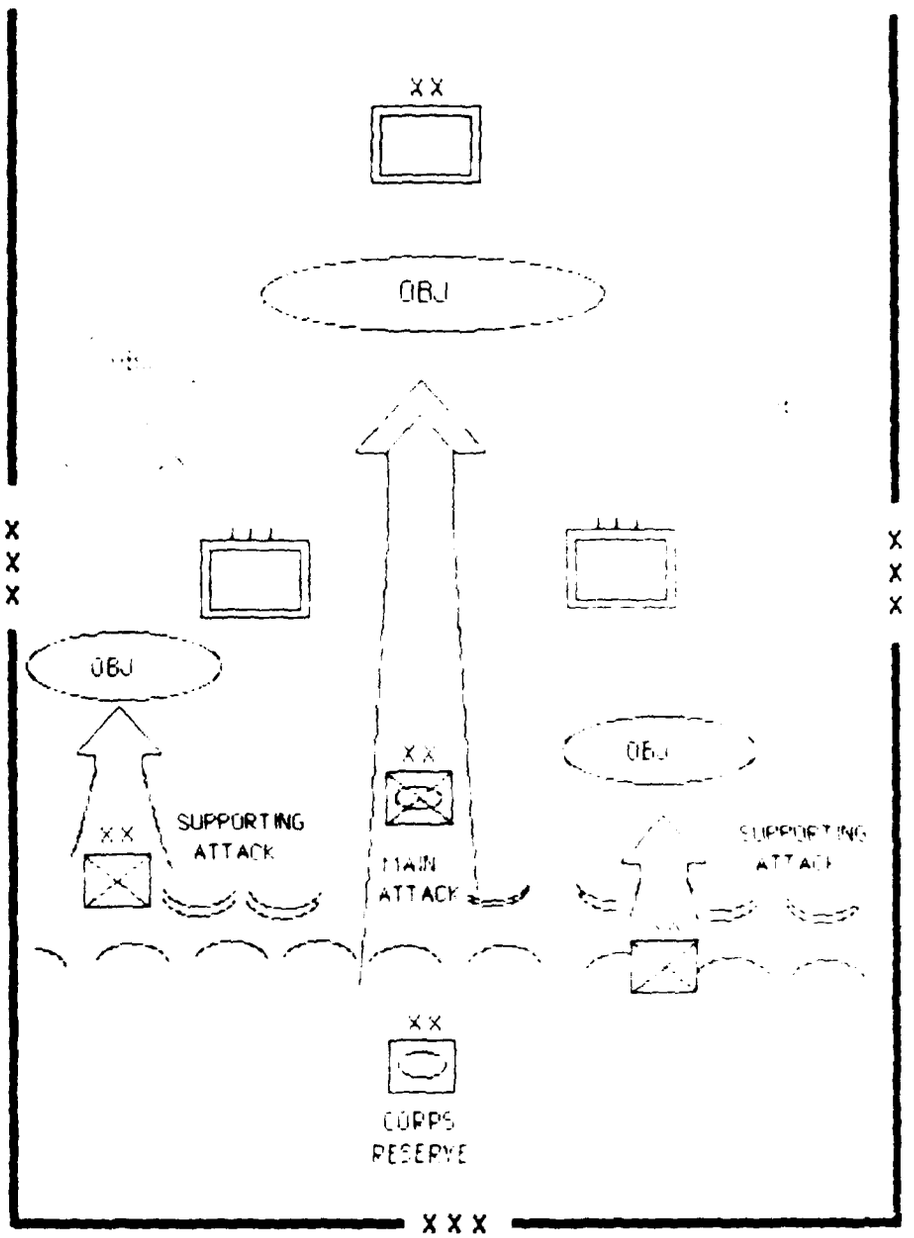

FIGURE 1

Obviously the attacking force in Figure 1 will bypass temporarily some of the enemy. When this happens, how do the attackers deal with the remnants of enemy forces or by-passed pockets of resistance? Furthermore, how does the attacking force "disorganize the enemy's

remaining defenses?" How should the Army "defeat the enemy in detail?" FC 100-15 and the Army's other doctrinal publications do not adequately address the answers to these questions. They discuss the form of maneuver used to achieve the positional advantage, but they ignore the follow-on actions that are necessary for concluding the battle.

Another example of this is the envelopment. Throughout history, the envelopment has probably been an army's most desirable form of tactical and operational offensive maneuver. Hannibal's classic double envelopment of the Romans at Cannae in 216 B.C.; Robert E. Lee's Confederate envelopment of the Union forces at Chancellorsville in 1863; Germany's Schlieffen plan and Blitzkrieg in the two World Wars; and Israel's encirclement of the Third Egyptian Army in 1973 are all examples of the envelopment's appeal and potential.

The U.S. Army as well as most other present-day armies looks upon the envelopment as the basic form of maneuver, . . . "which seeks to apply strength against weakness. . . [and] typically requires less initial combat power than other forms of maneuver."[8] The Army's Corps Operations manual, FM 100-15, further explains:

> "An envelopment seeks to avoid enemy strength, striking instead on a flank or into the enemy rear to secure deep objectives that disrupt and destroy his defensive organization, cut his routes of support and avenues of escape, and subject him to destruction by attack from the rear. . . . This form of maneuver. . . is one that may be used in the deep attack . . . [or] as a means to attack a defending enemy or, . . . to shift from the defense to the offense."[9]

Figure 2, below, illustrates the double envelopment based on a sketch in FC 100-15.[10] It shows an armored division and an air-assault division

circling the enemy's flank in order to seize objectives in the enemy's rear. If this envelopment is successful, the attacking force will most likely encircle part or all of the enemy's force, providing "... opportunities for entrapment and defeat of the enemy."[11]

