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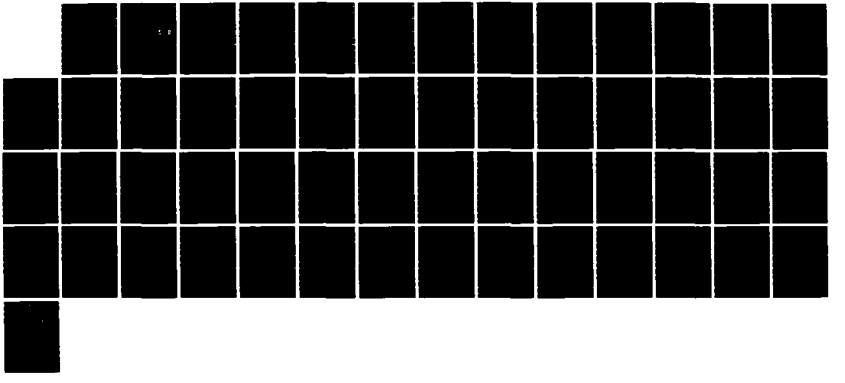

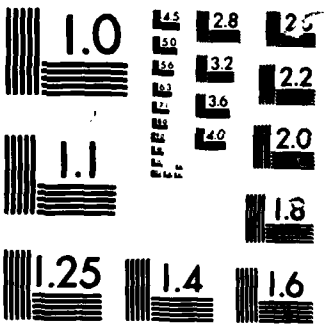

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LIGHT INFANTRY: A TACTICAL DEEP BATTLE ASSET FOR CENTRAL EUROPE

by

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ABSTRACT

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Major Raymond R. Drummond, USA, 47 pages

This study examines whether light infantry is envisioned for employment in an optimal way, specifically in an offensive role in Central Europe. The paper reviews current doctrine and determines that a disconnect exists. Lower level manuals argue for innovative and aggressive offensive employment, while the division and higher level manuals virtually ignore this capability. A historical overview traces the employment of light forces in tactical infiltration roles from World War I to the Korean War and supports the use of these tactics for hitting critical, vulnerable areas in the enemy rear.

Deep operations by light infantry are contrasted to other US capabilities for deep attack and are then addressed at specific Soviet vulnerabilities at the tactical level suited for attack by light forces. The following type deep battle missions for light infantry are suggested for incorporation in US doctrine: deep spoiling attacks, attack of enemy ADA assets (SEAD role) to open air corridors, deep attack against critical soft targets within 25 kilometers of the front lines, deep tactical reconnaissance to locate targets for other deep attack assets, and the provision of terminal guidance for smart munitions.

The study concludes that light infantry, in Central Europe, operating closer to the unconventional mode and using infiltration tactics is able to strike the enemy at a time and place for which he is unprepared. The cumulative effect of a number of these small blows can disrupt the enemy and expedite the reaching of his culminating point.

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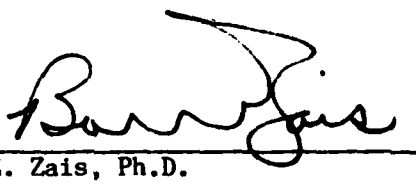

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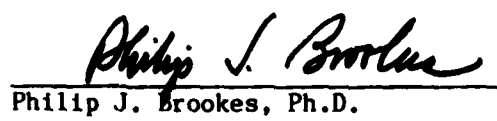

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I. INTRODUCTION

> ....war continues to be a primitive endeavor in which there is always a 'friction' that militates against complexity, it is highly likely that the traditional infantry fighting skills applied with cunning and flexibility will still be applicable in the next one.[1]

A great deal has been written of late discussing the merits of the U. S. Army's recent initiatives in modification of its force structure — the inclusion of "light infantry" forces in the classic sense. Ostensibly this change has been predicated on the enhanced strategic deployability of light forces and their ability to respond quickly to contingency needs in the world beyond Europe. However, now numerous officers and commentators are suggesting that there is a valid role for light infantry on the European battlefield of the future, one that to the present has been largely dominated by heavy forces. A review of existing doctrinal literature conducted in examination of the nature of these envisioned roles indicates that in the chain of higher level manuals perhaps a disconnect occurs. Lower level documents freely discuss infiltration tactics and the use of stealth by light forces culminating with operations in the enemy rear that are intended to realize objectives very similar to those expected of deep operations (as expressed in FM 100-5, Operations. However, in the division level manuals this capability is not directly related in terms of deep operations capabilities of light infantry forces. This paper will examine the feasibility of employing light infantry forces on the Central European battlefield as a tactical level deep operations asset for the Division and Corps commander.

The study will begin with a definition of the terms and scope of the study, and follow with a cursory doctrinal review to establish the aforementioned doctrinal disconnect. A historical overview will then trace the development of "classic" light infantry from the German Jaegers of World War II to the Chinese Communist Forces (CCF) in the Korea War. From that overview significant lessons will be extracted with a view toward modern day applicability. A brief review of current capabilities for U. S. forces to conduct deep battle will follow and lead directly into a consideration of Soviet vulnerabilities that could be effectively attacked with these capabilities. We will then examine the impact of surprise on these Soviet vulnerabilities which will set the stage for the remaining portion of the paper. Certainly deep operations are not without inherent tactical risks and these will be developed, as well as means to reduce or eliminate these risks. Lastly, conclusions will be articulated

that will attempt to answer the question of whether there is a role for light infantry in tactical deep battle on the Central European battlefield.

II. CLASSIC LIGHT INFANTRY

This paper will deal primarily with the concept of "Classic European" light infantry — along the lines of that envisioned for the U. S. Army's new 10,000 man Light Infantry Divisions. However, consideration is given to Airborne Infantry, Air Assault Infantry, or regular "Straight-Leg" Infantry in special circumstances where they are without their normal organic mobility assets and increased firepower, i.e., operating in a severely "stripped down" mode akin to the organization of the new 7th Infantry Division (Light). What then are the characteristics, capabilities, and purpose of this light infantry?

Light infantry is a specialized form of infantry best suited for very rugged terrain, night operations, infiltration missions, raids, and ambushes. It is capable of minimizing its tactical signature (noise, visual, radar, or thermal imaging acquisition by the enemy) and able to capitalize on a relative mobility advantage (vis-a-vis heavy forces) in heavily wooded and mountainous terrain. Light infantry forces are generally regarded as "firepower evasive" and consequently employ small unit hit and run tactics against heavier enemy forces.[2] At the small group and individual level they are characterized by superior physical fitness, self-reliance, extreme adaptability, and the high level of training exhibited by their Non-Commissioned Officers. This is normally manifested at the individual level by a number of positive traits: night fighting ability, initiative, superb land navigation skills, camouflage, and self-discipline.[3] These qualities provide certain advantages to a light infantry force operating against heavier forces: equal or better mobility in close terrain, a low logistic demand and support structure, enhanced operations during periods of reduced visibility, and superior fighting ability in close operations.[4] Liddell Hart extolled this form of infantry, predicted its future value, and urged the British Army to profit from the lessons of irregular warfare by developing in the infantryman the rusefulness and groundcraft of the guerrilla. What is created then is a "stalker,

athlete, marksman" who possesses great endurance, is both mentally and physically agile, and is lightly equipped allowing him to move quickly.[5]

Given the foregoing traits and characteristics one can then expect that these units will have unique capabilities as well. Generally, their capabilities and potential missions are essentially offensively oriented and appear consistent with the characteristics mentioned earlier. The missions that are cited most often are listed below:

- infiltrate through rugged (perceived as impassable) terrain, slipping past enemy strong points to seize or destroy critical enemy installations.
- infiltrate to seize critical points to disrupt enemy lines of communications (LOC's) or conduct other deep maneuvers to facilitate an attack by a heavy division or corps.
- conduct long reconnaissance, sabotage, assault raids, or pre-emptive seizure of key bridges or passes to facilitate maneuver by heavy forces.
- seize chokepoints to prevent retreat by enemy forces.
- by infiltration cause front line enemy units to have to fight in two directions at once.
- infiltrate into the enemy's rear to interdict or disrupt lateral movement of reserve forces or the commitment of follow-on forces into the main battle area.[6]

