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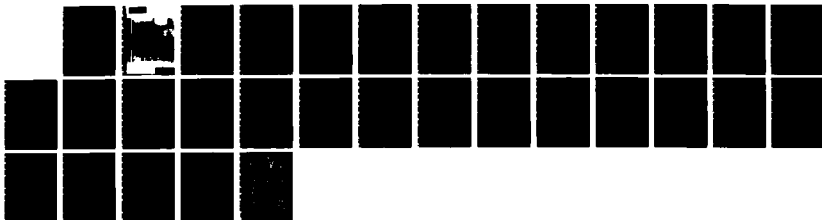
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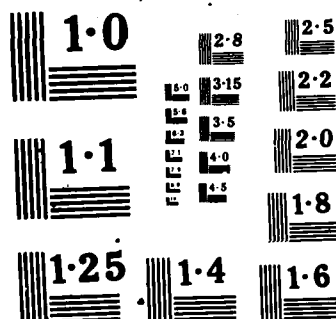
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ESSAY

FORWARD DEFENSE IN CENTRAL EUROPE
- AN OPERATIONAL VIEW -

BY

COLONEL GERD A. EDLER von LOEW, AR
GERMAN INTERNATIONAL FELLOW

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FORWARD DEFENSE IN CENTRAL EUROPE

- AN OPERATIONAL VIEW -

INDIVIDUAL ESSAY

by

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7 April 1986

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ABSTRACT

AUTHOR: Gerd A. Edler von Loew, COL, AR
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Through forward defense, loss of NATO territory is to be prevented and the damage of war limited to the greatest possible extent. This, from a German point of view, is an essential political requirement and has become an element of NATO's strategy as a basic operational concept. The strategic parameters - strategy, threat, balance of forces, and geography - determine the framework of that concept and influence decisively the use of the operational factors of forces, time, and space. The most important task is to defend against immediately attacking enemy forces close to the border, and simultaneously to delay the introduction of additional forces from the enemy's rear area and to weaken these forces before they arrive on the battlefield. The concept of forward defense does not constitute an obstacle to the necessity of mobility. The defender has to alternate rapidly between delaying operations, defense, and surprise counterattacks to avoid massive enemy fire and to form new points of main effort. Thus, the initiative can be regained and the aggressor's advantage of having the choice of time and point of attack can be reversed. A stable forward defense will also raise the nuclear threshold considerably.

THE QUESTION ON THE RIGHT CONCEPT

For more than 30 years the North Atlantic Treaty Organization has served as a very successful defense alliance. For this relatively long period it has achieved its prime objective: preserve peace in freedom. In spite of this success the alliance is - once again - in the midst of an intensive debate on the foundations of its military defense with an increased interest in the viability and credibility of NATO's conventional defense. Within these discussions the interpretation of the forward defense concept in Europe has become controversial. Forward defense is frequently interpreted, in an overly literal manner, as a principle which requires a linear deployment along the entire front, allowing more or less only static defensive operations. Tied to such a "Maginot Line" idea, our freedom of action would be severely limited and the necessary degree of operational flexibility to take the initiative at an early stage would be lost.

The new doctrinal concepts of the US Army - the "Integrated Battlefield," the "Extended Battlefield," the "Airland Battle," and the US Army Field Manual 100-5, in which the Airland Battle doctrine was adopted - have stimulated a whole host of proposals to put more emphasis on aggressive mobility exploiting the maneuverability of mechanized forces. Is the operational interpretation of forward defense - as basically static - exaggerated? Are the "new"



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proposals really new and are they feasible? Is a new operational concept needed, or can the successful defense also be achieved within the current concept? The question of which operational concept is best is not easy to answer in a short and simple way.

Since a campaign will not be conducted in a "neutral environment," there are many factors that will influence it. The key elements of these "strategic parameters" are:

- the framework of the NATO strategy;
- the expected threat;
- the geographical and topographical environment, and;
- the balance of forces.

The influence of these parameters on the conduct of operations will be examined, followed by operational considerations and consequences. This examination is focused on Central Europe - militarily: NATO's Central Region¹ - from a German point of view.

THE STRATEGIC FRAMEWORK

As a defensive alliance, NATO's political aim is to preserve the independence and territorial integrity of its member nations. It does not threaten anyone, nor does it seek to gain superiority. This defensive character of the alliance determines its military concepts and its strategy. The paramount purpose of its strategy is to prevent war by deterrence. But credible deterrence has to be based on effective defense capability. The object of such defense is:

- to end any conflict as quickly as possible;
- at the lowest level of violence;
- subject to the protection of our interests and the restoration of security and integrity of our territory.

