

HEAVY → LIGHT

Forces and the NATO MISSION

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EDITOR'S NOTE: This article is an adaptation of a talk given by the author at the Infantry Commanders Conference at Fort Benning in March 1984.

Although the pace of modernization of U.S. Army forces in Europe is unprecedented, the thrust is in the same direction as it has been for many years. The U.S. Army, Europe, remains a heavy force, as it should be, capable of meeting the heavy forces of the Warsaw Pact that are poised against it. Paradoxically, the major influx of new heavy fighting systems (the M1 Abrams tank, the M2 Bradley, and the multiple launch rocket system) provides us with extraordinary new capabilities for tactical mobility, but at the expense of strategic mobility. The



modernization of the force (and of its reinforcing units in the continental United States) over the years has contributed to the time lag during which the U.S. ground units that are committed to the North Atlantic Treaty Organization (NATO) will have to fight without reinforcement.

The emergence of the new U.S. Army light division, however, gives us an opportunity to reconsider the question of the heavy-light mix in Europe and to ask: Would it be feasible to reinforce with light divisions in the early phases of a mobilization to meet an impending Warsaw Pact attack in Europe?

Good question. Hard to answer.

Every student of military history knows that commanders often have struggled to find the most appropriate mix of forces to accomplish their aims, and that the main ingredients have been contrasting elements — heavy and light. (In the interests of printing costs and the readers' patience I will forego an analysis of Hannibal's use of elephants and of other interesting historical examples; suffice it to say that the problem of the heavy-light mix is as old as armies and, of course, is still with us today.)

Europe is, for us, a special case. The time available for reinforcement may be very short. I have heard General John Vessey say that the National Guard artillery battalion of which he was a member during World War II fired its first rounds in North Africa *eleven months* after Pearl Harbor. But today, could we be sure of having *eleven days* before it might be necessary to fire?

Reinforcement times for NATO affect any study of the heavy-light mix, but there are other important factors. German *Bundeswehr* Major General Franz Uhle-Wettler, for example, has looked at this question in terms of European terrain and certain other aspects since reinforcement time does not constitute the primary problem for him. In his book *Gefechtsfeld Mitteleuropa (Battlefield Central Europe)*, he calls for additional light forces (see box).

Our experience during recent U.S. maneuver exercises involving a variety of heavy-light force mixes shows some promise. From these exercises a rudimentary idea of how a modern heavy-light mix might be employed has evolved. (This training is taking place under the U.S. Forces Command CORTAIN concept. See "Heavy-Light," *Armed Forces Journal*, July 1982, and a response to that article in *Armed Forces Journal*, May 1983.)

BEEFING UP LIGHT FORCES

The differences between light and heavy divisions is not primarily in antiarmor firepower but rather in tactical mobility and armored protection. Firepower differentials can be rectified in a number of ways, including artillery and air support, or in cross-reinforcing light and heavy units to provide the light units with the advantages offered by the rapid flat trajectory cannon fire of the Abrams, the Bradley, and other weapon systems.

Light units can make up for their lack of armored protection by "terrain reinforcements" — digging in, laying mines, building obstacles. And they can seek to operate in terrain in which the enemy cannot use his mobility advantage—rugged hills, thick forests, boggy areas, and towns. As Uhle-Wettler points out, such "no-go" areas amount to as much as half of the Federal Republic of Germany.

American soldiers tend to be independent, proud of their self-sufficiency, and accustomed to operating in homogeneous units. But NATO is a coalition, and NATO operations are not only joint-combined; they also involve the close coordination of local territorial command forces and paramilitary organizations (policemen and border guards, for example). Light units, therefore, must be specially trained and prepared to achieve high levels of interoperability in order to pick up additional mobility and logistical support. Heavy engineer equipment, for instance, may be available through host nation support arrangements, and it may be vital to the terrain reinforcement that will be necessary for a light unit to fight a defensive battle.

The corps commander can also help overcome the lack of mobility of his light forces by using his combat power (and that of the Air Force) to decrease the enemy's mobility potential. It is *relative* mobility that counts; slowing down the enemy and inhibiting his mobility is as important, in fact, as improving our own mobility. The light units will have to become expert in countermobility actions, and recent innovative improvements in the methods of employing mines should be a great help. The enemy force may be well-trained in approaching and

In *Battlefield Central Europe*, Major Uhle-Wettler says the armament and organization of the Army of the Federal Republic of Germany are not optimally suited to the Central European terrain and that the army requires extraordinary logistical support. (See *INFANTRY*, September-October 1980, page 56.)