In the foregoing discussion it was implied that a specific set of criteria for terrain had to be met in order for light infantry to be optimally effective. Many of the inherent advantages of heavy forces are negated in proper light infantry terrain (built up areas, industrial zones, forests, marshes, and highlands).[7] According to General Franz Uhle-Wettler of the Federal Republic of German (FRG), only two possible tactics are appropriate for modern infantry on the battlefield of Europe: mechanized combat tactics or tactics which call for maximum dispersion and which thus approximate the tactics of strong partisan units.[8] In the latter case we are talking primarily about "terrain users:" infantry that is capable of fighting at night or under other conditions of limited visibility, in close terrain using tactics of infiltration, and led by leaders willing to take the necessary calculated risks. In the

opinion of many high ranking officers with extensive experience in Central Europe, the Central Front battlefield affords infantry these types of conditions or terrain. One former U. S. Army Europe commander, General Kroesen, contends that "the next war will be won or lost at the 300 meter range just as in the past" demonstrating his conviction that limited visibility will provide conditions favorable to light infantry forces.[9]

In 1980 Otto Munter wrote a paper suggesting the efficacy of using light infantry in Central Europe. He detailed very graphically the terrain considerations which suggest that the failure of the West to deploy light forces in theater is an oversight that necessitates prompt attention. He observes that twenty-nine percent of the FRG is forested and an additional four to eleven percent is urban area, most of which is concentrated on the FRG's eastern borders. He further points out the numerous mountainous areas (such as the Spessart and Harz) and broken regions that dominate the southern portions affording low levels of visibility seldom in excess of 500 meters.[10] In a separate analysis, Steven Canby estimates that forty-five percent of the European battlefield is considered restricted (urban or forested) allowing for many sieves whereby light forces can gain access to the enemy's rear or where they are likely to be bypassed by Soviet forces.[11] In conclusion, light infantry is critically dependent on close or restricted terrain to enhance survivability and afford it opportunities for tactical success. A significant portion of Central Europe meets these conditions and appears to support the employment of light forces.

III. DOCTRINAL BASIS

In April 1984, the Army Chief of Staff, General John A. Wickham issued the following challenge to the Army's doctrinal developers with respect to the employment of light infantry: "Doctrine and tactics must be developed to assure that we capitalize on the unique capabilities of the Light Infantry Division."[12] To assess how this challenge was interpreted and addressed by the TRADOC community and the Army at large, we must specifically orient this search on the treatment given to the use of light infantry in other than conventional roles such as: infiltration, deep battle initiatives, and operating as a bypassed force in the defense.

The Army's capstone doctrinal manual, FM 100-5, Operations emphasizes doing the unexpected and conducting deep operations, but fails to address employment of light forces in an extensive way. The authors describe the high to mid-intensity battlefield as being essentially non-linear in nature, pointing out that attack and defense will often take place simultaneously. Furthermore, they contend that the battlefield will be arrayed in depth and approximate a unified entity where actions to the rear and forward of the front line of troops (FLOT) will impact directly on the outcome of the immediate close battles.[13] They define deep operations as those activities related to shaping conditions under which future close operations are to be conducted. These activities generally include: deception, operations security (OPSEC), communications, command and control countermeasures (C^3CM), interdiction by ground based or aerial fires, ground or aerial maneuver elements, and Special Operations Forces (SOF). The object of these deep operations is to disrupt or destroy the enemy commander, his command and control (C^2) and other support structures, and the freedom of action of his uncommitted forces.[14] An appropriate target is one whose loss or damage will most affect the enemy commander's ability to concentrate forces, to control operations, or to support the battle at critical times. The primary assets are: aerial weapons platforms, artillery and missiles, and conventional and unconventional ground units capable of interdicting the enemy's movement in depth. The authors continue by acknowledging that there will be a paucity of weapons systems capable of conducting these long range fires; therefore, care will have to be exercised to select targets yielding the greatest benefit to close operations. Lastly, there is no direct reference to the employment of light infantry or other "conventional" forces in an infiltration or stay behind mode of operation against enemy rear areas as part of a deep battle operation.[15]

One of the authors of FM 100-5, LTC Don Holder, more succinctly states the importance of keying deep operations to the fight in the main battle area (MBA). In a separate article, he contends that the deep attack must play a direct part in the operation of the force as a whole and serve as an "inseparable part of a unified plan."[16]

Infiltration is discussed extensively; therefore, it could be easily inferred that perhaps this reference is a basis for justifying deep battle operations by means of tactical infiltration.

Infiltration is defined as the "tactical movement of all or part of a unit to a more favorable position beyond enemy lines to accomplish its mission." This tactic is primarily offensive, but can be used with defensive operations, and should be employed under conditions of reduced visibility over rough or difficult terrain, or through areas not occupied by the enemy. These operations are intended to fulfill a vital need, to occupy positions from which the main effort may be supported, to secure key terrain, or to conduct operations in enemy rear areas.[17]

The current manual for heavy forces, FC 71-100, provides extensive treatment of infiltration tactics, techniques, and considerations. In defining appropriate conditions for infiltration tactics the manual is consistent with our analysis to this point concerning limited visibility and appropriate terrain (woods, swamps, and broken ground). In regards to the question of how heavy forces would operate in these conditions, the manual says that infiltration is used primarily with offensive forces and that dismounted infiltration may be particularly effective when both opposing forces are heavy and not accustomed to defending against dismounted forces. An enemy that operates widely dispersed and allows gaps in its lines will be susceptible to these tactics. Again, there appears no direct linkage between infiltration and deep battle, but the objectives for infiltration appear very similar to those for deep battle: key terrain, fire support, enemy C^2, key logistic installations, and the requirement to contribute directly to the division's mission without dissipating combat strength.[18] Of note is the reference to bypassed forces — "friendly units bypassed in defensive operations can be used similarly to those infiltrating if they have adequate combat power for the mission."[19]

In FC 71-100, the light infantry division manual, the treatment of infiltration is virtually identical to that in the heavy division reference. This is interesting because the forces are entirely different in their organization, mobility, firepower, and capabilities. Infiltration as a technique for deep operations is mentioned almost apologetically under "planning considerations" following an earlier inferential reference to the deep battle capability of an infiltrating light infantry force.[20] As in the previous manual when discussing bypassed forces, the reference to deep battle type targets needs to be identified as a deep battle technique, because the forces are used as infiltrating units to pursue deep

battle objectives such as: operating behind enemy lines to confuse and disrupt enemy C^2, to sever lines of communications (LOC), and to conduct raids and ambushes that will prevent the introduction of enemy reinforcements to forward units.[21]

In FC 7-13 (DRAFT), the Light Infantry Battalion and Brigade manual, the authors have come closer than others to answering the challenge put forth by General Wickham. Although not addressing deep battle capabilities specifically, the authors have given extensive treatment to innovative uses and employment of light infantry units that are compatible with the deep battle requirements addressed earlier. However, the linkage between doctrine and capability remains unstated, even though the authors state the following as roles for light infantry in a mid to high intensity conflict (given suitable terrain):

- to soften up combat support (CS) and combat service support (CSS) of the enemy force in conjunction with heavy unit operations.

- to infiltrate, consolidate, and attack to deceive the enemy about operational intent and disrupt the enemy's C^2 and fire support.

- to quickly attack critical terrain in the enemy's rear, then disperse and link up with heavy forces.

- move well dispersed, mass, and then strike the enemy from an unexpected direction.[22]

Light infantry's purpose in an offensive role is essentially to penetrate the defense by infiltration, stealth, and night operations to disrupt the enemy's C^2, CS, and CSS by attacking him from the flank and rear. What the authors are talking about in so many words is deep battle, yet the connection is not made.

