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Defense Concept - Mechanized Division

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The purpose of the study is to design a feasible defense concept for a mechanized division facing the main attack in CENTAG.

The study was undertaken to generate feasible resolutions to shortcomings in our efforts to address the current threat against CENTAG. These shortcomings exist in terms of perceptions, attitudes, tactical doctrine, analysis of the threat, and the appreciation of political realities. The approach is deliberately polemic and designed to challenge a variety of "sacred cows". Underlying the effort is the belief that every officer has the responsibility to test every "rule" and to question every thesis which he believes may hamper our changes for a successful defense. The proposed tactical concept evolved in the process of developing this thought because of philosophical argument is essentially unproductive without some concrete expression of professional knowledge. In the study, this expression takes the form of the force specific defense.

A defense evenly disposed by divisions across CENTAG is destined to fail. Should war ever come, the Warsaw Pact would necessarily conduct its main attack on an extremely narrow front in order to attain its objectives. The only hope for a successful defense lies in a method which optimizes the use of terrain and forces. Inherent in this contention is the requirement to employ a defense which maximizes the capabilities and minimizes the vulnerabilities of every available weapons system.

An analysis of terrain, threat capabilities, tactics, and objectives suggests that the main attack against CENTAG would be in the Meiningen Gap area. A successful defense throughout CENTAG hinges upon stopping this attack.

In the force specific defense, forward security is provided by a reinforced armored cavalry regiment. The infantry and armor battalions of the division occupying forward positions in the main battle area, hold terrain. A mobile battle area is designated to the rear of the forward battalions. The division reserve is an airmobile antitank force. The essence of the defense is to constantly develop an increasing advantage in relevant weapons over the attacking forces. It is highly dependent upon detailed planning but does not eliminate flexibility, i.e., the potential for reaction to the unexpected. It is designed to face and to destroy a main attack but can be equally well used against a less pretentious attack on extended frontages.

The study concludes that the force specific defense provides an alternative. It overcomes many of the disadvantages of other defense concepts. It has problems of its own such as the adverse psychological effects of moving enemy forces both forward of and behind occupied positions and the inherent difficulty in resupplying bypassed forward forces. It is, however, a reasonable application of principles to the situation at hand. It is, when compared with other defense concepts, feasible. It is particularly, but not uniquely, applicable to a European scenario.

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INTRODUCTION

A great deal of well deserved concern has been generated in the past few years about the adequacy or, perhaps better said, the inadequacy of our existing doctrine when it is applied to a United States Army Europe (USAREUR) scenario. Tacticians and would-be tacticians from every school compare our forces with those of the Warsaw Pact and dedicatedly rush to develop concepts that will permit us to: (1) defend in depth, (2) along severely extended frontages, (3) against a numerically superior enemy, (4) who possesses the initiative of the attack. More often than not, the disparities between our force requirements and our actual capabilities overwhelm these students of the subject. Deep inside they suspect that we simply do not and will not have enough to do the job. Imbued, however, with the indispensable "can do" spirit of our Army and knowing that we must do the best with what we are given, they attack the problem at hand.

A brief review of the realities of the bidding is appropriate.

The strength and organization of our forces in Europe were not originally intended to provide a successful ground defense. The current USAREUR force structure, in spite of some changes, is essentially a product of the earlier nuclear strategy of massive retaliation.[1] Our "hostage" forces in Europe were initially designed to demonstrate our commitment to the defense of Europe. We were sworn to greet theater-level aggression with a strategic

nuclear response. The emphasis was on the strategic sword not the local shield. Now the Warsaw Pact has essentially the same size sword and our token shield has grown no larger. Today we realize that a stratogic nuclear response no longer provides a reasonable alternative for countering aggression in Europe. Before this realization, it was acceptable to practice our doctrinal tactics on European soil, always knowing that we were no more than the first line and that others would come quickly to bolster our token defense. Today we appreciate the fact that when others do come, it may already be too late. Given the current political atmosphere, we will not get any more permanent ground forces in Europe. What we have does not seem to be enough. Why then do we suggest that we can conduct a successful defense when the die seems already cast against us?

This question and the discussion that generated it are not intended to deter valid efforts to increase our chances; they are pure rhetoric. They are intended to uncover and to frame the urgency of the existing situation. We can not choose to lose in Europe either tomorrow or one hundred years from now. We have no choice but to do the best with what we have. Since we cannot increase our force size, we must reorganize it and train it as best we can. Additionally, we must provide its leaders with the best possible doctrine for any situation they may face. Briefly, although our forces were not intended to defend in Europe with the conventional equipment and doctrine of the era of massive retaliation, new equipment and new doctrine may very well change the face of the situation without putting even one additional

squad on the ground.

Dr. Steven Canby has proposed a radical reorganization for our forces in Europe as a possible solution to the problem of providing a credible deterrent; credible because it can defend.[2] Dr. Canby's proposal is worth looking at, but it is much beyond the scope of this writing. This, as indicated by its title, is a tactical concept paper. It proposes one more method for employing forces to face the threat. The fact that it is "one more" method is, per se, important.

There exists today a great deal of consternation over the differences in tactical doctrine espoused by the NATO countries. Similarly, many are concerned about our own inability to resolve the conceptual differences in the defenses proposed by our service schools, our development agencies, and our principal trainers. Most of our dedicated tacticians, pressing the viability of their own concepts and stressing the importance of a limited number of common rules within an army and among allies, fail to seek any strength in these differences. We are facing a threat which practices historically proven tactical methods. This threat is, however, not inflexible; like us, it studies the methods of its enemies. Is it possible that facing many different doctrines would make his task more difficult?

All armies traditionally study the experiences of their predecessors-in-arms. Experience is the soldier's most valued commodity, and the study of history is its most practical substitute.[3] Military students read about the successes and failures of others in order to avoid the mistakes that led to failure

and to learn the principles which underlie success. This knowledge of military history is a valuable asset to the soldier, but it also poses an inherent danger. Studying history in order to determine how to fight the next war can become analogous to driving a car by looking through the rear view mirror. As long as the road ahead is identical to the road behind, the car is safe. If the road is different, however, the driver is doomed to failure. Certainly some overriding principles remain the same, so does the pavement of the road. Unfortunately, an identical pavement does not predict which way the road will turn.