The author, a former commander of the German Armor School and the present commander of the 5th Panzer Division, uses the Korean War experiences of the United States Army to show that in mountainous, heavily wooded, or built-up terrain the mobility of mechanized and armor forces is largely negated. Technological superiority, he notes, is often a disadvantage in such terrain; in fact, with increased technology, more and more soldiers must be taken from the front lines to work in logistical support tasks.

Uhle-Wettler does not dispute the need for armored and mechanized forces with complex weapon systems, but he is convinced that the German Army has gone too far in reducing the number of its light infantry units. The use of mechanized units, while approximately half the terrain of Germany is wooded, hilly, or urban, most of the Army is mechanized and, he believes, overly oriented on the open areas conducive to armor units, antiarmor missiles, and mechanized forces. As a result, it is too supply dependent, has too few fighters, and is ill-prepared for battles in rugged or built-up areas.

Uhle-Wettler calls for a restructuring of the German Army that would then orient its mechanized and armor forces on maneuver-oriented operations and its light infantry forces on defense in forests and built-up areas as well as counterinsurgency combat.

breaching minefields, but our capacity to deliver mines from airborne platforms will present a new situation in which enemy forces find themselves suddenly in the center of a new minefield—surrounded, in effect, by anti-

foot-mobile Infantry; in order to see these scenarios with new eyes and to gain additional insights, the reader can substitute air assault, airborne, high-technology (motorized), or Ranger units in the place of the foot Infantry, or can assume that through host nation support or other means the light force has acquired vehicles and engineer equipment.

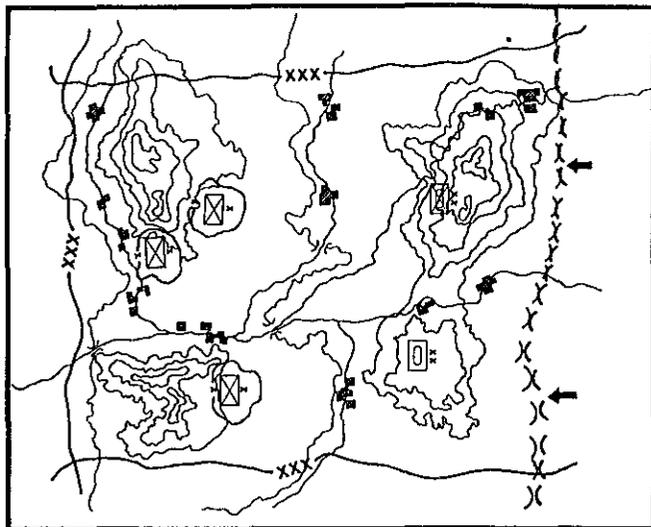


FIGURE 1.

armor and antipersonnel mines. Additional ways of cutting down enemy mobility are available, and these should become a familiar part of the light force's tactical repertoire.

AUGMENTATION, NOT SUBSTITUTION

What follows here is a series of brief scenarios that attempt to apply the experiences of the recent heavy-light exercises to the potential battlefield of Western Europe and to look at the feasibility of sending strategically mobile light divisions to be committed as part of the NATO forces in the event of war in Europe. It should be noted that these light divisions could not be a *substitution* for heavy divisions (thus saving money by ridding ourselves of the need to raise and support heavy divisions). A simple count of the Warsaw Pact's heavy forces will show that there is a need for enough heavy divisions within NATO to provide a reasonably balanced ratio for a defending force. The fast-arriving light divisions, however, can be a vitally important *augmentation* that improves the possibility of conducting a conventional defense of Western Europe without having to resort to nuclear weapons.

The assumption for these scenarios is that the corps commander is given operational command of a light division, meaning that he can either employ it as a complete entity or break it into smaller units. (The terrain used in these scenarios is an imaginary composite of the variations that can be found anywhere in the southern part of the Federal Republic—in the V or VII Corps sectors, for example.)