It is somewhat surprising to see the doctrinal literature so devoid of focus on light infantry initiatives in deep battle when one considers the thinking at the Command and General Staff College (CGSC) and the Combined Arms Training Activity (CATA) that preceded the publication of these manuals. MG Dave Palmer, the former Deputy Commandant of CGSC, indicated to personnel at CATA that the Light (IOK)

Divisions must have the ability to fight unconventionally — "not an 'A Team' approach, but to build on the SOF experience."[23] A CATA memo later reinforced that position:

> Combat operations conducted by small (Brigade and below) light infantry units in support of tactical or operational objectives should be similar to those associated with Ranger units: raids, ambushes, and patrols but at the tactical or operational level. Raids by Rangers support the Theater Commanders Deep Battle concept, whereas a rifle company of the light division should support the Division Commanders concept. In order to do this they must be prepared to operate unconventionally — isolated, decentralized, and deep in the enemy's rear.[24]

Further, two additional CATA documents [illegible] in February 1984 expand on this notion of unconventional fighting by the light division by requiring that they receive training in a number of specialized unconventional tasks: foreign weapons expertise, survival escape resistance and evasion (SERE), sniper, advanced land navigation and reconnaissance, night fighting, cross country movement, additional first aid, self-reliance, and field expedient communciations techniques. This individualized training is to be brought together at the unit level in enhanced capabilities such as interdiction operations to hinder or interrupt enemy LOC's, deny the enemy use of key areas, destroy military installations and equipment, and set up blocking positions in the enemy's rear.[25]

A yet unpublished Field Circular drafted by elements of the Light Infantry Task Force at Fort Benning, Georgia, focuses principally on two unique capabilities for light infantry, stalking (infiltration) attack and operations as stay behind forces. These capabilities make optimal use of the superior mobility advantage afforded light infantry by restrictive terrain and limited visibility. However, as the authors point out, soldiers must be highly trained, motivated, and physically fit to achieve success. Units will infiltrate at squad or platoon level, then mass at company or battalion level to conduct an attack, after which they will disperse in order to exfiltrate. On the other hand, when operating as stay behind or bypassed forces they can subsist on cached supplies and consolidate to attack typical deep attack targets in the rear of an enemy penetration avoiding decisive engagement with the enemy.[26]

Discussions addressing the intended roles of light infantry forces in the conduct of deep battle have proceeded in a new direction. A significant departure from established conventional doctrinal practices has been suggested, yet how credible is this new approach? Two Germans, Otto Heilbrun and General Uhle-Wettler, appear to support this direction of thought. The former contends that guerrilla tactics should be a part of the retinue of regular forces as it enables them, when overrun by the enemy, to hold out and survive in guerrilla fashion.[27] General Uhle-Wettler views what he considers as the helplessness of modern armies with respect to rather large partisan units as cause to strip away questionable methods of guerrilla tactics and then incorporate the remnants for use by our active armies.[28] Tom Wintringham, a much earlier commentator, viewed the situation this way:

> ....methods and tactics of modern infantry will progressively be approximate to those of guerrillas. The mobile battlefield will split up into a greater number of isolated small engagements where "guerrilla infantry" has enormous opportunities....[29]

The task remains to define clearly these two "unconventional tasks" before we embark on a historical search to ascertain the validity of these proposed methods of employing light infantry. Tactical infiltration does not include special forces operations (strategic depth, envelopment by airborne, airmobile or amphibious means, or infiltration by deception — the use of special units in civilian clothes or enemy uniforms to penetrate the lines). Stay behind operations on the other hand are the defensive counterpart to tactical infiltration; infantry forces gain access to enemy rear areas by intentionally or unintentionally allowing themselves to be bypassed.

IV. HISTORICAL OVERVIEW

The concept of tactical infiltration was heralded into the 20th century by the French Captain Andre Laffargue in his The Attack in Trench Warfare written in 1915. He essentially coined the term "infiltration" to describe the tactics that consisted of small assault teams seeking out weak spots in the enemy line through which they could fight into the enemy rear. This was essentially a departure from the concept of "linear skirmishers" where the thrust had become penetration of the front lines in order to take trenches and machine gun nests from the flank or rear. Laffargue's pamphlet had little impact on

the French. However, when it was discovered by the Germans in 1916, it was immediately translated. Ultimately it became Ludendorff's textbook for the attack in position warfare. Much of the success of the German offensive of March 1918 has been attributed to this single work.[30]

The Kaiser's army had the raw material needed to employ this new tactic as early as 1914 with the formation of the Jaegers. They were an elite force trained for combat in forests and distributed to the army at one battalion per corps.[31] There is some controversy as to who was the driving force behind the eventual adoption of these tactics on an army-wide basis, but General Hutier's success on the eastern front in 1917 certainly aided the cause. His principal contributions were twofold. First, he handpicked the "sturmbattalions" that would lead the attack past strongholds to attack from the flanks and advance boldly to the rear to take out artillery, and secondly, he promoted the use of artillery primarily in a counterbattery role placing more emphasis on surprise in the attack.[32]

With the use of "storm troops," we saw once more the ascension of infantry from the abyss of technological inferiority:

> ....infect the enemy organism with the disease of defeat, slicing at nerves and arteries, at headquarters, supply dumps, bridges, phone lines. These are the pick of the forces. These are shock troops.[33]

To carry out these missions the Germans selected the youngest, fittest, and most experienced soldiers and armed them with light machine guns, light mortars, and flame throwers. These units typified traits normally associated with light infantry. They exploited surprise, moved fast, employed stealth, shot straight, and were capable of independent and individual performance that demonstrated initiative. Corporals and sergeants were expected to display initiative and independence of action as they were required to understand the higher unit's task and use their units to find a way to achieve the mission. Army NCO's now had to make tactical decisions without the opportunity for advice from higher.[34] The goal of this new tactical method was to penetrate through weak points then go after the nerves and arteries of the enemy army — headquarters, crossroads, and supply and communications centers. The means to achieve this end were reliable, aggressive, and intelligent troops who emphasized initiative.[35]

During World War I the German Army experienced considerable tactical success with this new approach; however, they failed to ever exploit it to achieve the operational or strategic success essential to winning the war. In September 1917, Hutier's German Eighth Army, using these new tactics, took the city of Rign on the Eastern Front in two days (after previous repeated failures). Later, using similar tactics, Hutier was to destroy the British Fifth Army on the Western Front and drive a wedge between the British and French armies taking as many as 50,000 prisoners.[36]

This offensive of 1918 began on 21 March with Hutier's Eighteenth Army using "infiltration" tactics in the assault. They were able to penetrate thirty-eight kilometers in the first four days and by 4 April had crushed Gough's Fifth British Army. There were three distinct conditions for success in this operation: surprise, finding and hitting through the enemy weak point, and training the Army down to the smallest details of execution.[37] The effect on the Allies was startling and best captured by Marshal Foch:

> ....initiative, the role of all commanding officers in every arm and unit being the decisive factor; once battle begins special orders no longer reach those to whom addressed and everyone must act upon his own responsibility....[38]

By their selection process and employment of these new tactics the Germans proved themselves equal to the task, whereas the Allies were paralyzed by the new tactic. Had Ludendorff exploited his tactical successes to achieve a strategic decision the war's outcome might have been altered.

With the close of the World War I the lessons derived from the dramatic tactical successes of the Germans were lost on most of the major combatants. The 1936 editions of Offensive and Defensive Combat manuals for Infantry published by the U. S. Army Infantry School made no mention of "infiltration" tactics.[39] The Scandinavians, in particular the Finns and Swedes, tried to capture some of the lessons learned about the value of light or "Jaeger" infantry. They were mostly concerned with conducting "guerrilla" actions in the enemy rear thus imposing serious rear area security burdens on an invading army. Their soldiers became adept in "fieldcraft," and at least for the Finns, this continuing

experimentation with the lessons of the war became the basis of the "motti" tactics which defeated the Soviets in the Winter War of 1939.[40]

A similar experience befell both sides in the Spanish Civil War as both were required to employ infiltration tactics when they wanted to advance. They failed more often than not, primarily due to a failure to develop the individual skill levels of their soldiers to that demanded by these tactics. There was, however, one very successful infiltration operation conducted by the Republican forces. Platoons of thirty men were given orders for two days of operation, and they were able to penetrate twenty to thirty miles into General Franco's territory with whole divisions reaching their objectives in two days.[41] Given only this limited activity and even less doctrinal acceptance of these tactical methods, World War II was still to see extensive usage of infiltration by all sides in all theaters to achieve success in the depths of the enemy's rear areas.