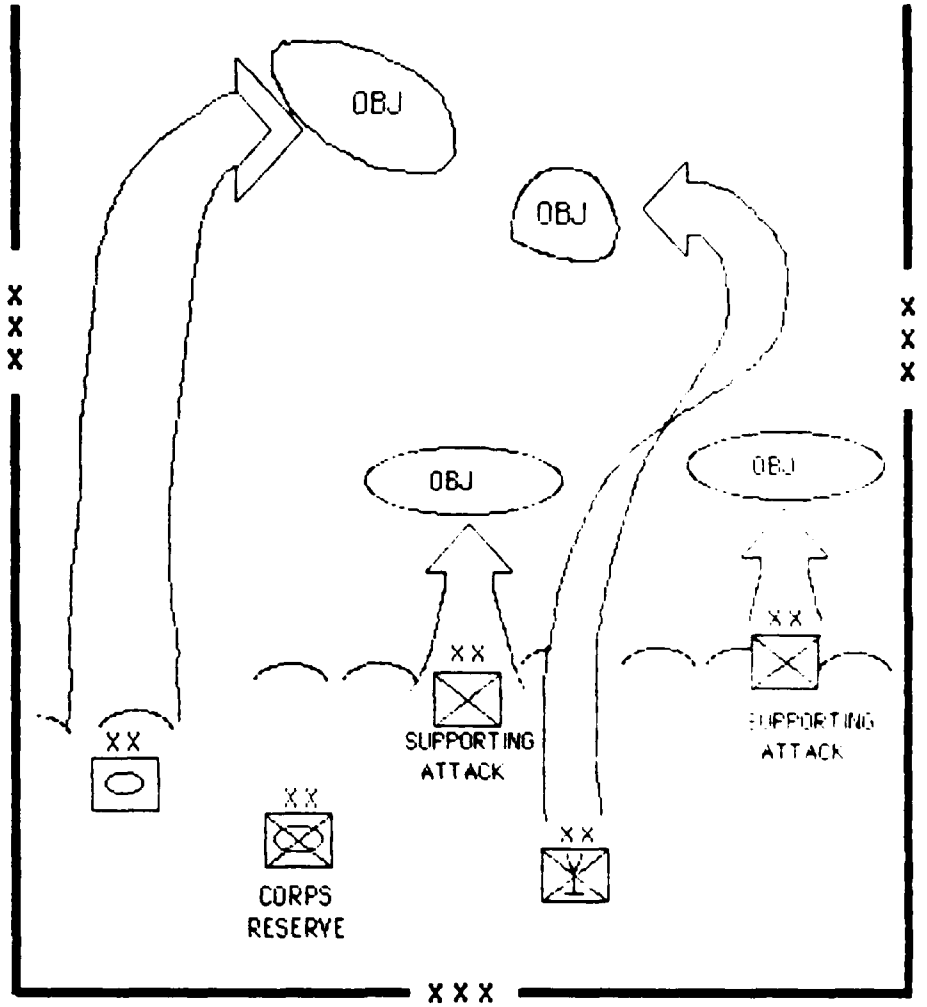

FIGURE 2

Assuming the enemy in Figure 2 is "trapped," how does the attacking force contain and liquidate the encirclement? The Field Circular and other Army manuals do not discuss the answer to this question. Once again, the

Army's doctrinal publications provide the means of obtaining the positional advantage, but fail to address the manner of concluding the battle

In the penetration, the by-passed enemy forces occupy pockets In the envelopment, the enemy forces occupy a larger pocket or encirclement The two terms are similar with respect to tactical reduction operations Therefore, the remainder of this study will use the terms "pocket" and "encirclement" interchangeably

The third maneuver form, the turning movement

> is a variant of the envelopment in which the attacker attempts to avoid the defense entirely, instead seeking to secure key terrain deep in the enemy's rear the enemy is thus "turned" out of his defensive positions and forced to attack rearward at a disadvantage [12]

Logically, the turning movement, like the envelopment, could result in a large encirclement of the enemy The Army's doctrine, however, provides no guidance for subsequent operations

The fourth maneuver form is the infiltration "It is the covert movement of all or part of the attacking force through enemy lines to a favorable position in their rear "[13] If part of the attacking force is in the enemy's rear and part is still facing his front, the enemy could be surrounded Assuming this is the case, how should the attacker exploit this advantage? Once again, Army doctrinal publications do not address an answer

The fact that an encirclement will probably occur on the AirLand battlefield is significant When a pocket appears, the commander must either contain it, reduce it, or ignore it Logically, if the enemy refuses to surrender, a reduction action is both possible and probable Conceivably, the

envelopment in Figure 2 could encircle large, combat-effective elements of a Soviet combined arms army. Depending on the operational situation, the encircling corps might not want to risk large enemy remnants moving in its rear area, nor risk containing the encirclement for an inordinate length of time. In this case, reduction is the only likely course of action.

This is where doctrine's failure to address reduction operations becomes significant. In order for commanders to deal effectively with encirclement reductions, they must not only understand the probabilities of their occurrence but also have some conceptual basis for dealing with them. Doctrine is supposed to provide that basis; " that mode of approach which repeated experience has shown usually works best."[14] Without doctrine, the tactical commander is forced to "invent" his own method of reduction, probably requiring "trial and error." This clearly is not the most effective approach. Furthermore, the absence of a reduction doctrine becomes more significant as the reduction operation becomes more difficult and complex. When the commander uses "trial and error" in a complex situation, he faces a greater opportunity for failure.

*

History, and especially World War II, offers a number of good examples of difficult and complex reductions. Furthermore, the often non-linear nature of the Russo-German front provided perhaps the most significant number of bypassing and encircling actions in this century. Taking examples from this front is especially appropriate because AirLand Battle doctrine promises a non-linear battlefield.[15]

In the Russo-German theater, both German and Russian offensives used tactical and operational penetrations and encirclements to destroy their opponents. The German army specifically designed its offensive tactics to achieve encirclements.[16] They began their attack by creating one or more penetrations in the enemy's defensive belt.