There is at least one more caveat that should be appreciated by each tactician before he begins with a proposal. It deals with the fact that we are neither more gifted nor more dedicated than our predecessors. During the 1920's and 1930's, those who prepared for the next war earnestly sought solutions to the problems of ground warfare posed in World War I. A few "voices in the wilderness" were quieted by the drive for common doctrine based on experiences of the past. Our trainers seem to be doing somewhat better. We must; this time we could actually lose.

ENDNOTES TO INTRODUCTION

1. This point is deduced from a reading of: American Strategy in the Nuclear Age. By David W. Tarr, (New York: McMillan. 1966).

2. Steven Canby, The Alliance and Europe: Part IV Military Doctrine and Technology. Adelphi Papers Number 109 (London: The International Institute For Strategic Studies, Winter 1974/75), p. 2.

3. Samuel P. Huntington, The Soldier and the State (Cambridge: Harvard University Press, 1957) p. 60.

CHAPTER I

CONSIDERATIONS IN RELATION TO THE THREAT

The dimensions of the threat faced by a division in the zone of USAREUR is a topic subject to considerable conjecture. Allied Forces Central Europe (AFCENT) figures are relatively easy to cipher; it is more difficult to determine how the bulk would be broken down and poured into the terrain funnel that constitutes an avenue of approach. The Warsaw Pact's tactical doctrine provides some reasonable insights, but they, like us, consider the constraints imposed on their actions by the ground that they must traverse. We can be fairly sure that at higher levels, they will cross the ground that provides them with what they consider to be the greatest total advantage. It is also known that the threat is willing to accept a high casualty and destruction rate in order to accomplish its mission. At the same time, however, tactical commanders are taught to conserve as much strength as possible within the demands of their particular missions.

It is extremely disconcerting to read United States military publications or to listen to briefings which suggest that we take the total threat force and divide it by the number of kilometers along our front in order to determine an average density of the threat forces at the forward edge of the battle area (FEBA). To state that the two of our battalions will, on the average, face three of the threat's battalions is not just fallacious; it is distinc-

tively dangerous. Warsaw Pact and more specifically Soviet doctrine is a study in surprise, mass, and mobility. This doctrine does not dictate a balanced attack all along a front; it concentrates on the breakthrough and the encirclement at all levels.

Many studies have, regardless of what they may say, addressed tactical problems using the relative combat power which could be expected to exist between belligerents only in the area of a supporting attack. Such studies certainly contribute to the art, but it is the area of the main attack that must be dealt with. It is the outcome of that battle that will determine the course of the war.

It appears feasible to suggest that the reason that studies shy away from addressing the combat power ratio that would exist in the area of a main attack is that the situation is often viewed as being futile. To defend against a main attack in USAREUR we would have to know exactly where the main attack would be in order to preposition all of the required forces on that axis of advance. Prepositioning an adequate force on the right avenue of approach is considered by some to be no more possible than conducting a successful defense with forces distributed along the entire front is considered to be possible by others. We may not, however, have any choice.

We are fortunate that the ground over which the first battle is to be fought does not provide the attacker with an entirely random selection. The same terrain has been crossed time and again throughout history. The nature of that terrain, however, has been changing and the threat's first day objective, 50 to 75 kilometers

beyond our initial defense positions, restricts him in the number of avenues he can choose. His doctrine of avoiding built-up areas coupled with the ever increasing urban sprawl across the potential battlefields provides some very positive indications of which way he must go. Finally, what is his most logical final objective? It appears to be at least highly possible, considering these factors, that only a main attack could have an objective 50 to 75 kilometers deep for the first and each subsequent day. This idea is reinforced by the structure of his combat service support system.

A frequent topic of concern in Army conferences and classrooms is our representative 48,000 man division slice. Unquestionably, our forces could do with some combat service support paring, but it may also be reasonable to stop and consider that our current division slice was not arbitrarily determined. It was, instead, dictated by the demands, completely valid or not, of our combat divisions. The logistics requirements of the threat, although typically more austere in peace, should be at least the same and possibly even greater than our own when the battle is finally met. It is generally accepted that logistics is a greater problem for attacking forces. An attacker cannot preposition needed supplies forward of his initial attack positions. The threat in particular must conduct local resupply over extended road and rail bound lines of communication. Additionally, assuming that the threat faces a cohesive defense, it will suffer greater losses. If the attacker is doctrinally willing to accept heavy losses, the advantage of logistics turns even more in the favor of the defender.

There can be no question about the substantial depth of the threat's logistics base; it is the breadth, or more appropriately, the lack of breadth in his system that limits his ability to launch a substantial number of attacks with daily objectives that are 50 to 75 kilometers deep. The threat's comparable division slice consists of approximately 17000 men.[1] Divisions which are not participating in a combined arms army size main attack are provided only enough supply to accomplish their specified mission.[2] Because of the limited transportation equipment available in a division slice, it is probable that such a division will be incapable of sustaining an attack to a depth of 50 to 75 kilometers against a well constituted economy of force type defense.

The point of this discussion is to direct attention to the threat in the area of a main attack, while attempting to develop an appreciation of the fact that the threat's supporting attacks will probably not have the capability to seriously threaten the defense. In measuring relative combat power, we must always consider the logistical capabilities of the forces involved at every level.

The terrain, the distance to the final objective, Warsaw Pact doctrine, and logistics limitations all suggest that we can expect only one main attack in the USAREUR area. I suggest that this attack will come in the area of the Meiningen gap. The first echelon of this main attack will be so concentrated that the defensive zone of one battalion covering an extended front could, and probably will, contain the breakthrough zone of

an entire army. It seems highly probable that a division which has planned to defend along an extended front is not prepared to face the real threat. One additional advantage available to the defender in this day of satellites is information as to the locations and movement of massed forces and supplies. Without an appropriate plan, however, he is still less prepared than he could be. Even an appropriate plan, of course, will not guarantee success.

A significant change which may be occurring in Warsaw Pact doctrine is suggested by the increased emphasis on the development of aircraft dedicated to the close air support of ground forces. The Soviet SU-19 is the first dedicated ground support aircraft to be developed within the Warsaw Pact since World War II.[3] This new direction should substantially increase of our Army's concern over the vertical dimension of the battlefield. It suggests that the Warsaw Pact will no longer depend on the strength of its land armies alone. Previously, Soviet fighter aircraft have been designed primarily for an air defense role. The improvements in their air defense artillery (ADA) technology and doctrine have provided them with this opportunity to reorient their development efforts. Their ground forces will protect themselves; their air forces, more than ever before, are available to attack us. It should be accepted that we cannot assume air superiority at the beginning of a European war. We can certainly not expect it in the area of the main attack. Finally, Soviet advances in ground based air defense may have far reaching implications in relation to our ability to conduct strategic

reinforcement and resupply. The reduced requirement for air to air defense frees a substantial number of aircraft for traditional air interdiction roles.