Virtually out of necessity the Soviet Army became the most prolific practitioner of infiltration tactics during World War II. In the early stages of the war the Russian infantry often marched thirty miles per day for extended periods (up to ten days) to escape encirclement. As a result the forces that remained to combat the Germans learned to travel lighter and exhibited greater battlefield mobility than any modern army. The Russians also soon discovered a chink in the German infantry's armor — fighting at close range. The Russians began to exploit the superior "stalking" ability of their infantry with the result that practically every Russian attack was preceded by massive infiltrations of small units and individual men.[42]

Almost from the outset of the war and owing largely to its unexpected beginning the Soviets began to employ elements of regular units in a tactical unconventional warfare role. These operations were generally conducted in support of division and lower units and normally to a depth of no greater than fifty kilometers.[43] The majority of these forces were composed of bypassed elements of the Red Army and some refugees. By the summer of 1944 they numbered several hundred thousand operating in 20,000 to 30,000 men groups.[44] From this nucleus of regular forces sprang a large partisan movement that operated principally by hit and run tactics with the expressed aim of diverting the attention and strength of the

Germans from their main effort.[45] These activities had a significant impact on the German effort and by the war's end absorbed several hundred thousand German soldiers in the task of countering their efforts. These troops were dedicated to security operations guarding rear LOC's, railroads, operating facilities, and ammunition and ration dumps. The supply of frontline German units often became seriously endangered.[46]

In the initial stages of the war, again born largely of necessity, the Soviet use of infiltration tactics emanated largely from the operations of bypassed forces against the enemy's LOC. Although the German supply system operated without major interruptions in the first six months of the war, there were entire divisions cut off from their supply base for short periods. This interruption was the inadvertent result of Soviet troop units or stragglers fighting their way back to friendly lines.[47] Typically these units would break out from encirclement, pick up stragglers in forests and marshy areas, and then hit enemy communications hard. They chose soft targets that were designed to disrupt the German offensive, airfields and large headquarters organizations. Soviet General Boldin wrote about a forty-five day operation in the enemy's rear in which he established communications with friendly forces and was able to coordinate an attack on German frontline units from both the front and rear. This operation netted over 1,000 German casualties, five field artillery batteries destroyed, along with 100 trucks and two German regimental headquarters.[48] In that these operations were not originally planned yet achieved considerable success across the entire front, one stops to wonder what results might have been achieved had they been planned and conducted from the outset.[49]

As the war continued on the Eastern Front the Soviets began using infiltration tactics in a more traditional sense. Soviet mountain troops who were masters at camouflage and the use of terrain infiltrated through German lines in small groups. They would assemble behind German lines and attack at daybreak in conjunction with frontal assaults by other units.[50] As they experienced heavy casualties when using wave assaults they began to turn more and more to infiltration tactics. In 1943 they began infiltrating heavily through known weak points (in areas the Germans considered impassable) with larger

units up to division size. This quickly became the most effective Russian method of night combat.[51] General von Mellenthin best relates the impact of these tactics:

> Practically every Russian attack was preceded by large scale infiltration...in least likely places, where going was incredibly difficult, there he was...in spite of everybody being alert and wide awake during the whole night, the next morning entire Russian units were sure to be found far behind our lines...infiltration tactics were employed by the Russians in hundreds of cases, bringing them considerable successes.[52]

The gaps in German defenses continued to be inviting targets for Soviet infiltration, especially during conditions of limited visibility. Two specific cases from the 1942-43 period demonstrate the effectiveness of these operations.

In February 1942, the Soviets infiltrated a battalion on skis between strong points of the German 269th Infantry Division (about fifty miles southeast of Leningrad) during a severe snow storm. During the day they would hide and at night conduct interdiction and harassment operations. These included mining main supply routes, ambushing supply columns, and attacking command posts (CP) and heavy weapons positions. Their relative mobility advantage was a key factor in the success they experienced. The Germans responded with intensive countermeasures that proved largely ineffective. To assure security, they ultimately had to place Regimental CP's in the main line of resistance and the Division's CP was positioned within one kilometer of the forward edge of the battle area (FEBA) for "protection."[53]

Another example is illustrative of the absolute confusion created within German rear areas by a successful infiltration operation. The operation took place in August 1943 in the XXXIX Panzer Corps sector. The 337th Division had been told to withdraw on 17 August to secure the Dorogsbuzh - Smolensk road and prevent a breakthrough in its sector. However, a swampy area five miles south of the road was thinly covered by a security detachment. During the night of 17-18 August, while the Russians were infiltrating nothing unusual was reported, but on the 18th a German ammunition column setting up a dump four miles to the rear of the FEBA was hit. The Corps reaction force proved unable to engage the infiltrated force. Then, on the morning of 20 August, a key bridge over the Vop River in the rear was attacked. This time engineer and infantry reaction forces were able to clear out what the Germans still

perceived to be a "partisan force." Later that same evening the only bridge over the Dnepr River for the 18th Panzer Grenadier Division LOC was hit by the same force. Fortunately the Russian regimental CP (operating in the German rear) was overcome the morning of 21 August, the day before the regiment was to cut all the bridges thereby severing the Corps' LOC. Most of the Soviet force in this operation was annihilated, but only after having caused much damage and disruption, and tying down considerable German manpower.[54]

In another theater of the war the Japanese used these tactics almost as extensively as the Russians did on the Eastern Front, only this time against U. S. and British Forces. In the opinion of Field Marshal Slim, the Japanese ability to move through the jungle more freely than the British, whose transport system required that they remain roadbound, gave the Japanese every advantage.[55] The Japanese technique of infiltration employed advance guards (platoon to company size) moving between enemy positions to get behind organized defenses. They normally had a specific mission such as seizure of a particular point or attack on a located headquarters or flank. When these units were counterattacked they would "melt," exercising good fire discipline while allowing the counterattack force to pass by and then engaging them from the flank or rear.[56] Their tactics called for stopping at three o'clock, and then commencing infiltration operations again at midnight. In the darkness they would pass through British forces and by dawn their fire covered the routes of egress, as well as the British positions themselves.[57]

The Japanese employed these same tactics against the U. S. in the successful conquest of Bataan. The key operation involved the passage of a battalion through the Mount Natib area. This battalion later fell on the main supply route (MSR) of I Corps holding the western end of the line. This surprise interdiction of its LOC caused I Corps to retreat down the peninsula abandoning large numbers of vehicles and artillery pieces. This action set the stage for eventual defeat at the hands of the Japanese.[58]

Although not typical of the small unit operations discussed above, the operation conducted by the U. S. 36th Infantry Division near Mount Artemiso, Italy in late May 1944 is ndicative of the potential of infiltration tactics. General Walker's infiltration of two regiments from his 36th Division through the

gap between two German corps broke the stubborn German defense at Velletri and served as the turning point in the Allied drive on Rome. General Walker described the risk involved in the operation:

> ....our operations for tonight and tomorrow have promise of being spectacular. We are taking chances, but we should succeed in a big way.[59]

The plan called for the infiltration of the 142d and 143d Infantry over Mount Artemiso in the gap between two German Corps after which they were to hit Velletri in the rear in coordination with a frontal assault by the 141st Infantry. Mount Artemiso was heavily forested and consequently was the most logical portion of the sector for Field Marshal Kesselring to leave lightly guarded. If the 36th could slip in behind the German defenses they could break the German hold on the Alban hills overlooking Velletri. With some hasty engineer assistance Walker was able to send some tanks to accompany the two regiments through the two mile gap in the German lines. Just prior to midnight on 30 May the 142d Infantry began moving with battalions in column. It was not until late on the 31st that the Germans realized that a large force had penetrated to their rear and they were ill-equipped to react quickly. By 1 June, 3,000 U. S. infantrymen had entrenched themselves in the enemy's rear. They achieved tactical surprise and were able to conduct a coordinated attack with the 141st (attacking frontally) from the FLOT to secure Velletri. This defense which had previously held up the 31st Infantry Division for over a week was now taken with minimal losses by the 36th Division (11 killed, 146 wounded, and 12 missing). In the process, Kesselring's last defensive line south of Rome was shattered. General Truscott, the corps commander, considered this to be the turning point in the drive to the northwest.[60]