> As the initial assault forces drove into the enemy front, additional forces would pass through them in order to press on and gain ground for the achievement of breakthrough. . . . Once through enemy lines the important thing was to move and avoid his strength. . . . Meanwhile, additional forces would follow through the gap, motorized infantry to follow closely behind the spearheads, and other elements to undertake the rolling-up. . . of the tattered ends of the enemy line and mop up isolated strongpoints and forces. Exploitation was now the mission of the spearheads. Pressing onwards with the object of encirclement.[17]

In the German offensives of 1941 and 1942, many of the Red Army formations quickly disintegrated and thousands of soldiers surrendered. Other times, many Soviet soldiers refused to capitulate, thus creating stubborn pockets of resistance.[18]

As the war progressed, so did the tenacity of the Red Army's defense. Author John A. English points out that the Soviet infantry learned to change Blitzkrieg's bypassed pockets into ". . . fortresses or island like strongpoints in depth."[19] Additionally, English writes that these strongpoints could resist for long periods without prepared food or bread. He provides the following example:

> During the winter campaign of 1941, a Russian regiment was surrounded in a forest near Volkov. The Germans, too weak to attack, decided to starve them out. After one week, Russian resistance had not subsided; after another week, only a few

> prisoners were taken, the majority having fought their way through the German Encirclement. According to prisoners taken by the *Wehrmacht* , the Russians had subsisted during those weeks on a few pieces of frozen bread, leaves, and pine needles. It had never occurred to any of them to surrender, although the temperature dropped to 30 below zero Fahrenheit.[20]

In this example, the Russians demonstrated their resolve to resist in near hopeless circumstances. Nevertheless, the longer the Russians delayed surrendering, the longer they prevented the encircling German soldiers from being used elsewhere. Furthermore, the Russians broke through the encirclement in spite of weeks of resistance and starvation. Ironically, German tactical doctrine expected to create and reduce this type of encirclement. Regardless of German doctrine, this encirclement was too difficult for the German forces to reduce or contain. One can imagine the problems they would have experienced if their doctrine had not included encirclements.

The German advance on Stalingrad in August 1942 provides another example of the problems that Soviet resistance created. After crossing the Don River on 21 August, the German's XIV Panzer Corps occupied defensive positions between the Don and Volga Rivers. In the 3d Motorized Division's sector, the Soviets still occupied a small hill called a Balka (a dry river bed with steep precipitous banks). The Germans, underestimating their opponent's resolve, expected enemy resistance to cease when the entire division arrived in the area. One of the 3d Division's staff officers, Colonel H. R. Dingler, replied, "Had we known that this very hill would cause us so much trouble and many losses during the months to follow, we would have pressed home our attack more energetically."[21]

The Russians defending the Balka in the 3d Division's rear area held out for weeks and weeks. Colonel Dingler explains the difficulty of removing this Russian "thorn":

> All our attempts to get the better of the Balka held by the enemy had so far been in vain. We had assault troops attacking it; they achieved nothing, but suffered heavy losses. The Russians had dug themselves in too well. We thought that about four hundred men was a more or less correct estimate of the enemy's strength. In normal circumstances a force of that size should have surrendered after a fortnight. After all, the Russians were completely cut off from the outside world. Nor was there any chance of supply by air, as at that time we had undoubtedly air superiority.
>
> This Balka was a thorn in our side, but we could not count on reducing it by starving the garrison. Something had to be done.
>
> Having exhausted all the wiles and arts which our training as staff officers had taught us, we thought it would be a good thing to allow the real fighting men a chance. Therefore we called in our lieutenants. Three of them were instructed to go into the matter and think up something useful. After three days they reported back and submitted their plan. They suggested subdividing the Balka into several sectors and putting tanks and antitank guns opposite the holes of the Russians on the slopes below. Then our assault troops were to work themselves down to these holes and smoke them out.
>
> Everything went according to plan. . . . We were very surprised when we counted our prisoners and found that instead of four hundred men, we had captured about a thousand. For nearly four weeks these thousand men had subsisted on grass and leaves and on a minimum of water which they dug up by sinking a deep hole into the ground. What is more, they not only had lived on so little, but put up a stiff fight to the very end.[22]

The German forces assumed a simple reduction because the Balka was surrounded. By doing so, they allowed the Russians time to prepare their

defense. Consequently, the operation became more complex, difficult, and costly in terms of time, equipment, and men's lives.

The two vignettes above demonstrate the adversities the Germans encountered regardless of the fact they had positional and numerical advantages. The German forces in both examples penetrated the enemy's defense, by-passed or encircled the remaining enemy forces, and then experienced difficulty in reducing the anticipated pockets of resistance. The weaker Russian elements tied down German forces and made them expend precious time and resources. In each case, the Germans had more problems trying to exploit the positional advantage than they had trying to secure it.

Red Army doctrine, like German Blitzkrieg, espoused using penetrations and envelopments to create encirclements. For example, as early as 1911, "V. I. Lenin believed encirclement of the enemy to be the most decisive form of action, and he required it to be performed in accordance with all of the rules of the art of War."[23]

Like the Germans, the Soviets learned that encirclements were not so difficult to attain, but were often difficult to reduce. In the years 1941 through 1944, the Russians encircled German units on numerous occasions, but were sometimes unable to liquidate or contain the encircled force or defend it against external German relief forces.

In December 1941, strong Soviet forces surrounded the 1st Panzer Division at the small village of Klin near Moscow. After receiving orders to breakout, the Germans conducted a reconnaissance in force and discovered the weakest point of enemy resistance. The 1st Panzer Division conducted a

diversionary breakthrough with all of its tanks, a company of armored infantry, and an infantry battalion. The Germans placed their artillery in the center of the encirclement so it could cover both the feint and the actual breakout. The Russians reacted to the feint by shifting their reserve forces to meet what they assumed to be the main effort. Once the reserves had displaced, the Germans shifted their artillery and anti-aircraft support to the actual breakout. The German division penetrated the weakest portion of the Russian defense, widened the penetration, used the tanks that had survived the feint to weight the main attack, and fought its way to friendly lines.[24]

Although surrounded, the German forces retained the initiative and executed a coordinated breakout. They took advantage of the fact that the Russians had little time to prepare for a reduction. They complicated the situation with a well executed feint and a violent penetration at the weakest point.

Similar situations occurred for both adversaries many times on the Eastern Front. The previous examples suggest that encirclement alone only provides the encircling force with a positional advantage; it does not eliminate the opposition or guarantee success. The examples also suggest that the encircling force's greatest threat comes from the units inside the pocket. This is not always the case. Sometimes the threat comes from an enemy relief force outside the encirclement.

In late November 1942, a Russian force attacked and encircled a German regimental combat team of the 83d Division in the town of Velikiye Luki (Figure 3, below). The German combat team consisted of an infantry

regiment, two artillery battalions, an observation battalion, two engineer battalions and other combat and service support units. Although the Russian encircling force was considerably larger than the German combat team, only two Russian brigades initially occupied positions between the Germans and their parent organization. The German regimental commander, realizing the Russians would eventually strengthen their encircling cordon, requested permission to break out.