Among other things, the accompanying sketches show a high speed approach, an area of "no go" terrain and some "slow go" avenues, along with cities, towns, and the usual natural and man-made features. The light divisions that serve here as examples are for the most part

REAR BATTLE

The simplest example of the employment of a light division in the NATO environment is a rear battle situation. (In a yet unpublished manuscript, Colonel C. Hines discusses our need to rid ourselves of the tactical idea of "rear area protection" and to understand full-up *rear battle* as an important aspect of the AirLand battle.) The rear portends to be a far more intense battlefield than we have seen in previous conflicts, and it may not be uncommon to have a brigade or even, as in this case, a full division employed in the corps rear.

In the situation illustrated in Figure 1, the light division remains "pure" and spreads its brigades over a wide area in anticipation of enemy battalion- or brigade-sized airborne or airmobile assaults. In such a situation, a light division augmented with artillery, aviation, and other support would be in a widely dispersed defensive posture, tied in to the corps intelligence collectors, watching the situation, and ready to concentrate its battalions in response to enemy action. If the light division is motorized, it can use its mobility to close on enemy forces and contain them in the vicinity of their landing areas while additional artillery, air, and other support are moved up to assist.

The Soviet airborne divisions have a long-range capability that can threaten the whole rear area of a corps and, indeed, of an army or army group. Theoretically, it would be possible for one of these airborne divisions to attack anywhere on the European continent, although normally those divisions can be expected to limit their penetration distance to allow their own ground forces to accomplish an early link-up.

The Rhine River in the Frankfurt-Mannheim-Karlsruhe area, though, is only 200 kilometers from the potential jumping-off points of a Warsaw Pact attack, making this area an excellent target for airborne or air assault operations. The sector to be overwatched is so large that a friendly airborne or air assault force, which has the mobility to react to enemy airborne assaults, may be the best response. Since it has the same air mobility advantages, it can pick up the enemy attack while it is under way and react rapidly, either parachuting or air landing forces into a position to attack.

If during the AirLand battle the corps commander expects a significant rear battle, he may want to keep a strong reserve that is a mix of heavy and light forces. This will be hard to do if he is also heavily opposed in the close-in and deep battles, but he cannot afford to ignore the threat to his rear. One way to use his light division in

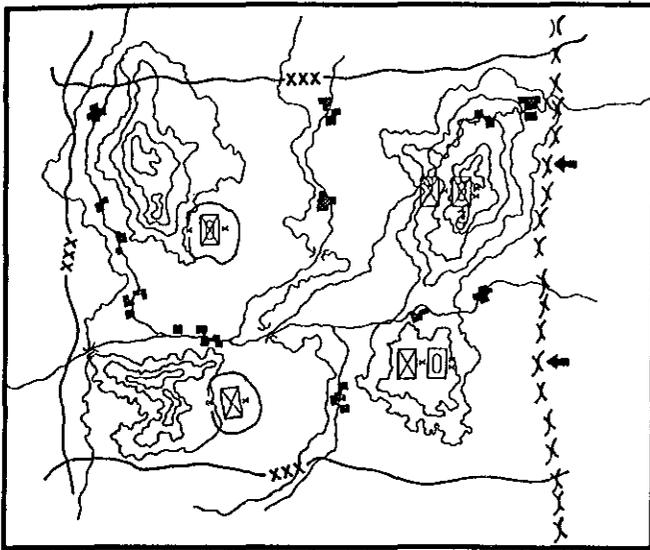


FIGURE 2.

such a situation is to place one of the light brigades under the operational control of each of the heavy divisions, then to provide the light division commander with one heavy brigade (Figure 2).

CLOSE-IN BATTLE

As we move from the rear battle scenarios and consider the close-in aspect of the AirLand battle, the likelihood of fighting enemy light forces diminishes, and the corps commander, given the other factors (mission, enemy, weather, time, troops available), must ensure that his mix of forces is correctly positioned to meet the threat forces on the terrain that provides the greatest advantage. He can then tailor his forces to make the best use of his combat power. By cross-reinforcing at the corps level—that is, exchanging brigades between heavy and light divisions—he can allow his subordinate commanders to cover the tank approaches with heavy forces and to use light forces in forests, built-up areas, and abrupt terrain.