American forces would see the effect of such tactics six years later when they were subjected to extensive infiltrations of their lines by the Chinese People's Liberation Army (CCF) in November 1950. The CCF would infiltrate small units under cover of darkness regrouping at previously designated points, then operate in the enemy's rear with units up to regiment size for from a few hours to several days. These operations had five purposes: to collect intelligence, to create confusion and paralysis in the enemy rear, to destroy critical enemy installations (CP's, depots, etc), to delay enemy reinforcement, and to prevent the withdrawal of defending units.[61]

The tactics used by the CCF against UN forces sought to take advantage of their perceived superiority vis-a-vis UN forces — "man over weapons." In using the terrain to gain surprise, deception, and camouflage terrain became an ally for the CCF, whereas the terrain created problems for the heavier "roadbound" UN forces. Alexander George aptly describes the effect:

> ....its (PLA) semi-guerrilla tactics were based on a mobility which could not be burdened with heavy weapons and transport. The Chinese coolie could do one thing better than any other soldier on earth; he could infiltrate around an enemy position in the darkness with unbelievable stealth. Only Americans who have had such an experience can realize what a shock it is to be surprised at midnight with grenades and submachine gun slugs of guerrilla attackers who seem to rise out of the very earth.[62]

The CCF soldier had become a master in the use of terrain, stalking, deception, and infiltration during darkness. Close combat with Chinese forces in superior numbers applied at the vital points against deep flanks and the rear of UN formations would almost lead to the total collapse of the Eighth Army.[63]

Much of the success of the CCF in employing these tactics is attributable to the superior fieldcraft of their soldiers. The latter were in excellent physical condition, possessed great stamina, moved with stealth using the terrain to their advantage, and were very proficient at navigating and operating at night. This ability enabled them to avoid UN patrols, identify enemy boundaries and weak points, and move noiselessly to the rear of UN units. They were so successful at this tactic that by the end of the counter-offensive an entire CCF division had infiltrated to the rear of the right flank of 8th Army living entirely off the countryside or captured stocks.[64]

The effect of these successful tactics was quickly felt by UN forces. The speed, shock, and surprise of the November 1950 offensive created a paralysis of thought. This was compounded by the physical damage to communications in the U. S. sector that prevented the issuance of guidance or accurate reporting of damage. The CCF soldiers would cut wire lines almost as fast as they could be laid rendering U. S. command and control efforts virtually ineffective.[65]

In light of this historical overview of infiltration tactics we must now distill the lessons. This process should then provide the foundation for examining current capabilities vis-a-vis Soviet vulnerabilities in these areas.

V. LESSONS

The preceding historical examples point out some common truths that need articulation and further examination. This effort will focus on five major aspects of infiltration that can be used as a reference point for the remainder of the paper. They are the capabilities and nature of the soldier required for these operations, terrain conditions, techniques of execution, likely high value targets, and effect on the enemy.

The use of infiltration tactics by various forces in recent history reflects, in many cases, subscription to the belief in "man over weapons (technology)." To employ successfully these tactics, an elite, physically fit soldier capable of operating in close terrain during limited visibility is absolutely essential. These soldiers must be organized in units gifted with superior leadership capable of exercising initiative and operating independently down to the lowest levels. Lastly, they must be well versed in unconventional or guerrilla type operations. In the right terrain these light forces can employ infantry hunting combat techniques against heavy forces by degrading their combat capability indirectly — taking out their maintenance, logistic, and C^2 facilities. Corelli Barnett in a study of surprise and initiative sums up this point:

> ....given a high standard of leadership and training a unit that makes maximum use of surprise and initiative can prevail over superior numbers or adverse battle conditions — even an Army on the defensive can be a hunter waiting in ambush to pounce on an unwary victim.[66]

As has been shown, an essential ingredient for success is to employ these tactics in the correct terrain. The terrain must afford light forces a mobility advantage over heavier forces. This can normally be expected in close, restricted terrain, or in terrain considered to be impassable by the unsuspecting enemy (swamps, heavily forested, mountainous). Additionally, the employing force must be able to read the terrain in such a way that it can hold the enemy, damage him, fade away, and then do it again while never exposing itself to the enemy's superior firepower and weight.[67]

The techniques employed in the historical examples were very dependent on surprise and engagement of targets in the enemy's rear from an unexpected direction. These opportunities were provided either in

the passive mode by forces that were bypassed by the enemy, or in the active mode by forces that infiltrated into the enemy's rear. In either case infantry units were able to interdict extensive areas causing considerable destruction and harrassment in the enemy rear area by bold combat operations that included maximum surprise.

An analysis of the typical targets that were engaged by the infiltrating forces in the foregoing examples bear striking similarity to those we earlier identified as objectives for deep battle:

- Headquarters elements or C^2 facilities.
- Fire support elements.
- Logistic units and installations.
- Tie down forces that the enemy could otherwise commit in his main effort.
- Seizure of key terrain to facilitate attack or interdict movement of enemy reinforcements.
- Enemy reserve forces.

It is interesting to note that the above were all included in an article entitled "Tactical Infiltration" written by Major Sinclair Melner in 1963.[68]

In reviewing the effects achieved by these tactics we again see the strong similarity to the intended effects of deep battle in our contemporary doctrine. We must recognize that infiltration tactics were rarely decisive by themselves, but ultimate success lay in their contribution to the action at the forward edge of the battle area (FEBA). By operating with surprise in the enemy rear and interdicting his C^2 and logistic support operations a state of confusion was created in the enemy. He was forced to draw combat power away from his main effort to secure his vulnerable sustainment base. Typically, this state of confusion made it difficult to identify or react effectively to the threat in the rear. Also, the shock and surprise effect often magnified disproportionately the perception of danger and would lead to overreaction by the enemy.

Perhaps the single greatest effect identified above is the shock value gained by employing these techniques. As Tom Wintringham stated,

> ....the aim of modern war is to get men and weapons to effective points behind the enemy's main positions...the "guerrilla" is able to strike against enemy material before it is brought into action...strike morale where it is weakest, behind picked units of securely armored men.[69]

He goes on to add that this "guerrilla force" rarely will be decisive by itself, but needs to be linked to a mechanized and armored strike force in order to allow a smaller force to defeat a more powerful army.[70]

It is interesting to note the similarity between the lessons extracted above and the benefits of deep battle operations identified by LTC Holder. He contends that the principal benefits of deep battle are diversion of the enemy commander's attention which forces him to react. It causes the enemy to relocate and secure CP's, supply dumps, helicopter, and artillery assets and ties down his reserves, disrupts his air defense artillery coverage, upsets his march schedules, disrupts his planning effort, and detracts from his ability to focus on the main effort.[71]

VI. CURRENT CAPABILITIES

Certain questions arise. First, is "infiltration" a credible tactical option for today's light infantry, and secondly, are there other means for conducting deep battle that are more effective? This section will address these issues by assessing current capabilities with emphasis on the first question. The section will close with a review of recent exercise experiences where tactical infiltration into the enemy's rear was conducted by light infantry forces.

Lieutenant Colonel Holder divides the principal deep battle means available to commander into four major groupings. They are electronic warfare, cannon and missile artillery, conventional and unconventional ground forces, and USAF battlefield air interdiction (BAI).[72] With the advent of the Combat Aviation Brigade (CAB) we must add attack helicopters to the list. Colonel Holder very clearly states his preference for employing maneuver forces in this role and cites a number of reasons:

- direct fire weapons create a more lasting effect.

- they can quickly adjust their actions and support fires to the enemy's movements and countermeasures.

- relatively speaking they require less precise intelligence.

- they are more readily available to commanders than the other high technology, long range interdiction means.