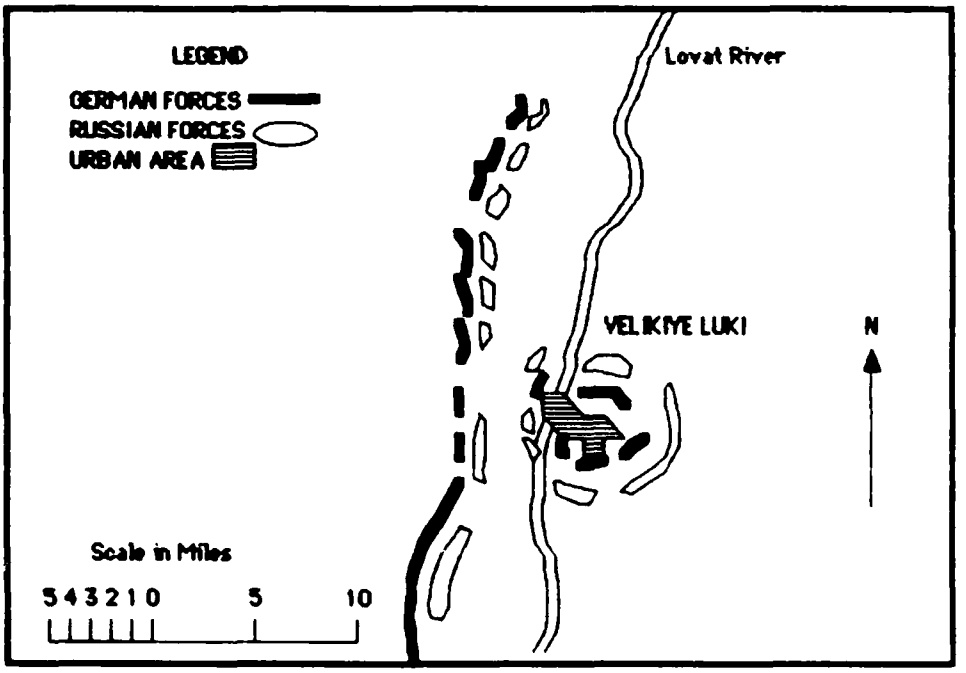

FIGURE 3

Hitler, who in December 1941 assumed direct control of all military operations in Russia, rejected any breakout request requiring westerly displacements. Instead, he ordered that pockets be held at all costs, that other German forces attack from the west and reinforce the encircled units, and that the front be pushed even farther to the east. The German regimental combat team prepared to defend.

The Russians could not storm Velikiye Luki because the Germans had previously constructed a perimeter of hasty field fortifications around the town. Furthermore, after the Russians had for four weeks attempted unsuccessfully to reduce the pocket, an attacking German relief corps forced the Russians to divide their attention in two directions. The Russians halted the first relief attempt and two weeks later thwarted another (Figure 4).

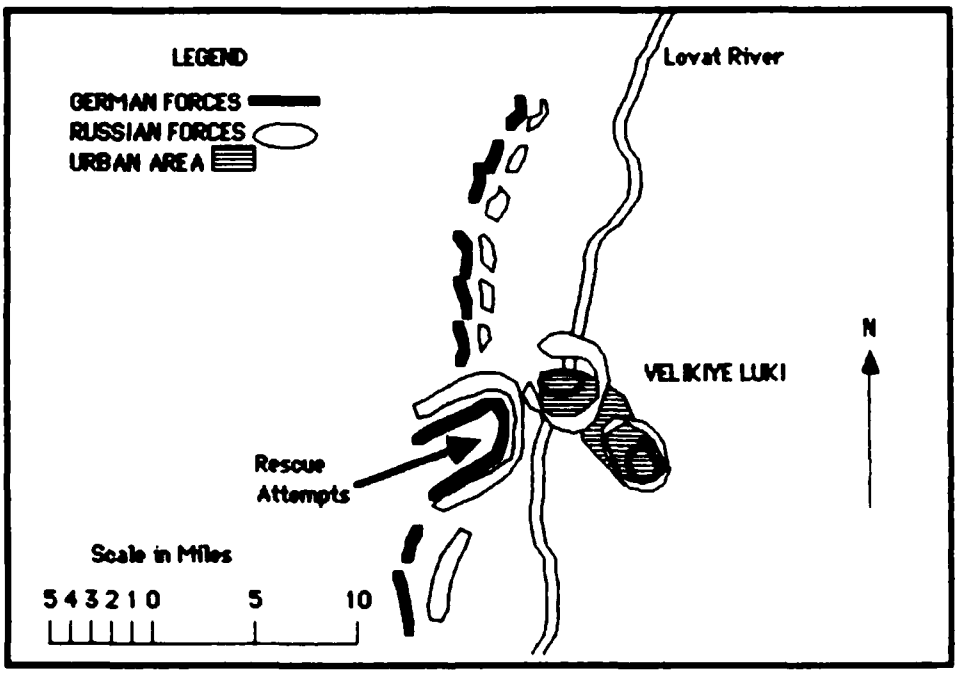

Figure 4

On 5 January, the Russians once again focused their efforts on the encirclement, penetrated it, and divided the encircled forces into two smaller pockets. On 10 January, the Germans strengthened one of these pockets by ramming a reinforced infantry company, riding on trucks and tank destroyers, through the Russian encirclement. On 14 January, a German parachute battalion tried to conduct a similar ramming attack in order to

reinforce one pocket, but lost its way and failed to reach its objective. On 15 January, the smallest pocket broke out of its encirclement and rejoined German lines. The same day, more than six weeks after initially surrounding Velikiye Luki, the Russians successfully liquidated the second pocket.[25]

This example shows how complex encirclement reductions can become. The Russians had to divide their attention between the pockets and the German link-up forces. And although they prevented the link-up, the Russians still could not contain the breakout of one small encirclement.

* *

All four historical examples demonstrate that achieving an encirclement does not automatically end the battle. Furthermore, regardless of how weak the encircled force is, reducing encirclements can be difficult and complex operations in terms of time and manpower expenditures. Consequently, bypassing or encircling forces must plan ahead to determine the best courses of action in dealing with pockets of enemy forces.