In his book, The Offensive, Siderenko assumes the use of tactical nuclear weapons in any conflict between NATO and the Warsaw Pact forces. He states that "the primary method of attack will be the launching of nuclear strikes and the swift advance of tank and motorized rifle podrazdeleniye into the depth of the breaches formed by nuclear weapons."[4] Should this concept be undertaken, the implications on our form of defense is overwhelming. These implications also suggest, however, a requirement for greater dispersion within and among the attacking forces. Necessarily, there is a corollary reduction in the concentration of attacking forces along our front. This does not negate the argument that a battalion could face an entire army. We could expect, instead, that the primary direction of dispersion will be along the axis of advance rather than perpindicular to it. Should one echelon be destroyed by a tactical nuclear response, another echelon will be right behind it to continue with the attack. This only further emphasizes the columnar nature of a main attack and consequently the importance of a defense in depth. It also suggests that the leading forces of a nuclear attack would be a tank army because of its inherent superior protection against a nuclear response. Even under conventional circumstances, the main attack will probably consist of a tank army because of the importance placed on the shock action, firepower, and mobility of the tank.

In short, the threat is formidable but not necessarily overwhelming. There are indications of some significant changes occurring in his doctrine and some significant weaknesses in his logistics system. Both should be fully examined. The Warsaw Pact, like NATO, cannot concentrate adequate forces everywhere. Our task is to determine where the main attack will be and to provide the adequate means to stop it. Again, I suggest that the main attack will be led by a tank army through the Meiningen gap.[5]

ENDNOTES CHAPTER I

1. Canby, op. cit., p. 3.

2. U. S., Department of the Army, Handbook on Aggressor, FM 30-102 (June 1973), p. 7-7.

3. Canby, op. cit., p. 7.

4. A. A. Sidorenko, The Offensive, Trans. Under Auspices of the United States Air Force, (Washington, D. C.: U. S. Government, 1970) p. 40.

5. The rationale for selecting the Meiningen gap is based on an analysis of objectives and terrain. Although the capture of a city such as Munich may represent a substantial political victory, it is not worth risking a war in which the United States would become directly involved. The initial, primary objective must be considerably deeper and more significant. The Rhine River is such an objective. In order to reach the Rhine River, the threat must, of course, consider its available avenues of approach carefully.

Although the Fulda gap is the beginning of the most direct route to the Rhine, it provides limited maneuver space because of its many obstacles. The Coburg, Hof, and Cheb approaches all provide longer routes to the objective; using them would be inconsistent with a shortest possible war scenario. Additionally, based on the threat's perception of the importance of momentum, the greater the distance to the objective, the greater the advantage which accrues to the defender and the greater the losses to the attacker. Meiningen, then, is selected as much by a process of elimination as by positive analysis. This approach traverses good tank terrain, has few major obstacles, and ptovides the second most direct route to the Rhine through the USAREUR zone.

CHAPTER II

SIX CONTEMPORARY CONCEPTS OF THE DEFENSE

The Doctrinal Defenses

Regardless of the many new tactical concepts being discussed at various conferences, there are still only two basic forms of defense practiced within the United States Army today. Even if the trainers can ever agree on some new defense concepts, there is still the inevitable barrier between the school and the practitioner that must be overcome. Deconditioning our field commanders and their staffs from the preferred use of "historically proven" methods will be considerably more difficult than training our embryonic force managers in the employment of newly endorsed techniques.[1]

The much maligned position and mobile defenses of today both contain the same essential deficiency: they do not concentrate on maximizing every capability and minimizing every vulnerability of the defender. Neither is appropriately matched to the threat. One should not confuse, however, their application over extended frontages with their inherent capabilities. It is the fact that they are currently planned over extended frontages that makes them particularly vulnerable.

The mobile defense possesses a deficiency not present in the position defense. It concentrates a counterattack force

at division level that is incapable, considering the nature of the threat, of stopping the attack. The forward forces in a mobile defense after being driven from their holes may also be incapable of holding the shoulders of the penetration once it is accepted. Finally, in the mobile defense, as the counterattack force engages the enemy, it must expose its flank to the second echelon; a thrust, parallel to the attacker's axis of advance across the counterattack's rear would leave it encircled.

The Checkerboard Defense

The checkerboard defense provides one alternative to the position and mobile defenses.[2] As illustrated by Dr. Canby, however, it requires substantially greater foxhole strength per division than is currently available in USAREUR. Dr. Canby, under questioning, admitted that this concept, in order to be feasible, required the adoption of his reorganization plan.[3] Through his reorganization, he reduces division frontages by increasing the number of divisions and by reducing the in-theater combat support and combat service support. As stated earlier, it is beyond the scope of this paper to critique Dr. Canby's proposed reorganization.

The checkerboard defense has the appearance of a fragmented area defense in depth. Under this concept, reorganized 650-man battalions position their four infantry companies in strongpoints and require them to hold a specified piece of terrain while attriting the attackers tank strength. It is based on the hypothesis that in Europe, the tank is supreme. Each infantry battalion is armed with 70 major antitank weapons. There is

also an antitank cavalry company organic to the battalion; its basic mission is to participate in the process of attrition by local maneuver against the attacking force. Additionally, this unit serves as a connector between the infantry companies which are not, per se, mutually supporting. Two proposed advantages of this form of defense are the distance between and the small size of the company strongpoints. They are "difficult for artillery to find and capitalize on an inherent deception in small size."[4] I suggest that each strongpoint also capitalizes on the "inherent advantage of the defense." Each is required to remain in its covered and concealed position. Each position is initially chosen and then improved to minimize its vulnerability to tanks. It is also evident, however, that should a company attempt to move from its positions, it forfeits any advantage which had accrued to it as a result of its planning and preparation for the tank dominated attack. There are no alternate positions.