- there is a greater psychological impact when these actions are conducted by maneuver forces.[73]

Inserting a heavy force by means of infiltration is not without problems. The reduced infantry personnel strength (fighters) of Bradley-equipped mechanized infantry units reduces the number of combatants that could operate in a dismounted role. Also there is the expense of maintaining heavy forces which can hardly be justified if they are envisioned as being employed in a dismounted role. Infiltrating in a mounted configuration would provide such a significant tactical signature it would compromise any chance of surprise. Additionally, as has been shown, most opportunities for infiltration occur in areas that have restricted terrain. Lastly, the difficulty of maintaining the necessary levels of expertise in fieldcraft for soldiers who have significant maintenance responsibilities is almost insurmountable.[74] The foregoing reasons tend to favor the use of light infantry forces in this role.

The use of helicopters in an air mobile assault or attack mode appears to hold some advantages worth exploring. Air assault operations conducted in the enemy rear will have significant advantages over infiltration. However, in most cases, these insertions will also provide a significant tactical signature for the enemy to acquire. The major problem with cross-FLOT air mobile operations is one of secure air corridors. Crossing the FLOT will require flying through the most dense anti-air coverage on the battlefield (from two to five kilometers to the rear of the FLOT). To suppress these systems (for multiple corridors) will require a heavy commitment of precious indirect fire assets.[75] An additional threat to successful helicopter operations in the enemy rear is the Mi-24 which is equipped for air-to-air combat and capable of outrunning any U. S. helicopter.[76] Attack helicopters would also experience some difficulty in acquiring certain key soft targets (command posts or communications nodes) without ground terminal guidance or assistance in identification.[77] Lastly, Soviet doctrine for countering airborne or airmobile landings in their rear calls for the use of nuclear or tactical air

strikes as soon as they are identified. The signature of any large airmobile insertion would subject these forces to immediate retaliation.[78]

In his charter for the Light Infantry forces, General Wickham established the essential elements of their ultimate character. They must be offensively oriented, able to attack by infiltration, air assault, raid and ambush, and able to operate primarily at night or in other conditions of limited visibility.[79] These capabilities will allow light infantry forces to strike the enemy from unexpected directions at unexpected times. The importance of this is not so much to take the enemy unawares, but rather to deny him adequate time to react effectively. A number of factors have been shown to contribute to such success. Speed, deception, application of unexpected combat power, effective intelligence, and significant variations in tactics and methods of operation are critical. Admittedly, once the enemy is exposed to infiltration tactics and operations in his rear by bypassed forces he will develop countermeasures to employ. However, some success will still be enjoyed by forces that employ these techniques, and the enemy will continue to be psychologically disadvantaged by having to deal with this threat in his rear area. Furthermore, he will be forced to divert combat power from his main effort to provide the necessary security forces in his rear.

Light infantry is ideally suited for these roles. Training for infiltration or stay behind (bypassed forces) operations is consistent with their mission. This is especially so when considering the high density of Ranger trained leaders (in excess of 550) that are authorized in the Light Infantry Division.[80] Experience has shown that well-trained light infantry forces can move one and one quarter to two and one half miles per hour during darkness.[81] A physically fit, highly trained, disciplined unit accustomed to operating under limited visibility conditions can move ten to twenty kilometers to the rear of an enemy force. In stay behind operations where this force is bypassed by heavy forces skirting restrictive terrain this distance may be even further in the enemy's rear area. General Wickham intends that U. S. light infantry be trained along the Ranger-Commando model: physically tough, thoroughly grounded in all infantry skills, prepared to fight aggressively at night, and able to employ the latest technology in night vision equipment.[82]

The use of light infantry forces in deep battle roles during a number of recent exercises has met with success. On Exercise Reforger in 1982, an airborne infantry battalion was able to infiltrate on foot, at night to seize an opposing force ribbon bridge intact. This action was conducted in advance of an attack by heavy forces.[83] Also during Exercise Dragon Team 3-82, light infantry forces were sent deep to attack the enemy from the rear in conjunction with an assault by heavy forces.[84]

The most innovative and extensive use of light infantry in this role was employed by elements of the 7th Infantry Division (Light) during the Team Spirit '85 Exercise in Korea. These operations were primarily conducted as stay behind missions by elements of 3-32 Infantry. The battalion established hide positions in restrictive terrain and set up caches of essential supplies. As their parent unit withdrew the 3-32 Infantry went into predesignated hide positions and was bypassed by the enemy. From these locations they conducted raids, ambushes, and deep reconnaissance operations in the rear of an enemy division for five days. They operated in a highly decentralized mode using three separate company areas of operation (AO). The majority of these operations were initiated at the independent discretion of the company commanders. To enhance the security of the force, minimum radio communications were employed throughout the conduct of the operation.[85]

The communications plan for this operation was indicative of the intense coordination and planning required to assure success. The units maintained strict communications discipline and conducted passive radio checks only (eight times per day). Once the division withdrew it was impossible for the battalion to communicate with their higher headquarters using FM radio, and they had to resort to tactical satellite communications.[86]

The battalion conducted extensive training in preparation for this operation to familiarize all leaders with the commander's intent and concept of operation. This included plans for emergency extraction by helicopter, exfiltration techniques, and experimentation with storing supplies (rations, water, batteries, ammunition, and simulated demolitions).[87] For much of the operation the battalion operated beyond the Fire Support Coordination Line (FSCL) and was most effective in ambushing soft vehicles in the enemy rear, raiding high value soft installations, conducting a night raid against an

enemy signal battalion, and attacking of a night laager location of helicopters. Incredibly, their presence was never ascertained by enemy intelligence.[88]

During this same exercise another unit enjoyed similar success during the conduct of a night infiltration mission. Company B, 2-32 Infantry (7th Division) was able to infiltrate through enemy lines undetected in platoon size elements. They assembled at a predesignated rally point and then moved to gain control of a piece of dominant terrain in order to establish a blocking position. From this position they denied the enemy forces access to rearward crossing sites as their parent organization attacked the enemy force and ultimately linked up with the infiltrated force.[89] These operations are similar, in nature and scope, to those addressed in the historical overview and conform to the lessons extracted from that analysis.

VII. SOVIET VULNERABILITIES

We must now attempt to identify Soviet vulnerabilities against which the U. S. Army can employ these tactics to achieve its ultimate end — victory on the battlefield. This next section will provide an analysis of Soviet doctrine and the experiences of others who have fought against them with the intent of identifying vulnerabilities that may be attacked by light infantry forces that have been bypassed or have infiltrated into the enemy rear.

In general, the Soviets are most threatened when they perceive a potential loss of control or experience events not planned for.[90] This may be loosely viewed as losing the initiative by the Soviets, or conversely the appearance that their opponents are gaining the initiative. General Uhle-Wettler proposes that this end can best be obtained under conditions of limited visibility where forces could infiltrate and block the Soviet's communications throughout the depth of his defense. The wide dispersion of units on the modern non-linear battlefield would facilitate infiltrations through restricted terrain. These forces would then be free to attack artillery, headquarters, nuclear delivery means, and supply installations. This action would compel the Soviets to attack dismounted in close terrain, a mission for which their modern mechanized forces are ill-suited.[91]

General Mellenthin has developed a comprehensive list of what he considers to be major Soviet weaknesses that should be attacked by their opponents:

- overreliance on advance planning which contributes to a rigid style of operation.

- cumbersome command style for conduct of mobile war.

- excessive reporting and restrictive orders.

- incompatibility of exaggerated Soviet political indoctrination and controls with the military independence required by mobile warfare.

- diluted authority of military commanders due to contradictions in the expression of the Soviet principle of "sole command."[92]

We must develop a number of the above further to understand clearly their implications for U. S. doctrine and tactics.