Prior planning is probably the most important consideration of encirclement operations. The encircling commander should identify and set the conditions of the encirclement <u>before it develops</u>. In other words, deny the enemy as many advantages as possible before surrounding him. The reason is simple. If the encirclement occurs through happenstance, the enemy may have the opportunity to occupy advantageous terrain or secure a better position. This would make encirclement reduction much more difficult for the surrounding force. Therefore, as early in the operation as

possible, the commander should look ahead and consider creating the most favorable end-state for his encircling forces.

The commander should also understand that bypassed and encircled forces can behave in five ways: (1) surrender; (2) remain stationary and cause no interference; (3) remain stationary and, by virtue of their position, interrupt friendly operations; (4) move for the purpose of rejoining their own lines; (5) move for the purpose of interrupting friendly operations. Obviously the encircling force commander would prefer the enemy's surrender in order to preserve his own force and save time. Unfortunately, this situation occurs only if the encircled force realizes it has no hope for success and can expect reasonable treatment as captives. In many cases, as demonstrated by the previous historical examples, the encircled force will not surrender. Therefore, the remainder of this paper will address the encircled force as one which refuses to capitulate and is dangerous to the extent that it requires systematic reduction.

Encirclements can occur as a consequence of an operational action, a tactical action, or a combination of both. Regardless of how the encirclement occurs or the size of the forces involved, its reduction is strictly a tactical action.

Once the commander resolves to reduce a pocket, he conducts his commander's estimate in order to determine his best course of action. He does this by using the decision process outlined in the Army's FM 101-5, Staff Organization and Operations.[26] In short, the commander considers the factors of METT-T (Mission, Enemy, Terrain, Troops available, and Time) and

then selects one of two possible methods of reduction: by fire alone, or by fire and maneuver.[27]

Reduction-by-fire-alone implies that the encircling commander will use fire support as the predominant or sole means of subduing the encirclement. This fire support includes the employment of conventional and special munitions by artillery, close-air support, and possibly attack helicopters. Reduction-by-fire-alone provides the encircling force with the advantage of manpower preservation. The German bombardment of Warsaw in 1939 provides a good example of a successful reduction by fire.[28]

Unfortunately, reduction-by-fire-alone has a number of disadvantages. Perhaps the most apparent disadvantage is the fact that it is ammunition, weapon, and time intensive. Another disadvantage is this method's inability to guarantee results. Reduction-by-fire may cause the enemy to surrender or it may reduce his force to the extent that it no longer poses a significant threat. On the other hand, this bombardment alone might not be sufficient to *compel submission*. A *modern example* of this is the German bombardment and siege of Leningrad in World War II.[29]

Reduction-by-fire's final disadvantage is its sharing of initiative between the encircled and the encircling forces. Although the encircling force can bombard the pocket at will, it is really the encircled force commander who decides when to defend, breakout, or surrender. Nevertheless, the encircling commander can employ some special measures to reduce the enemy's initiative and these will be addressed later in this paper. Commanders must understand that reducing the enemy by fire might

save lives but, in the long run, might not be the most efficient method to achieve the desired end.

The second method, reduction by fire and maneuver, uses a combination of fire and ground maneuver forces to attack and destroy the encirclement. It is the surest method of reduction because it forces the enemy to surrender, displace, or face annihilation. This method also allows the encircling force commander to retain the majority of the initiative. The major drawback of reduction-by-fire-and-maneuver is that it reduces the strength of the encircling force through what can be very severe attrition.

Once the commander selects his reduction method, he must then determine his reduction technique, or simply, how that reduction method will be employed. Reduction-by-fire-alone contains only one technique--application of overwhelming fire--and requires decisions on selection of munitions, delivery means, and targets. Reduction-by-fire-and-maneuver incorporates at least four techniques: reduction by continuous external pressure, divide-and-conquer, selective reduction, and reduction by infiltration.

The first technique, reduction by continuous external pressure, is the classic siege. The encircling force contains the encirclement, bombards the pocket with fire, and attacks the perimeter of the pocket in a battle of attrition. Obviously, this is not the most advantageous technique for the encircling force. In the first place, the encircled force usually has the advantage of the stronger form of combat--the defense. Secondly, the encircled force usually has the advantage of interior lines, allowing it quickly to transfer forces within its defensive perimeter. Finally, as a

result of these two defensive advantages, the attacking force can expect to suffer a greater number of casualties in comparison with those experienced by the defenders. In comparison with the other techniques, reduction by continuous external pressure has few if any advantages, unless, of course, the encircling force has an overwhelming force advantage.

The technique of divide-and-conquer, on the other hand, is a much more viable and less costly operation. It is also the technique that the German and Red Armies used against pockets of resistance in World War II.[30] Once the pocket is surrounded and contained, the encircling force launches a penetration to divide the pocket in two. Then another penetration divides these pockets into smaller ones. These penetrations and divisions continue until resistance subsides.[31]

This technique is designed to eliminate the pocket's advantage of interior lines. It reduces the encircled force's ability to shift forces while simultaneously retaining the initiative for the attacking force. The previous example of the encirclement at Velikiye Luki and the battle of Stalingrad provide two historical examples of this technique's success.[32]

The third technique, selective reduction, attacks the cohesion of the encircled force by focusing on the sequential destruction of specific targets. Take, for example, a situation where the encircled force is strong in air defense and artillery assets. The encircling force might focus on eliminating the pocket's air defense systems first, and then use air and ground forces to eliminate its artillery. This could be followed by armored attacks on combat service support assets and infantry attacks on vulnerable armor formations. The objective is the eroding of the total combined arms

strength of the pocket by eliminating specific combat and combat support elements. This technique could be and probably has been used in combination with the other reduction techniques.

One example of selective reduction is the siege of Dien Bien Phu, Indo-China in 1953-54. Once the Viet Minh troops surrounded the French forces inside the village, they used overwhelming indirect fire to destroy the encirclement's airstrip and artillery. Next, the attackers used their air-defense artillery to isolate the pocket from air drops. The Viet Minh then used a combination of mining, massive artillery, and direct assault to reduce selected strongpoints of the defense. After removing the strongpoints, the attackers finally overran the French forces with an assault.[33]

The fourth technique, reduction by infiltration, is similar to a technique the Red Army used against German defenses in World War II.[34] The Russians would infiltrate at night and occupy key blocking positions. This required the Germans to divide their attention in two directions, reducing their ability to delay or shift forces.[35] Reduction by infiltration infiltrates forces through the perimeter of the encirclement, isolating small portions of the pocket so they may be reduced without external interference.