Straight cross-attachment on such a large scale serves to underscore the need for standardization, which, as earlier experiences have shown, becomes even more acute when heavy and light units are mixed. Communication codes, recognition signals, reporting formats, logistical procedures,—in fact, all facets of combat operations are potential problem areas if the different units do things in different ways. Exercises in which heavy and light forces are mixed will provide opportunities for commanders to work out the areas where standardization needs more emphasis—in SOPs, CEOs, and drills, for example.

If the terrain and other conditions permit it, the light division can be used “up front” in the defense, either with or without reinforcement by or cross-attachment with heavy forces. There are scores of places in the defensive sectors where a defense by the light division would be appropriate. One such employment of light units might be in an infiltration scenario.

There are indications that under some circumstances the enemy may employ infiltration tactics in the initial attacks, especially if he is convinced that we are defending

strongly in our forward positions at the sacrifice of the depth of our defense in sector. He may hope thus to break through our thin crust and then reorganize into larger formations in our rear. If we lack light forces, especially in close terrain (forests, cities, rough areas), we could be vulnerable to this kind of infiltration. In such a situation it would pay to move a light division forward, either as a “pure” unit or as one cross-reinforced with one of the heavy divisions (Figure 3). The corps reserve in this case might be its combat aviation units.

Defending in rough terrain, a light division can serve as a “pivot.” The concept of the pivot in its essence means that the presence of the dug-in light forces provides a static situation around which a series of mobile strike plans can be built. The existence of a number of pivots increases the flexibility of planning and makes the defense more unpredictable.

In well-fortified positions, light units add depth to the battlefield and contribute directly to the potential for increased mobility on the part of the heavy units. In order to take the best advantage of the terrain, light forces have to know how to work with engineers in a well planned and executed terrain reinforcement. In this manner the light division can hold terrain and wear down a heavy assault, allowing heavy divisions to take advantage of their mobility to complete the destruction of the attacking enemy forces.

An excellent example of this is the battle of El Alamein, during which General Montgomery allowed General Rommel to attack and penetrate to a strongpoint at Alam Halfa. The German attack was worn down and blunted against this strong defensive position and then counterattacked successfully by mobile British forces.

Strongpoints held by light forces can assist in “shap-

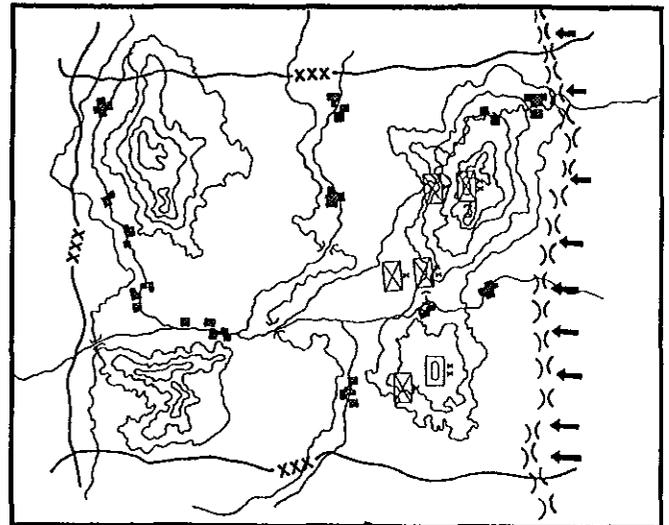


FIGURE 3.

ing” an enemy penetration—that is, assuring as far as possible that the enemy’s attack follows closely along the lines of an “assumed penetration” calculated by the defender. Light forces in good blocking positions can “blunt the nose of a penetration and stop it, giving the defender’s reserve force an opportunity to launch an attack against a vulnerable flank.

The construction and defense of strongpoints requires extensive training in order to achieve a detailed understanding of the principles of terrain reinforcement and their application to the ground the defender has selected. Light units must become "terrain users," with consummate skill at digging in, camouflage and counter-mobility; seeking engagement with the enemy in the "close fighting terrain" of villages, woods, and rough ground; fighting at night and in periods of limited visibility; using tactics of infiltration, ambush, and raid. Leaders must be oriented to these kinds of combat situations, willing to take the necessary calculated risks, and the soldiers of these light units must be equally adept.

Given the right terrain, a light division can move up into defensive terrain behind a heavy division opposed by a fixing force or a holding attack. The heavy division can then be employed elsewhere on the battlefield (Figure 4).