The Soviet's lack of flexibility in responding quickly to the unexpected is a major vulnerability that can be readily attacked by light forces. The Germans were impressed by the extremely long time it took the Soviets to react to penetrations of their rear areas during World War II. Soviet literature echoes this point and underscores the fact that they are extremely concerned about their vulnerability, "encountering the unexpected leads to inactivity or the commission of serious mistakes when one's current plans become inapplicable."[93] This may be endemic in their system, and therefore, may remain beyond their capability to resolve. Steven Canby contends that the Slavic soldier (mainstay of the Army) is basically a "flatland soldier" who operates best under highly centralized C^2 which is inappropriate to the type of engagements enemy light infantry forces may compel them to accept.[94]

In the area of logistics support of tactical units the Soviets again manifest some vulnerabilities. Their doctrine calls for the division to hold five days stock on wheels which requires numerous wheeled vehicles in the division area.[95] Soviet doctrine also calls for the supply forward concept of logistics. Therefore, division vehicles push supplies forward to the regiments (often within ten kilometers of the FLOT). This will create traffic congestion on major routes just to the rear of 1st Echelon regiments providing lucrative targets for attack. In the offense one could expect the Division Rear Services (DRS)

to be located as close as twenty-five kilometers to the rear of the FLOT.[96] The absence of dedicated mechanics in forward units will require evacuation of inoperable equipment potentially adding to the vehicle congestion and creating additional targets.[97] Lastly, operations in the enemy's rear during the hours of darkness are more apt to interdict logistical resupply operations that the Soviets prefer to conduct during these periods very near the FLOT.[98] Tactical units could then be hit at a vulnerable time and could be made even more vulnerable when they lose their CSS assets.

Soviet doctrinal placement of forces on the battlefield provides a number of lucrative targets that may be effectively engaged by deep battle. To begin with, Soviets will bypass restrictive terrain in order to maintain their momentum in the offense. They freely acknowledge that this technique invites attacks of their flanks and rear which ultimately could impair the success of their offense.[99] Secondly, in both the offense and defense a number of targets are within the range of action for the U. S. division and corps commanders.

Offense[100] (behind FLOT)

Battalion CP	1-2 km
Mortar Battery	1-2 km
Regimental Artillery Group	1-4 km
Divisional Artillery Group	3-6 km
MRL Battalion	3-6 km
Regiment's Main CP	5 km
Division's Forward CP	5 km
Divisional Logistic Units	5-10 km
Division's Main CP	15 km

Defense[101] (behind FLOT)

Regiments Main CP	3-6 km
Division's Forward CP	3-6 km
Regimental Artillery Group	5-7 km
Regimental Logistics Units	10 km
Divisional Artillery Group	10-15 km
Divisional Logistics Units	15-20 km
Division's Main CP	20 km

This doctrinal preference to keep key command, CS, and CSS assets well forward, even in the defense, makes the Soviets extremely vulnerable to attack by infiltrating or bypassed tactical light infantry

forces. As stated earlier, in vehicles alone the logistics assets of a regiment require over 210 thin-skinned vehicles, whereas in the division this number goes to 1,550.[102] Lastly, the antenna and combinations of vehicles provide a very definite signature for targeting C²'s, therefore enabling our forces to identify and attack them.[103]

Considering the above, the Soviets approach to command and control is probably their greatest vulnerability, providing the U. S. commander the greatest payoff when successfully attacked. The Soviets firmly believe that the confused nature of modern combat will make the ability to react rapidly and appropriately to changing situations a key element for victory. They recognize the stress this requirement will place on their C^2 systems, and therefore expend extensive efforts in refining their ability to exercise command and control.[104] The following Soviet view of C^2 points out a doctrinal conflict between their requirement for initiative and the necessity for uninterrupted command and control: "....to constantly control the units and formations, to coordinate their operations, and to exercise constant and effective supervision...."[105] Another Soviet view reinforces this point as General Lashev advises commanders that they and their staffs must exercise constant influence on the course of combat, not to let the reins out of their hand for a minute, that the temporary loss of control will lead to failure on the battlefield, and that troop control is only efficient if one can operate inside of the enemy's decision cycle.[106]

In looking specifically at C^2 at the regiment and division level, the focus should be on developing exploitable vulnerabilities to attack. Major Argersinger contends that the Soviet key decision level is the Army or higher, but this may be attacked indirectly by confusing the input that comes to them from lower levels (Regiment and Division). Argersinger tells us that it may be impossible to destroy all of the C²'s at these levels (because of their multiplicity). However, we should continue to expend effort and resources to destroy these where possible. We must also use deception, surprise, maneuver, and speed ultimately to undermine the higher level Soviet commander's confidence in his ability to succeed in the face of multiple, conflicting potentials for failure.[107]

To defeat Soviet decisionmaking, high tempo operations must be maintained constantly showing new and unexpected situations to the Soviet commander, and surprising him at every turn with attacks from unexpected directions. In the Soviet system the commander is the key at battalion through division level. His loss would have serious repercussions on the unit's ability to plan and conduct operations. Surprise will have the greatest impact at the battalion or regimental level as the resulting confusion will delay reporting. This delay in reporting — or better yet, confused reporting — will reduce the ability of the Army or Front commanders to make timely and accurate decisions. This in turn would result in delays in providing approval for changes at the lower levels temporarily freezing units engaged on the ground. A cycle is set up providing U. S. forces with an opportunity to wrest the initative from the Soviets. Lastly, Argersinger contends that Soviet attempts to automate C^2 functions will not solve their problems of rigidity.[108] In summary, by their doctrinal penchant for rapid movement the Soviets will leave gaps or flanks exposed making their C^2 system vulnerable to disruption. In appropriate terrain this vulnerability can be attacked by light infantry forces.

A last area of vulnerability that must be addressed is the Soviet's lack of flexibility. This is tied to command and control, but deserves separate treatment in that it deals with the effects of disrupted C^2. Cooperation of all arms is the idealized intent of Soviet combined arms actions and as stated earlier, the commander is the key to insuring that this happens. However, should something unexpected happen and the plans become disrupted, little initiative will be exercised by subordinates to make the necessary revisions to the plan.[109] As General Mellenthin postulates "....under attack in fluid conditions and forced to think for themselves, Soviet commanders and troops would be subject to paralysis, panic, and disintegration."[110] Argersinger states that to defeat the Soviet Army we must "....target the Soviet commander's ability to see and understand the battlefield, unhinge his ability to predict battlefield outcomes and disrupt his cooperation on the battlefield."[111]

Liddell Hart views these conditions as disorganization and demoralization. This disorganization of the enemy is created by upsetting his dispositions or causing him to suddenly change his orientation, dislocating the organization of his forces, separating his forces, endangering his supplies, and menacing

his routes of retreat. Demoralization on the other hand, "....results from the commanders impression of the aforementioned physical effects especially if he realizes his disadvantage has most frequently followed a physical move on his rear."[112] Given the battlefield described earlier, light infantry forces can move into the Soviet rear and successfully destroy or engage numerous critical soft targets. The mere presence of these forces in the Soviet rear, General Galvin contends, will cause the Soviets to react slowing down the pace of their overall effort.[113]

VIII. RISKS

Not much has been said thus far about the inherent risks and difficulties involved in these type of light infantry operations. Certainly one of the most difficult problems to overcome would be coordination, followed closely by resupply or sustainment of operations in the enemy's rear, and then security. What has been proposed is a different style of operation that requires intense coordination to insure chances of surviving the mission. From linkup operations, recognition signals and drills, and communications to timing, each critical phase from the infiltration to exfiltration must be minutely planned and coordinated with all units involved. Light forces operating in the enemy's rear also have some significant tactical vulnerabilities such as NBC attack, attack by heavy forces in the open, and attack from the air (primarily by attack helicopters).[114]

Logistical sustainment of these forces will be most difficult. The Soviets experienced only limited success in resupplying their partisan forces by air (less than five percent of supplies). Even today, with improved technology, we could not expect to do much better without increasing the risk of compromising our forces' security.[115] Operating on captured enemy stocks could reduce the logistical demand, but exposes forces to increased risk as they must now attempt to recover supplies while attacking logistical facilities.