Dr. Canby points out that the checkerboard defense "immobilizes armor through the proliferation of the antitank weapons."[5] He contends that assault on the company strongpoints would be costly and that "infantry would not be too effective against them because of its vulnerability to artillery, air,....," and other weapons.[6] Since the mission of each unit is to hold terrain, the checkerboard does not attempt to counterattack. It concentrates forces around the penetration. In essence it provides a system for prepositioning the reserve and avoids the parity that exists between two moving forces when both have been trained

to take maximum advantage of the terrain and the capabilities of their weapons. It also assumes, however, a higher casualty rate for the defender by accepting the loss of virtually all of the companies in the forward battalions. There is no planned form of withdrawal.

The principal deficiency of this form of defense is that it lacks flexibility. A division commander positions all of his available force and, if the concept is followed to the letter, he is unable to react to changes in the nature of the threat. Additionally, as each company strongpoint is lost, a portion of the division's primary antitank strength goes with it.

The Island Defense

The design of the island defense, first proposed by Major General J.F.C. Fuller in 1932 is founded on three basic premises cited by Major L. Wayne Kleinstiver in his article "The Archipelago Defense". He states that "(1) It is not possible to organize linear defenses in sufficient antitank strength along the entire width of the front to stop an armored breakthrough at every possible armor approach. (2) Once broken, linear defenses, because of their frontal orientation, are vulnerable to attacks on the flanks and from the rear, and (3) tanks alone cannot sustain a drive of considerable depth; they cannot hold the ground they win."[7]

These premises still hold.

The island defense system consists of a series of "tank

proof," mutually supporting platoon and company size strongpoints (depending on the terrain) deployed in depth in order to conform to and counter the columnar nature of a tank attack. "The organization of the defense will obviously depend of [sic] the country, and the natural obstacles to be found on it."[8] In this defense the infantry blocks and delays movement. The islands of resistance stress all round defense and should "command the roads leading towards and through the area being held."[9] The relatively small defensive positions preferably occupy the small towns and villages along these roads because they are essentially "tank proof." The defending unit takes up positions on other terrain which is characteristically difficult for armored vehicles to traverse such as marshes and heavy forests. Engineers are used to develop "tank proof" terrain where it does not already exist. Maximum use is made of small obstacles to reinforce the selected positions. Armored counterattacks are employed from central locations against the attacker's flanks once his his slowed by or bypasses significant strongpoints. At higher levels, forces are prepositioned from areas not under attack to add depth to the defense along the main avenue of approach. Considerable stress is placed on information so that the greatest threat will be properly addressed.

There is remarkable foresight demonstrated in this pre-World War II concept. Considering the threat it appears somewhat more viable than current doctrinal concepts and overcomes a deficiency of the checkerboard defense by requiring a system which considers the need for mutual support. It is not, how-

over, substantially different from the existing doctrinal forms of counterattack in that it requires substantial armored counterattacks against a penetrating force. Major General Fuller could not possibly foresee the nature of the current threat and the characteristic echelonment and its combined arms columns. Consequently, he could not foresee that a counter-attacking force will necessarily expose its flank to an immediate threat essentially equal to the one within the penetration. Additionally, he neglected to consider the basic parity in vulnerability that exists between equally well trained and armed moving forces.

These deficiencies do not, of course, negate the underlying concpet of a defense in depth against an armored attack . Neither do they negate one other concept espoused by MG Fuller, "the role of the infantry is to resist."

The Force Oriented Defense

"The underlying principle of the force oriented defense is that the defender offers a degree of resistance appropriate to the existing combat power ratio."[10] The designers of this form of defense correctly perceived the combat power ratio as being initially unfavorable to the defender and consequently provided that the initial phases of this "defense" take the form of a modified delaying action. Instead of trading space for time, it is traded for as much of the enemy force as possible. Decisive engagement of a superior force by units assigned an attrit mission is avoided.

Described primarily at brigade level, this "defense" consists of company size strongpoints (with designated alternate positions) distributed throughout each battalion's area of responsibility. The lead battalion's front is identical to the front of its controlling brigade. Other battalions are similarly disposed behind the forward battalion positions. The number of battalions employed and the widths and depths of their sectors are dictated by the number of "kill zones" designated by the brigade commander. Additionally, enough depth is provided in each battalion sector to allow for the employment of airmobile forces to assist in the avoidance of decisive engagement. The intent of the brigade commander is to employ enough kill zones to eventually permit decisive engagement between a weakened enemy and a strong divisional counterattack force. This counterattack will occur much to the rear of the original positions is dependent upon the remaining strength of the attacker. The company size strong points are not deployed to cover the entire battalion front; they concentrate on destroying those forces in their designated kill zones, on avoiding decisive engagements, and on withdrawing to positions behind the rearward battalions.

This form of defense is no defense at all. The delay has always attempted to inflict maximum punishment on the enemy, and the delay is a form of withdrawal, not defense. Regardless of its name, it encourages a retrograde mentality. Calling an apple an orange does not change its citric acid content by even one nanogram. There would be some slight degree of reality if

adjacent brigades were told to defend. It is apparent, however, considering the size of the threat, that the adjacent brigades will be withdrawing too. If they do not, they expose their flank.

In examining this form of "defense" it appears that it requires company size units to conduct withdrawals under pressure in order to avoid decisive engagement. This is the most difficult form of maneuver and once a unit leaves the protection of its prepared positions, it is subject to attack by every weapons system on the battlefield. What is proposed, in fact, is a strongpoint as opposed to linear delay on alternate positions until the combat power ratio is sufficiencly favorable to permit a mobile defense. A major problem, given the intended gaps between strongpoints and the size of the threat, is that the defender could be 50 kilometers west of Wurzburg before the combat power ratio is sufficiently favorable to permit the counterattack. The problem is compounded by the fact that each unit held in reserve is one less unit available to the forward brigades. An inherent danger of the concept is the possibility of a premature counterattack necessitated by some political requirement to hold specific terrain. Finally, the eventual effect may be to conduct a defense with fewer forces on less favorable terrain that had been occupies in the first place.

Another problem is worthy of mention. In this "defense," STANO devices are employed to provide flank security. It is not my intention to become embroiled in semantics, but security is not provided simply by pointing a radar outward along a

flank. STANO devices provide information on the enemy. It is only after this information has been interpreted and reacted to by the employment of an adequate force that security exists. If there are not adequate forces available, there can be no security, only withdrawal.

A tacit acceptance of the force oriented "defense" would have been the most serious mistake a peacetime army could make. That mistake would be to believe that calling an apple an orange will make it one.