In addition to the reduction methods and techniques above, the encircling commander must identify special planning considerations for his entire force as well as for specific members of his combined arms team. These considerations include: the effects of an organizational pause, maneuver and fire support control measures, continuous reconnaissance,

encirclement isolation, psychological operations, electronic warfare, use of nuclear weapons, creation and employment of a mobile reaction force, and service support.

As the commander plans a reduction, he must consider the combined effects of an organizational pause on both friendly and enemy forces. Before the reducing force can execute containment and reduction operations, it usually has to quit its previous mission and pause to organize for its next one. During this pause, the enemy can sieze the initiative and attempt to break out, reinforce, or otherwise improve his defense. Moreover, in the early stages of the reduction, the reducing force is often uncoordinated or unprepared for surprises. This, in turn, provides the enemy with additional advantages. The Germans and Russians both learned that the most successful breakouts and reliefs of encirclements occurred in the initial stages of the operation. For example, the Germans at Klin broke out before the Russian forces could effectively organize their reduction. Other historical accounts suggest the longer the encircling force takes to organize, the more time the enemy has to improve his own situation, and perhaps the more difficult and complex the reduction.[36] The consequences of a pause in operations further emphasize the importance of the commander's ability to anticipate and create a favorable end-state before the encirclement occurs.[37] Nevertheless, if the commander determines the encircling force is insufficiently organized to conduct the reduction, his force must pause to regroup.

While the reduction force is organizing, the commander will have to consider special maneuver and fire support control measures. Unit

boundaries in an encirclement reduction usually differ from those of most other tactical operations. Ordinarily, a combat force shares only its lateral boundaries with friendly units. When subordinate elements of an encircling force surround the enemy, however, their areas of operation converge toward the center of the pocket and they share forward and lateral boundaries with each other. Because the areas of operation converge, boundaries frequently change as the pocket is reduced. In reduction operations, a divide-and-conquer penetration probably will require adjustments to all the other unit boundaries. In most other offensive operations, a penetration rarely will affect all the friendly units. Another reduction technique, the reduction by infiltration, often will dictate boundary changes because it isolates a friendly unit inside the encirclement. Add the establishment and updating of fire support control measures, and one quickly appreciates why the encirclement reduction requires special control considerations. It also demonstrates why one Soviet officer states,

> [encirclement reductions] require commanders and staffs to maintain constant knowledge of the situation, to predict its development and to maintain firm and flexible control.[38]

Another planning consideration is continuous reconnaissance and surveillance. The commander needs to know, at all times, where defensive gaps and weaknesses exist, where a breakout will most likely occur, or where and when relief forces might attack.

Continuous reconnaissance also can help the encircling force isolate the pocket. Isolation of the encirclement is important for two reasons: (1) it requires the encircled force to depend upon and deplete its own supply

base; and (2) it has an adverse effect on the pocket's morale. Isolation includes using combat forces to prevent the link-up of relief forces as shown in the Velikiye Luki example. It also includes using electronic warfare assets to deny communication with outside elements, using engineers to construct obstacles, and, like Dien Bien Phu, using counterair assets to isolate the pocket from airborne reinforcement, resupply, and communication.

Isolation is also important for the successful employment of psychological operations (psyops). Once the encircled force realizes it is cut off from the the outside world, it is more vulnerable to psyops. Psyops attacks the pocket's deteriorating morale in a number of ways. One is the age-old surrender ultimatum. The following provides the basic content of the ultimatums used by the Red Army in World War II:

> You, the commander and all officers of the encircled troops, understand quite well that you have no real possibilities for breaking out of the encirclement. Your position is hopeless, and any further resistance has no sense at all.
>
> Considering the hopeless situation in which you now find yourselves and to avoid needless bloodshed, we propose the following surrender terms to you:
>
> 1. All German encircled troops headed by you and your staff are to halt resistance.
>
> 2. All personnel and armament and all combat equipment and military property is to be transferred in serviceable condition into our possession by you in organized fashion.
>
> We guarantee the lives and safety of all officers, NCOs and soldiers who halt resistance, and after the war, their return to Germany or any other country the prisoners of war may express a desire to go.
>
> All personnel of surrendered troops will retain possession of uniforms, rank insignias and decorations, personal articles

> and valuables, while higher officers will also retain possession of silent weapons.
>
> All officers, NCOs and soldiers who surrender will be provided a normal ration immediately.
>
> Medical care will be provided to all casualties, patients and frostbitten soldiers.[39]

The ultimatum ended with a warning that if the surrender terms were not accepted, the encircling force would begin liquidating the pocket, and the blame for this would fall upon the officers in charge.

The Russians used the ultimatums with mixed success. It was unsuccessful the first time it was attempted in January 1943. But by June of 1944, it became very successful, especially when it was combined with leaflet droppings and loudspeaker broadcasts.

In August 1944, Soviet psychological operations also used German prisoners of war as "salesmen" for surrender:

> . . .specially trained groups of captured German soldiers and officers were sent into the enemy's disposition. There were a total of 53 persons, to include over 10 officers. The prisoners of war were to explain the critical situation to the encircled troops, and the need for surrendering. All groups returned to the disposition of our troops, bringing back over 3,000 soldiers and officers.[40]

In addition to using electronic warfare as a tool for surveillance and a means of isolating the encirclement from external communications, the commander should use it to disrupt the pocket's internal communications. Moreover, electronic warfare might be used to transmit propaganda. These actions potentially can add to the surrounded force's confusion and thereby increase inefficiency and decrease morale.

Perhaps the most effective means of reducing the enemy's efficiency and morale is with nuclear weapons. These weapons hold the promise of a speedy rescue for the encircled force or a quick reduction for the encircling force. Nevertheless, nuclear weapons do not favor both forces equally. The pocket usually offers the best targets--large unit concentrations and key locations.

Although the encircled force has some inherent defensive advantages, one of its major disadvantages is its inability to disperse. Another disadvantage is its inability to remain hidden. Additionally, in order to escape the pocket, the encircled force either must concentrate for a breakout, or exfiltrate in piecemeal fashion. Each time it concentrates, it offers the enemy a lucrative target. Furthermore, a nuclear weapon's residual effects can impede intrapocket movement and deny the encircled force the use of portions of the pocket.