Additional risks for the light infantry force abound in the area of special equipment. The Soviets have developed portable direction finders that can be used extensively in rear areas to locate the source of enemy electronic signatures.[116] They have also perfected the use of PFM-1 scatterable anti-personnel mines in Afghanistan. These can be aerially delivered by Mi-24's to cover gaps or suspected infiltration

routes leading into their rear. True, these become a double-edged sword, but their impact would likely be far greater on light infantry forces that are dependent on these routes for cover and concealment.[117] Lastly, the inadequacy of the light infantry force in addressing the threat of Soviet armor is critical. Even with an orientation on soft targets in the enemy's rear, the infiltrating force will have to deal with heavy forces that will come to the aid of their CP's or CSS forces. The current LAW's and DRAGUN's will be woefully inadequate for the task.

IX. SOLUTIONS

Several key areas, if properly addressed, will work to mitigate the risk entailed by these operations. Training will always be one of the most important of these. When attempting to train units to operate with a higher degree of initiative, it will be imperative that they gain more knowledge about the intentions of their commander. Without that knowledge, improvisations that are necessitated during the course of the battle may work to the detriment of the overall plan. The following is a brief synopsis of major areas that will require emphasis in training a force to conduct infiltration operations:

- field expedient communications and TACSAT.
- emergency medical treatment.
  - — battlefield resuscitation.
  - — battle dressing; administration of saline and morphine.
  - — evacuation procedures.
- sapper training, field demolitions, and mines.
- sniper training (selected individuals in platoon).
- link up procedures and drills.
- call for and provision of terminal guidance for tactical air and artillery support.
- scavenging for resupply and survival techniques.
- familiarization (intensive) with Soviet equipment to include heavy weapons systems.
- extensive training in all aspects of night operations.

- stealth movement for units and individuals.

- advanced land navigation.

- superior levels of physical fitness (both strength and endurance).

A number of the above have been substantiated by the recent experience of the British in the Falklands. Here they moved extensive distances, mostly at night, with heavy loads, on foot, and experienced delays in being able to evacuate their casualties.[118]

Obviously training is not the only area that must be addressed. There are a number of places where technology can greatly enhance the likelihood of success. Our soldiers must be light, yet not impotent. The Kaiser, at the turn of the century, found that a fit soldier could move twenty-five kilometers carrying a fifty pound load without too much difficulty. However, when that load was increased by fifteen to twenty pounds the soldier's performance was significantly reduced.[119] Currently we are asking soldiers to carry far too much and we must direct the Research and Development (R&D) effort toward finding ways to lighten this load. These innovations in the light infantry soldier's equipment will help other soldiers as well.

A number of new techniques and items of equipment demonstrate potential for adding to the capability of light infantry to employ infiltration tactics. Photo flash bombs, though difficult to coordinate, can provide an effective form of suppression (night blinding unprotected troops) to aid in the assault or extraction of a force. Remotely piloted vehicles (RPV's) with thermal imaging (TI) equipment can assist in the identification of possible infiltration lanes. Lastly, the M21 sniper weapon, with an effective range out to 1500 mm, will enhance the survivability of our light force by allowing them to engage discrete targets at longer ranges, thereby minimizing our force's susceptibility to rapid countermeasure.[120]

However, two critical areas remain, vulnerability to armor and attack helicopters. Light forces continue to need a light weight, portable anti-tank (AT) weapon that is capable of penetrating Soviet armor. This may be somewhat aided by the ability of light forces to increase the likelihood that they

can take rear or flank shots. Ian Hogg, of Jane's Weekly, also indicates there are some improved munitions coming that will aid the infantryman in his fight with armored systems:

- smart mortar bombs using millimetric wave radar with a .5 kilometer search envelope could be called for through indirect fire channels.

- refinement of tandem warhead AT systems may allow for frontal armor attack with lighter systems.

- eventual improvements in laser designation technology will allow the infiltrating force to carry lightweight designators for attack of selected critical armor targets (C^2 vehicles, bridging equipment, etc.) with cannon launched, laser guided projectiles (CLGP).[121]

The vulnerability of light forces to enemy attack helicopters must continue to be addressed with "passive" measures (dispersion and concealment) until some lightweight, specialized "attack helicopter only" stinger system is developed.[122]

X. CONCLUSIONS

In considering the question of whether or not there is a tactical deep battle role for light infantry forces in Central Europe, we have observed that light infantry operating closer to the unconventional mode and using infiltration tactics is able to strike the enemy at a time, place, and in a manner for which he is unprepared. Little by little these tactics can wear down an enemy over a large area by a high number of small combats ultimately causing him to secure physically all critical areas in his rear.[123] These many blows against the enemy rear can, in effect, expedite the enemy's reaching of his culminating point.

Although mentioned in the doctrinal literature as a capability of light forces, infiltration tactics have not been seen for their true potential in support of AirLand Battle (ALB) doctrine. The ability of these forces to get into the enemy rear and draw off combat power from the enemy's main effort at a highly disproportionate rate must not go unexploited. Combining this with the ability of these forces to disrupt enemy plans and planning by hitting key C^2 vulnerabilities makes it even more imperative to pursue these operations. It is certainly true that sound judgment must be exercised in properly selecting terrain in which to employ this capability. Additionally, it remains essential for the R&D

community to commit the necessary resources to close the technological gaps that will facilitate light infantry's ability to operate in this manner.

Through a historical overview it was shown that these tactics were practiced effectively by a wide range of military forces. Clearly this mission is consistent with the training standards and capabilities we have espoused for our new light infantry forces. We observed that light forces have successfully conducted similar type operations in recent exercises. Lastly, this method of employing light forces is not only consistent with AirLand Battle doctrine, but also in large measure answers the challenge to capitalize on the unique capabilities of the light infantry division that was issued by General Wickham.

Not only must these tactics and forces be employed in proper terrain, but they must be targeted against identified Soviet vulnerabilities that will yield a favorable impact on the close battle. These attacks against the enemy rear must be focused on high value targets that will disrupt his time sensitive operations to the degree that it will tend to paralyze his efforts in support of the close battle. Ultimately this will detract from the combat power available to him at the decisive points in the close battle. Light infantry forces infiltrating through gaps in the line or through the flanks of enemy penetrations have the capability to do this. They cannot only acquire the necessary targets, but will have the means to bring about their destruction as well. In response to these tactics the enemy will have to secure all of his headquarters, nuclear delivery means, artillery, and logistic facilities even without our commitment of a proportional share of troops. This will further erode his combat power in the decisive arena of the close battle.[124]

This new approach will have significant doctrinal implications for our division and corps manuals. First, the capabilities addressed here and in the draft battalion manual will have to be tracked and included in the higher level manuals so that these means to conduct deep battle are not overlooked. Additional work will be required in documenting the interface between brigade size or smaller light infantry forces working in concert with heavy forces in this role. More thought must be given to the

following type deep battle missions for light infantry and these then must be incorporated into our doctrine:

- deep spoiling attacks to disrupt enemy timing.

- deep attack to secure vital terrain to assist a heavy mobile ground force.

- attack of enemy ADA assets along a proposed air corridor in support of deep airmobile insertion or attack.

- deep attack against various critical soft targets within a twenty to twenty-five kilometer envelope of the FLOT.

- deep tactical reconnaissance to locate targets for other deep attack assets.

- provision of terminal guidance of artillery, multiple launch rocket system (MLRS), smart munitions, and air assets.

The foregoing by no means represents an all inclusive list of potential missions, but merely serves to stimulate the thinking process. In this developmental stage it must be remembered that these missions apply to bypassed light forces just as they do to intentionally infiltrated ones. Only the techniques and control by higher headquarters will vary, essentially the missions remain the same.

A final point that must be mentioned is the force structuring or organization of light forces within the Central European theater to best accomplish these tasks. That question goes beyond the scope of this paper, however, as a departure it must be asked. It is interesting to note that two people from different sides of the Atlantic have come up with similar proposed solutions. Colonel(P) Wayne Downing feels that an optimal arrangement would be to integrate a light infantry brigade into each heavy division in Europe.[125] Otto Munter, in his paper on light infantry, argues that each German corps should have a light infantry brigade.[126] Whatever the optimal organization, hopefully we will not continue to see these forces employed primarily as an economy of force measure or for friendly rear area protection. Their deep potential must be exploited.

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