A Modification of the Original Archipelago Defense

Major General Fuller's island defense was the original archipelago defense. A new archipelago defense adheres to the same basic concepts proposed by Fuller. To avoid confusion in this writing, Fuller's concept is termed the "island defense" and its updated, modified version is called the archipelago defense.

The archipelago defense, another strongpoint type of defense, adds tank ambush positions, a different forward security area, and modern equipment to Fuller's original version.

In the forward security area, the corps covering force and the general outpost line are still observed. An additional light attack force is located in this area. It lays low during the day and attacks at night concentrating on combat support and combat service support units.

In the forward defense area, "tank proof" infantry antiarmor

strongpoints no small than platoon size are disposed in battalion areas of operation (AO). They are supplemented by day-hiding, night-striking antitank ambushes. There is no column or linear form to brigade or battalion defensive areas. Strongpoints within battalions are mutually supporting; strongpoints between battalions may or may not be. Small towns and villages remain the "knot in the web," just as they are in Fuller's island defense. When tanks are employed forward, they conduct local counterattacks between strongpoints from AO to AO. (See Figure 1.)

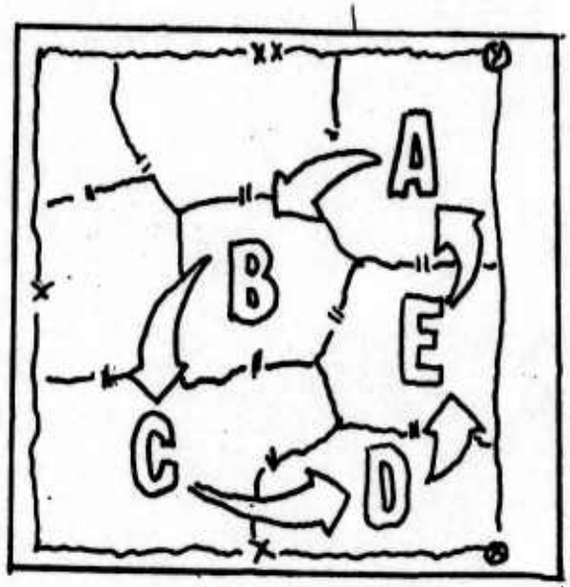

Figure 1

They strike at the flanks and rear of the "disintegrated armor formations as they are swallowed up in the web."[11] Helicopters are used for evacuation and resupply. Armed helicopters conduct mostly night and some daylight attacks against soft targets and counterattack against weakened armor formations.

The preponderance of a division's tank strength is normally held in reserve, apparently to be used for large counterattacks.[12]

The invisibility of the defensive system and the tank proof nature of the strongpoints are the primary assets of the defense. "Often [the enemy's] attacks may be directed against unimportant point [sic] or into thin air."

The principal deficiency of this defense is revealed in this last sentence. Doctrinally, the forward elements of the threat will be attacking to reach specified objectives. If they can reach these objectives through "thin air," all the better for them. There is an excellent opportunity for the attrition of tank forces through the forward defense area but the small strongpoints are subject to defeat in detail unless they withdraw.

As a final note, the author of this form of defense makes frequent reference to the successful application of the archipelago defense in Viet Nam. His explanation is highly conceptual, and he does not actually consider the battle through to its end. The inapplicability of the reference to Viet Nam and the open ended nature of the work detract from the overall credibility of the concept.

ENDNOTES CHAPTER II

1. This suggests the feasibility of giving tactical commands to high level trainers after their dedication to improved tactical methods.

2. For a detailed discussion of the Checkerboard Defense see Canby, op. cit., pp. 23-38.

3. This question was answered during a conference with Dr. Canby conducted at the U. S. Army Command and General Staff College in February 1975.

4. Canby, op. cit., p. 28.

5. Ibid, p. 26.

6. Ibid, p. 26.

7. Major L. Wayne Kleinstiver, "The Archipelago Defense," Infantry, (March - April 1974), p.26.

8. Ibid, p. 27.

9. Ibid, p. 27.

10. LTC Robert Carmichael, "Force Oriented Defense," Infantry, (May - June 1972), p. 20.

11. Kleinstiver, op. cit., p. 29.

12. The author, Kleinstiver, never discusses what the large tank reserve does.

CHAPTER III

A SEVENTH CONCEPT: THE FORCE SPECIFIC DEFENSE

Underlying Concepts

The force specific defense is based on nine hypotheses: (1) The inherent advantage of the defense is complemented by superior mobility but is founded in the planned, prepared, fortified, mutually supporting, and essentially static positions of the defender. (2) Once a defending force leaves its prepared positions, it has forfeited the majority of the inherent advantage of the defense. (3) Offensive action occurs each time a defending weapon attacks the enemy. (4) The key to a successful defense does not lie only in "maximum offensive action" by counterattacking units but also in the offensive capability of each defending weapon. (5) A successful defense against the main attack in the USAREUR area is possible only if the defender capitalizes on every advantage and optimizes the combined employment of every weapon and every element within his force. (6) A successful defense against the main attack in the USAREUR is possible only if every aspect of terrain, including its realistic analysis, is thoroughly examined and used to the advantage of the defender at every level. (7) It is possible to determine the most likely area of the main attack against USAREUR. (8) Economy of force type defenses can withstand the supporting attacks in USAREUR. (9) The success of divisions is ultimately dependent

upon the success of squads; small unit leaders can be trained to function effectively in a defense which heavily depends on their abilities.

The first four of these hypotheses have been deliberately designed to question with the meaning of nebulous phrases or the validity of generally accepted precedence. The fifth and sixth hypotheses frame the importance of the Army's responsibility to prepare for a viable defense in Europe. The last three hypotheses are written to establish three additional essential requirements for a viable defense in Europe. We cannot rely on our equal mobility to provide the opportunity for adequate reinforcement from laterally disposed units even if they are contiguous to the units facing the main attack. Adequate forces must be prepositioned for success. Flanking units will be subjected to and held by supporting attacks along their fronts. Substantial reserves with equivalent combat power cannot be maintained because of the already extended nature of the front.