Unlike the forces in the pocket, the encircling force often disperses around the pocket's perimeter, and usually conceals its reserve element in a distant hide-position. When it masses for a penetration, it concentrates only at the point of assault using a converging approach. The encircling force, however, is not invulnerable to the effects of nuclear weapons. It merely reduces its duration as a potential nuclear target by using multiple routes, dispersion, speed, and surprise.

The encircling commander should realize that the pocket force might attempt to intermingle its ground forces with his in order to reduce its vulnerability to, as well as the likelihood of, a tactical nuclear attack. This could require the encircling commander to break contact and withdraw if he

desires to employ nuclear weapons. Additionally, this withdrawal might aid the pocket by providing it with an opportunity to escape or improve its posture.

As the encircling commander plans his reduction, he must analyze the enemy's ability to break out, and any external force's potential to rescue or reinforce the pocket.[41] Usually the commander will retain one or more mobile reaction forces or reserves to counter these threats. At Klin, the Russians used their reserve to counter a feint, but were unable to react to the actual breakout. At Velikiye Luki, the Russians used mobile reaction forces to prevent the German link-up.

The encircling commander must also consider a number of service support tasks, including prisoner of war handling and logistics support. The successful encirclement reductions on the Russo-German front are well known for their vast numbers of prisoners. The fact is, the more successful the reduction operation, the greater the number of prisoners of war. Consequently, the encircling commander and staff should prepare to process large numbers of prisoners in short periods of time and supply them with food, shelter, and medical services. If large numbers of soldiers surrender at one time, as they did on the Russo-German front, they could overburden the logistics support system and adversely affect combat power.

Logistics is no more important to reduction operations than it is to any other tactical operation. Nevertheless, encirclement reduction does require some special logistics considerations. The first consideration is the method of reduction. Traditional siege operations required special artillery and large quantities of ammunition. Therefore, reduction by fire,

which is basically a siege, would also require large amounts of ammunition Conversely, reduction by fire and maneuver would require more fuel, maintenance, and medical support. Moreover, the techniques of reduction by fire and maneuver tend to compound the difficulty of logistic support. For example, consider the difficulty of supplying the penetration element in the divide-and-conquer technique or the infiltration elements in the reduction by infiltration technique. In both of these situations, logistics support would have to function in close proximity to, or even in, enemy territory.

Very little if any of the reduction methodology discussed in this study is new or revolutionary. Sieges and other reduction operations have occurred throughout history. At least one modern force, the Soviet Army, has long considered the encirclement and its subsequent annihilation as an essential combination for winning battles. The Red Army Field Service Regulation of 1944 states:

> All battle has for its purpose the defeat of the enemy. But only determined offensive battle or counterattack executed with encirclement or continuous pursuit will lead to the capture or destruction of the resisting enemy. . . . Battle of encirclement should capture or completely destroy the enemy.[42]

Soviet General Major S. V. Shtrik supports this thought in his 1968 analysis of encirclement operations in World War II:

> Attacking troops were most often forced to deliver attacks upon the weakest points in enemy . . . formations and, as a rule, in converging directions. As a result, as shown by the experience of the war, not only was successful encirclement of enemy groupings . . . achieved, but also favorable conditions were created for their isolation from the flow of reserves . . . , which, in its turn, permitted the dismemberment of enemy groupings and their piecemeal destruction. In this, encirclement and subsequent destruction of large enemy

groupings was frequently the main task of all offensive operations and such operations were considered the most effective method of defeating the enemy.[43]

Encirclement operations were given such importance that the 1944 Red Army Regulation also addressed encirclement by inferior numbers of troops:

> For the execution of encirclement it is generally necessary to have a superiority in forces. However, it is sometimes possible to encircle and destroy the enemy even when our forces are equal or even numerically inferior to those of the enemy.
>
> Encirclement and subsequent capture or destruction of enemy troops, with equal or inferior forces, is a matter of honor, valor, and heroism of troops and a display of high skill by the commanders and should be considered as the highest military exploit.[44]

Although the Soviet Army has long considered the encirclement and consequent reduction as two essential parts of one operation, the U.S. Army has not. In comparison with the Soviet Army, the U.S. Army is woefully lacking in encirclement doctrine and methodology.

III Conclusion

As stated in the introduction, the U.S. Army's field manuals only address the first half of the encirclement operation--the envelopment. Encirclement reduction is virtually ignored. Furthermore, Army publications do *not* even use the word encirclement except in conjunction with exploitation and pursuit operations. A tactical encirclement can occur without conducting an exploitation. Similarly, an encirclement can occur without a subsequent reduction, although the encircled forces must be dealt with in some manner. The important point is not that the Army must reduce

encirclements. The point is the Army must recognize that encirclements can and will occur, and often must be dealt with by reduction.[45]

History and logic suggest that reducing encirclements and pockets of resistance will be difficult and complex if it is not anticipated. Consequently, the tactical commander must learn to anticipate both the encirclement and the reduction, and attempt to create a favorable end-state.

Once the encirclement occurs and the commander decides to reduce it, he selects one of two reduction methods: by fire alone, or by fire and maneuver. If the commander selects reduction by fire and maneuver, he also must decide on a reduction technique. He bases his selections of methods and techniques on a number of criteria, including the desired end-state, his available resources, his time constraints, the enemy's capabilities and intentions, and the likely costs involved. Regardless of the methods and techniques he selects, the commander must address some special planning considerations. These include assessing the consequences of pausing between operations, establishing and frequently amending control measures, maintaining continuous surveillance, isolating the encirclement, employing psychological operations, understanding the implications of nuclear weapon employment, and preparing for large numbers of prisoners.

Considering the Army's present situation concerning the reduction of pockets of resistance and encirclements, the Army must recognize that encirclement reductions may be necessary to end a battle, and that these reductions can be difficult and complex. Failing to do so could cost additional lives and threaten the success of a battle or campaign. The Army should also analyze its Tables of Organization and Equipment to determine

their compatibility with reduction methodology. Then, after sufficient historical research and operational analysis, the Army should establish an encirclement reduction methodology and doctrine and practice it. Finally, after considerable training and hands-on experience, the Army should conduct additional research into ways that technology can make encirclement reduction more efficient.