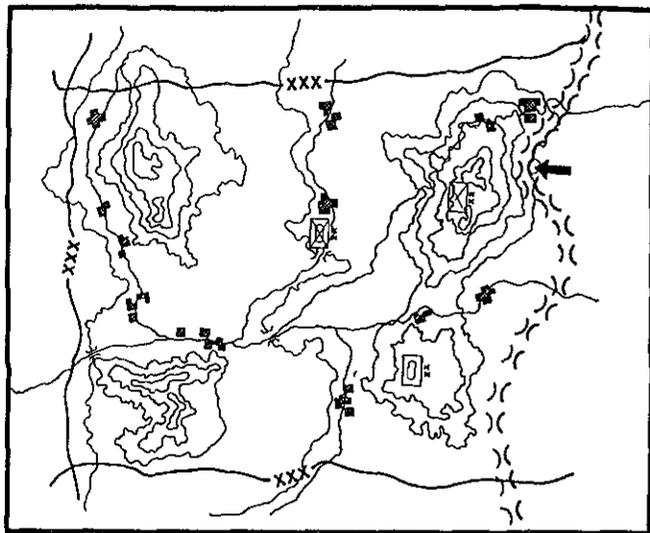


FIGURE 4.

Such an operation is complex; its chance of succeeding would have to be carefully weighed against the risks of concentrating and thus creating a tempting target, or of being attacked while executing the relief. Cross-reinforcement would make such a relief easier.

The question may arise, "Can a light division be expected to defend against the attack of heavy forces?" It certainly can, given proper defensive positions and support. Light brigades can take the place of heavy brigades in many current NATO defensive configurations, allowing the commander to move his heavy forces to places where they can be better employed in the tactical structure of the defense.

Although these scenarios all employ the light division in the defense, given the NATO mission, there are also offensive missions in which a heavy-light mix has advantages.

Exercises have shown that light forces, if augmented with an air assault capability, can increase the effectiveness of heavy units, especially in the attack. Air-mobile light forces in the enemy's rear, for example, can tie down reserves, cut lines of communication, and strike command posts, artillery positions, and logistical ac-

tivities. The mere presence of light units operating—especially by night—against these installations causes the enemy to react to the threat, which has the effect of slowing down the pace of his overall effort. In fact, there have been several examples during recent exercises in which "enemy" reserves were able to carry out counterattack missions because of delays caused by encounters with relatively small friendly air assault forces.

In the kind of terrain and industrialization that exists in most of Europe, the versatile light division can augment a sustained offense. Supported by airlift, it can seize key terrain in rough or mountainous areas or strike deep and hold ground for a link-up with attacking heavy forces. The light forces, well trained in fighting in built-up areas, can reduce strongpoints and drive enemy defenders out of cities and towns.

Cross attached to meet the requirements of the terrain and other factors, the light division has an even greater capability. As in the defense, the success of a light division will be determined to a great extent by the amount of additional fire and maneuver support the corps can offer. Light forces will certainly benefit from the high-technology capabilities inherent in the equipment, techniques, and tactics being developed by the 9th Infantry Division (Motorized) at Fort Lewis. Light divisions present an enemy force with a threat that in some ways is very new, because they can use a variety of maneuver means, they have a strong capability for night operations, and they can be augmented by various corps units.

The future tactical battle will present a definite challenge to our leaders. It will be fought by a mix of forces, and our leaders will have to be experts at handling all the variations of the mix. Since the mixing can occur at *any* level, depending on the factors of METT-T, the leaders from squad and section all the way to the highest tactical echelons will be called on to make decisions that demand a knowledge of both heavy and light forces. This means that there will be a continuing requirement for a full understanding of the doctrine and tactics of both types of forces. With cross-reinforcement a common occurrence, every leader can expect to find himself in command of both heavy and light elements. The same applies to staff officers, who will have to be ready to plan and coordinate the operations of a mixed force. (For these reasons, the "two-track" concept, in which Infantrymen are prepared at the Infantry School to go out to either heavy or light infantry units, is probably not the best training philosophy.)

In the event NATO goes to war, the new U.S. Army light division, with its geo-strategic advantages, will be excellent candidate for early deployment. Committed in the right situations and employed with skill, it can accomplish the kinds of missions suggested here.

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