Another consideration that pertains to this discussion is not a hypothesis; it explains the meaning which I attach to the maximization of weapons effectiveness. Specifically, the effectiveness of a weapon is a function of its location, vulnerability, and maximum effective range. A weapon in the wrong place, left vulnerable, or not attempting to make use of its maximum effective range is wasted. The offensive capability of a defending weapon is a function of both its location and its maximum effective range. Vulnerability is a function of the importance of the target to the enemy, distance from the enemy, armor pro-

tection, and the ability to use cover and concealment; it is a defensive characteristic. It is important the optimize the combination of a weapon's offensive capability and defensive characteristic. Without this optimization, weapons effectiveness if not maximized. Finally, a weapon which can be employed while moving is always in the attack whether it is part of a team of two or a part of an entire division.

Based on this description and earlier discussion, the following is a ranking of those ground-bound, antitank weapons which should be available to USAREUR. For the purposes of this ranking, a weapon must be capable of killing a tank.

a. Ranking by maximum effective range, greatest first.
   (1) M60A2, M551, TOW
   (2) M60A1
   (3) Dragon
   (4) LAW (Improved)
   (5) LAW

b. Ranking by vulnerability, least vulnerable first
   (1) M60A2 - stationary in hull defilade
   (2) M551 - stationary in hull defilade
   (3) M60A1 - stationary in hull defilade position and the TOW
   (4) M60A2 - moving
   (5) M551 - moving
   (6) M60A1 - moving
   (7) Dragon
   (8) LAW (improved)

(9) LAW

The methodology employed in this ranking process is unquestionably unscientific. It is, however, not arbitrary, nor is it intended to convince the reader of its validity. Its sole purpose if to provide insight into the rationale behind the employment of particular weapons in the proposed form of defense. There has been no ranking by location because the combined locations of organic weapons is the essence of a modern form of defense. If it is proven that there are minor discrepancies in the rankings, appropriate adjustments should be made in the concept of the defense. If there are major deficiencies, my concept requires considerable modification but the principles still apply.[1]

As a final note, the mobility of a weapon contributes to both its offensive and defensive capabilities.

The Forward Security Area

The distance a security area extends in front of the FEBA is dependent upon the terrain, the range of enemy artillery, the size and mobility of the security force, the size and mobility of the threat, the width of the zone, and the time required by the commander to complete those activities he deems essential. Against the main attack in the USAREUR area (which will come in the zone of a single division or on the boundary of two similarly disposed divisions) there should be no less and no different covering force than an armored cavalry regiment reinforced by an M60A2 equipped tank battalion. Two divisional

artillery battalions should be placed in direct support to supplement the organic artillery of the cavalry regiment. There is no requirement for either a GOP or a COP. Although its coordinating points are still designated by the corps commander, the covering force should be under the operational control of the division commander. The M60A2 tank battalion is an organic unit of the division. The lateral boundaries of the covering force can and should exceed those of the division. The division front should be no more than 18 kilometers. It can, of course, be compressed.[2]

There is no change in the role of the security force from that doctrinally accepted today. The techniques that it employs are of prime importance. These techniques should capitalize on the range and mobility of the organic weapons. They should minimize the vulnerability of the covering force. The activity in the security area takes the form of a highly mobile delay. The covering force avoids not only decisive engagement but also coming within range of the main gun of the T62 tank. The covering force is initially deployed in depth in a series of static, mutually supporting, hull defilade positions; each position has a predesignated zone of fire, alternate lateral positions, and a planned route of withdrawal. Additional positions should be planned all the way back to the FEBA. Dispersion between positions is important because it assists in preventing artillery suppression of any major portion of the covering force at any one time.

The principal targets of the covering force, in priority

are: (1) the SAGGER or SWATTER carrying BRDM, (2) the ZSU-23-SP-4, (3) the ZSU-57-2, (4) the SAGGER carrying BMP, (5) the BMP, and (6) the tank. Primary emphasis is placed on the BRDM because it constitutes the greatest single threat to defending tanks. The SAGGER and SWATTER missiles have a range of 2500 meters and, because of their mount, they can be fired in volley.[3] The reason that the air defense weapons take next priority is to permit optimal use of combat air support and AH-1G TOW Cobras further back in the division's main battle area. The destruction of the BMPs, whether carrying a SAGGER or not, is important because it attrits the attacker's infantry a squad at a time and assists in eliminating the SA-7 Grail from the attacker's arsenal. The delay is fought all the way back to the direct fire shield of the long range antitank weapons behind the FEBA. The covering force then withdraws through the FEBA on as many routes as possible to predesignated assembly areas in the rear. Tactical air forces in support of the covering force concentrate on eliminating the attacker's air forces. The primary role of organic and direct support artillery is to suppress the attacker, causing him to "button up." It displaces by echelon and withdraws through the FEBA once the forward elements of the covering force are within tange of the divisional artillery behind the FEBA. Enemy air defense artillery is suppressed only in reaction to specific information.

The Main Battle Area

The main battle area extends from the FEBA to the rear of

the mobile battle area (Figure 2). The division's forward bat-

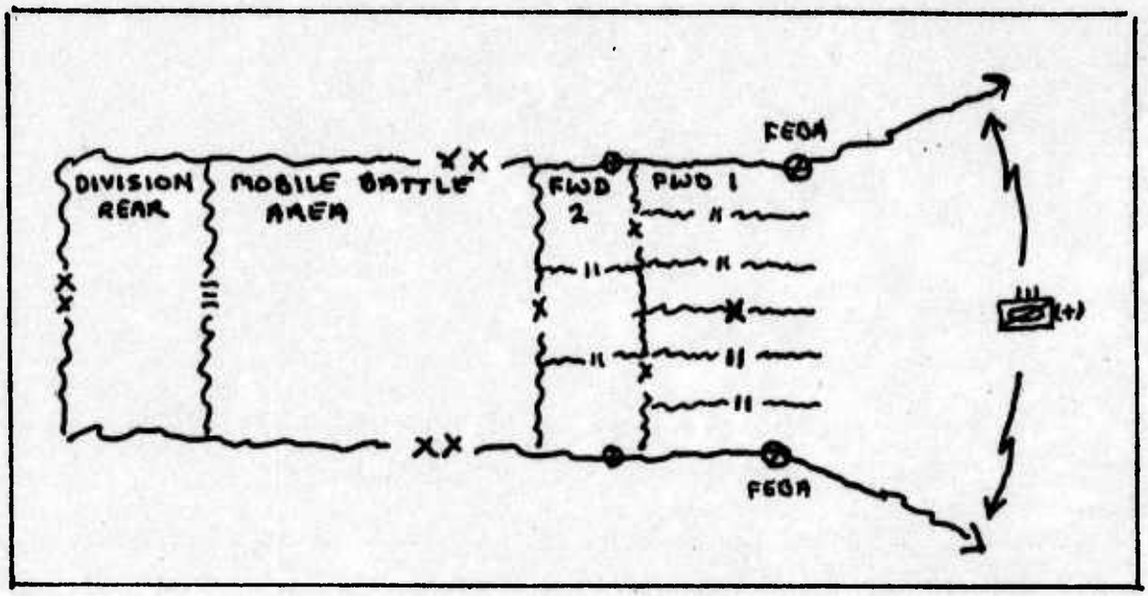

Figure 2

talion task forces are disposed, unlike it is suggested by the idealized figure 2, based on the military aspects of terrain. Each of these forward battalions is disposed as suggested by the idealized Figure 3. The forward rifle companies are pure