ENDNOTES

[1]U.S. Department of the Army, Field Manual 100-5, Operations, (U.S. Government Printing Office, 1986), p. 12.

[2]Ibid, pp. 101-105. The Army's fifth form of maneuver, the frontal attack, does not pursue a positional advantage.

[3]FM 100-5 does discuss exploitation and pursuit operations as follow-on actions, but ties these actions to " . . . fleeing enemy forces who have lost the capability to resist." Ibid, p. 117.

[4]FM 100-5 briefly discusses encirclement reductions as part of pursuit operations. Ibid, pp. 119-120. No Army doctrinal publications address reductions in detail, nor do they recognize the encirclement as part of any operation other than the exploitation and pursuit. Furthermore, reduction of bypassed elements and encirclements is often considered the mission of follow and support forces. Reduction by main effort forces is virtually ignored, p. 118.

[5]U.S. Department of the Army, Field Circular 100-15, Corps Operations, (U.S. Government Printing Office, March 1984), p. 5-22.

[6]Ibid, p. 5-24.

[7]Ibid, p. 5-22.

[8]FM 100-5, Operations, p. 101.

[9]U.S. Department of the Army, Field Manual 100-15 (Draft), Corps Operations, (U.S. Government Printing Office, 22 February 1985), p. 5-20.

[10]FC 100-15, Corps Operations, p. 5-28.

[11]Ibid.

[12]FM 100-5, Operations, p. 102.

[13]Ibid, p. 103.

[14]I.B. Holley, Jr., "Concepts, Doctrines, Principles: Are You Sure You Understand These Terms?", Air University Review, July-August 1984, p. 92.

[15]FM 100-5, Operations, p. 105.

[16]Major Ferdinand O. Miksche, Attack: A Study of Blitzkrieg Tactics, (New York: Random House, 1942), p. 16. Additionally, while on the defensive, German forces often used "defensive pincers" to cut and encircle Russian offensive penetrations. U.S. Department of the Army, Office of the Chief of Military History, Department of the Army Pamphlet 20-233: German Defense Tactics against Russian Break-Throughs, (Washington: 1951) p. 20.

[17]Albert A. Nofi, ed. The War Against Hitler, (New York: Hippocrene Books, Inc., 1982), p. 16.

[18]Lieutenant Colonel Henry D. Lind, "Break-Out From Encirclement," Military Review (June 1951), p. 57.

[19]John A. English, On Infantry, (New York: Praeger Publishers, 1984), p. 96.

[20]Ibid, p. 98.

[21]Friedrich W. Mellenthin, Panzer Battles, (New York: Ballentine, 1980) p.195.

[22]Ibid, pp. 195-6

[23]Viktor A. Matsulenko, Operatsii i boye po okruzheniye (Encirclement Operations and Combat), (Moskva: Voyenisdat, 1983, JPRS trans. no. 019-L), p. 1.

[24]U.S. Department of the Army, Office of the Chief of Military History. Department of the Army Pamphlet 20-234: Operations of Encircled Forces: German Experiences in Russia, (Washington: 1951), pp. 3-6.

[25]Ibid, pp. 7-14.

[26]U.S. Department of the Army, Field Manual 101-5, Staff Organization and Operations, (U.S. Government Printing Office, 1984), pp. 5-1 to 5-10.

[27]Both methods are briefly identified in FM 100-5, Operations, p. 120.

[28]James L. Stokesbury, A Short History of World War II, (New York: William Morrow and Company, Inc., 1980), pp. 73-74.

[29]Ibid, pp. 158, 241.

[30]Lieutenant Colonel C. A. Edson, "German Tactics in Russia," Military Review (September 1946), pp. 6-7, and Union of Soviet Socialist Republics, Field Service Regulations of the Red Army (1944), mimeographed translation by U.S. War Department, Office of the Assistant Chief of staff for intelligence, no no, pp. 117-119.

[31]FM 100-5, Operations, p. 120, also identifies this as the method commanders must use, ". . . [the encirclement] must be reduced in size by repeatedly splitting it into smaller elements until the encircled force is destroyed or it capitulates."

[32]Colonel N. Korbrin, "Encirclement Operations," Soviet Military Review No. 8 (August 1981): 36-9. Although this is a preferred technique, it is not simple to conduct, nor is it always successful. Lieutenant Colonel Joachim Schultz-Nauman provides an example of a complex, but unsuccessful, Soviet attempt to reduce German forces in, "The Demyansk Pocket, March-April 1942," Military Review (December 1957), pp. 77-84.

[33]Bernard B. Fall, Street Without Joy, (New York: Schocken Books, 1972), pp. 320-329.

[34]English, On Infantry, p. 101.

[35]Ibid, pp. 101-103.

[36]In his study, Lieutenant Colonel Paul Tiberi concludes, ". . . the early commitment to an attack against the encircling forces [by the surrounded unit] contributed to the favorable outcome of the [breakout] operation." Encircled Forces: The Neglected Phenomenon of Warfare, (U.S. Army Command and General Staff College student thesis, 1985), pp. 173-177.

[37]After considerable trial and error in World War II, the Soviets eventually acquired the ability to encircle and reduce German forces in one continuous effort. Matsulenko, Encirclement, p. 182.

[38]Ibid, p. 185.

[39]Ibid, p. 147.

[40]Ibid, p. 149.

[41]The following sources provide excellent examples of and techniques for breakout operations: Lieutenant Colonel Richard S. Kent, "Preparing for the Breakout," Military Review, July 1981, pp. 61-73; Lind, "Breakout from Encirclement," pp. 49-62; and Tiberi, Encircled Forces, pp. 70-202.

[42]Field Service Regulations of the Red Army (1944), pp. 8, 115.

[43]General Major S. V. Shtrik, "The Encirclement and Destruction of the Enemy During Combat Operations Not Involving the Use of Nuclear Weapons," in The Soviet Art of War, ed. Harriet F. and William F. Scott, (Boulder, Colorado Westview Press, 1982), pp. 203-204.

[44]Field Service Regulations of the Red Army (1944), pp. 116-117.

[45]Major Joseph J. Angsten offers a different approach with respect to bypassed forces, "the best way for a corps commander to deal with what has been referred to as bypassed enemy forces is not to bypass them at all." "Bypassed Enemy Forces and the Corps Attack," Military Review (September 1980), pp. 69-74.

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