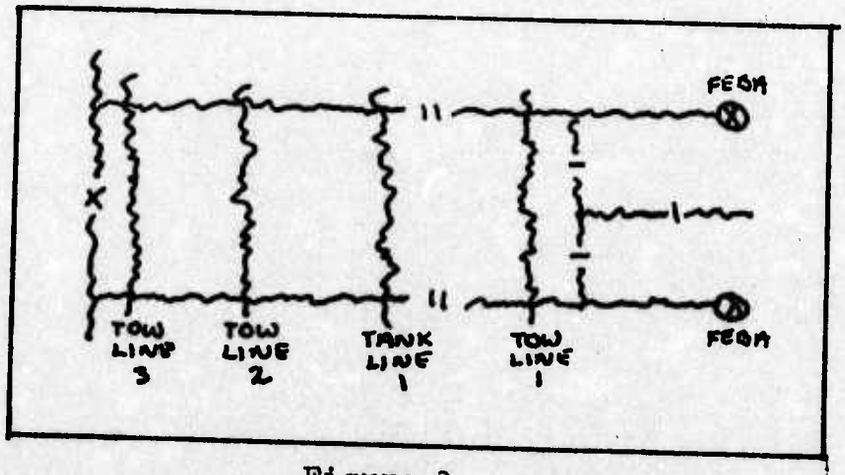

Figure 3

infantry and position their platoon in essentially linear strong-

points. The tank company and the M151 TOW strength of the battalion are deployed in a series of semi-linear (depending on terrain) formations throughout the battalion's depth. Each of these antitank lines is placed so that it is capable of providing support to at least one antitank line in front of it. Tow Line 1 is positioned to provide fires at least 1500 meters forward of the FEBA. Although the antitank lines are designated by the battalion commander, the fires of TOW Line 1 are controlled by the forward companies. The tank company controls TOW Line 2.

As the attacker, still suppressed by all available fires, approaches the FEBA, it is engaged by the weapons on TOW Line 1. As it closes within range, it is further engaged by the forward platoons. Each squad of the forward platoons is armed with an M47 Dragon. These weapons, like all other antitank weapons, have specified sectors of fire. Because of the difficulties in employing the Dragon under artillery suppression, these sectors should be redundant. Fires are controlled by the company commander who has a map overlay depicting each sector of fire. The target priority for the forward companies and TOW Line 1 are identical to those of the covering force for exactly the same reasons. Additionally, the defending infantry, occupying well prepared positions, should cause the enemy infantry to dismount. This could slow the entire tank dominated attack, but it will more likely separate the infantry from the tanks as they push forward.[4]

There are some interesting implications to this battle at the FEBA. Since the infantry is not concentrating on the

destruction of tanks, it does not require a substantial number of weapons with an antitank capability. The Dragons are employed for their range, not their killing power. The LAW or improved LAW would be distributed for close defense but it is still an overkill device in relation to the target priorities. Additionally, to use the LAW the infantry man must put his individual weapon down. To date, very little notice has been taken of the M433 HEDP 40mm cartridge which can be fired from the M79 and M203 grenade launchers. It has a maximum effective range of 200 meters and will destroy any vehicle in the priority list of the infantry force except tanks. Additionally, an infantryman with ten of these rounds is carrying less weight than one LAW and he does not have to put down his individual weapon to use it.

A principal difficulty which must be overcome at the FEBA is the adverse psychological effect of enemy tanks to the rear. This, of course, can only be done through considerable training and psychological preparation. Every man should be aware of the overall plan of the defense. This problem should be addressed even if this form of defense were never to be employed. Considering the threat, and given any form of defense, there will inevitably be enemy tanks to the rear.

One final consideration that pertains to the FEBA battle is the fact that the Warsaw Pacts tank armies are particularly weak in infantry strength. There is no overwhelming infantry superiority in favor of the attacker and the defender has the advantage of his fortified positions.

it is apparent that so far in this battle, the attacker has maintained most of his tank strength. The defender's efforts have concentrated on stripping these tanks of their ATGMs, their infantry, and their antitank protection. Now as these tanks pass the FEBA the defender's weapons concentrate on their destruction. They must run a gauntlet of antitank weapons which are difficult to find and have approximately twice the range capability of the main gun of the T62 tank. The defender also begins to employ his own, equally capable tanks, but these tanks, unlike those of the attacker are stationary and in hull defilade positions; they are considerably more difficult to see and hit. These tanks conduct very limited counterattacks and even then there must be an overwhelming opportunity to destroy the attacker before such counterattacks are launched.

According to Warsaw Pact doctrine, each destroyed tank has a designated alternate to take its place. The formation is maintained at all costs. Inevitably, the attacker, still in strength,

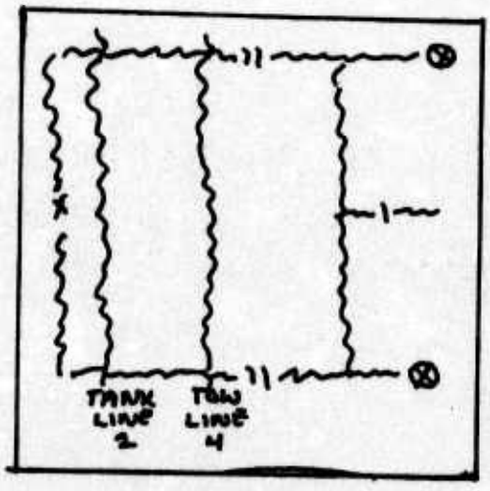

Figure 4

will arrive at the prepared defensive line occupied by the task forces in Forward Area 2. The dispositions of these task forces are as depicted in Figure 4. The platoons on the rifle companies are occupying strong points in a semi-linear fashion. They have the same weapons of the forward companies but are more heavily armed with the LAW. Any remaining BRDMs or air defense weapons should be destroyed. More attention will be paid to tanks. The depths of these task forces are about half those of the forward task forces; they also present a well disposed antitank defense in depth.

Finally, the attacker, his formation weakened but still intact enters the mobile battle area. There the armored cavalry regiment with the M60A2 divisional tank battalion has been waiting for him. The attacker will still have an advantage in numbers, but now he is completely outranged by an equally mobile defender with the sole mission of destroying as many tanks as possible. The depth of the mobile battle area is flexible and based on the need for maneuver space in depth and terrain which provides an advantage to the defender. Additionally, the armored cavalry regiment has been reinforced by the division reserve.

Admittedly, this is a strange way to introduce my concept of the division reserve, but it very specifically has not entered the battle until now either. This reserve is not the organic cavalry squadron, it would be employed to protect a designated flank. It is an airmobile antitank unit equipped with Mule mounted TOWS. Considering the inherent problems of suggesting an increase in the force size of USAREUR, these TOWs were taken

from the infantry battalions; six from each. There are thus 36 TOWs in this antitank unit. Two UH1D helicopter sorties would be required to position each TOW with its crew and ammunition. The reason for an airmobile reserve is to provide the commander the time to determine the area of the most serious threat. By the time the attacker is fighting in the rear area of the task forces in Forward Area 2, the division commander should have a fairly clear picture of the situation and the opportunity to make the best possible decision. This antitank force is not sent to fend for itself in the battle area. Predesignated positions with specified sectors of fire are occupied to complement the dispositions of the reinforced armored cavalry regiment. These positions and their sectors of fire are in an annex of the division operations order. Although emplaced in specific positions by the division commander (by zone), their fires are controlled by the armored cavalry regiment.

Although there may have been some occasion to employ the AH-1Q TOW Cobra before this time, its capabilities could not be optimized until now. This weapons system plays a major role in the mobile battle area. Its vulnerability has been substantially reduced by the elimination of almost all or all of the attacker's local air defense capability.

Combat air support is also optimized and used to the fullest extent in the mobile battle area.

The intended effect upon the attacker in the mobile battle area is to reverse the psychology of the tank. This weapons system is no longer a charging, attacking monster in the hands

of its commander. It is becoming a large metal coffin subject to attack from every direction, including those in which he cannot see. Even more frustrating, his main gun will not reach the majority of the weapons that are attacking him.

The attack is to be halted in the mobile battle area. The force that exits through the rear of the division, if any, should be no more than a vestige of a main attack.

The question on the method of withdrawal has been left deliberately unanswered until this point in the discussion. Withdrawal is not considered to be a viable alternative. The infantry units remain in place to face the next echelon of the attacking force. They refight the first battle. The TOWs positioned throughout the forward areas execute only local withdrawals by lateral displacement to alternate positions once there original fighting position has been seriously threatened. They do not reengage the attacker until the force which located them has passed or until they are ordered to do so by the commander controlling their fires, which ever comes earlier. Emphasis is placed on placing sufficient supplies and ammunition both on and near the established defensive positions. Extended resupply and replacement activity is conducted only during periods of limited visibility. The artillery displaces laterally off the main axis of advance. Its primary role throughout the battle area, has been to suppress the attacker's armored vehicles.

Although not specifically addressed, it has been assumed that maximum use is made of man-made obstacles throughout the battlefield.

ENDNOTES CHAPTER III

1. This ranking is made with full appreciation of some of the results published in volumes II and III of the TETAM Effectiveness Evaluation, November 1973.

2. This 18-kilometer-or-less "rule" is a suggested figure which is highly dependent upon terrain. It applies only in the area of the main attack. It can be extended for economy of force type defenses. An 18 kilometer width permits indirect fire support across the entire division zone by all artillery disposed just inside the division's lateral boundaries. Corps artillery in adjacent areas would also be able to cover a substantial portion of the division zone. Eighteen kilometers is also an aggregate figure based on the belief that a platoon should be required to defend on no more than a 500 meter front against an attack of the proposed proportions.

3. Selected Readings in Tactics, Volume II, Change 1. RB 100-2, (U.S. Army Command and General Staff College, 23 July 1974), 00. 15-27 and 15-28.

4. Soviet doctrine provides that tanks and infantry should become separated by no more than 200 meters during the assault. If this were rigidly adhered to, forcing the infantry to dismount could slow an entire tank army to 2½ kilometers per hour. It is doubtful, therefore, that the tanks would stop. It also suggests that the infantry might attempt to stay mounted.

CHAPTER IV

SUMMARY AND CONCLUSIONS

The force specific defense is designed to capitalize on the capabilities of each weapons system. As new weapons evolve, they can be added to the basic concept.

The origins of the concept are founded in the belief that a defense in USAREUR over extended frontages is impossible as long as the mobility of the opposing forces remains essentially equal.

In this concept there are, of course, implications which bring to mind the outflanked Maginot Line. In this case my reply is to ask if we have a viable alternative to concentrating a force regardless what form of defense is undertaken. If the force specific defense, or any other, is outflanked by a force which initially entered into the AFCENT area across the North German Plain, withdrawal is the only solution. The first battle will have already been lost. At a less than strategic level, the force specific defense has already been described as being contingent upon the ability of the USAREUR forces facing the supporting attacks to hold. It is also possible that a modification of the force specific defense could easily be applied over extended frontages in order to hold these supporting attacks.

The force specific defense, like any other form of defense,

is no panacea, but it does provide a feasible alternative.

The situation for our ground forces in Europe, in spite of the threat, is far from futile. We can defend if it is done properly. We cannot defend everywhere. Division commanders, after allocating the combat power available to them, leave it to there subordinate commanders to reallocate that combat power to addrees the most serious threat in their respective areas of responsibility. If sufficient combat power was not initially available, the brigade commander is expected to do the best with what he has. He would never be expected, and would be considered foolish to attempt, a defense along his entire front. He must concentrate his power along the main approach which is most likely to carry the main attack. I suggest that a similar situation exists at the highest levels in USAREUR and that providing for a successful defense cannot be left to division, brigade, and battalion commanders.

If in the process of this writing, I have developed even one thought that will contribute to the defense of Europe, I have done what I set out to do.

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