From a German perspective, the quick termination of a conflict, allowing for limitation of damage to be suffered by the population, the economy and the infrastructure, is essential.

Both, the so-called "NATO Triad"² as the instrument - consisting of conventional forces and different kinds of nuclear weapons - and the concept of graduated escalation are the components of NATO's strategy of "Flexible Response"³ to reach this objective.

The decisive factor of this strategy is that the response must not be calculable in advance for the aggressor. This unpredictability is a key element in maintaining deterrence - not only to prevent war but also as a continuum after the outbreak of hostilities.

At the operational level it is necessary to take in consideration that there is no automatic linkage of the three types of response to the three components of the triad. The types of response imply neither an order of priorities nor any automatic or chronological sequence in a course of action, and none of the components can substitute for another.

Should deterrence fail, NATO's strategy would confine itself to defense. The basic principle would continue to be defensive.

The strategy, and in particular planning and conduct of operations, is governed by the defensive character that is mainly based on three determining principles:

- limited aim;
- proportionality of the means to be employed, and;
- adequacy of forces.

Limited aims means that military options are tailored to the purpose of the defense. In contrast to the offensive military strategy of the Warsaw Pact, which aims at territorial gains and victory, that of NATO is based on maintenance of the status quo. The principle of limitation of objectives rules out any kind of aggressive forward defense. Again, the aim is not to gain territory or to change the opponents political system. Victory means to defeat an aggressor's attack, not the complete destruction of his military capabilities. Neither a preemptive war, nor offensive and preventive thrusts into the opponents territory aimed at gaining space for our own defense, are politically conceivable or militarily practicable concepts for NATO.

The proportionability of the means to be employed is to ensure that NATO is able to adequately respond to attacks of any size, to prevent escalation, to assure damage limitation and to terminate the conflict early.

These goals, however, are not a variance with the requirement to be able to conduct operational-level counterattacks. A defensive concept can not mean that the aggressor can consider his

territory a sanctuary and thus pass the risk of damage to the defender alone. The capability to attack the enemy with fire-power deep in his territory has always been a part of defensive operations. This capability includes air operations as well as operations with other long-range weapons. These operations have nothing to do with offensive warfare.

Adequacy of forces means that NATO does not need the same number of personnel and weapons as held ready by the Warsaw Pact. On the other hand, NATO's military forces must be strong enough for an effective defense to burden any military option of the aggressor with the highest risk of military failure. They must be strong enough, in the strategic sense to permit early restoration of the state of peace, while maintaining the protection of the population and avoiding territorial losses. Since a conventional attack will initially be countered by NATO with conventional forces and means, those must be of sufficient quantity and quality to conduct an early and cohesive defense close to the border. At the same time, the staying powers of these forces must be secured. That is what "Forward Defense" stands for.

But even a stable forward defense cannot replace nuclear weapons as a deterrent and as a means to end the conflict quickly. The primary purpose of nuclear weapons is to induce the Warsaw Pact to quickly discontinue an aggression if it has already begun. The military effects of the use of nuclear weapons is secondary to the

political purpose but indispensable as a component of political effectiveness. Nuclear weapons are, therefore, primarily means of the strategic level and not of the operational level.

The strategy of flexible response incorporates not only the concept of graduated escalation but the concept of forward defense. Forward defense is an overall operational concept but not a tactical doctrine of how to fight the battle. It prescribes the objective and the scope of action, but it does not commit forces to specific tasks. That means that Forward Defense must not turn into a rigid Maginot Line, neither geographically nor mentally. It requires the highest degree of technical and tactical mobility.

THE THREAT

In the West, the objectives of preventing war and containing conflicts determine military strategy and the planning and implementation of forces on the operational level. For the Warsaw Pact, Soviet military strategy, which is binding for the entire Warsaw Pact, is designed to seek military victory in the eventuality of war. Soviet military strategy, by its very nature, is also a war-fighting strategy.

The objective of Soviet military strategy, directed against the West, is to win a victory in the classic sense and in the shortest possible time through direct offensive use of military capabilities. The essential factors required to achieve this objective are:

- surprise and initiative;
- destruction of the enemy forces;
- occupation of the countries of the enemy coalition, and;
- seizure of strategic key zones.

The anticipated main thrust of Warsaw Pact forces will continue to be directed against Central Europe. Over the past few years the Warsaw Pact has purposefully improved its offensive military options. We have to prepare our defense plans for three positional offensive options of differing probability:

- a full-strength attack - following extensive preparations;
- an attack seeking to achieve strategic surprise - launched practically without any preparation, and;
- an attack combining surprise and strength - following comparatively few preparations.

A full-strength attack would not begin until extensive preparations of both the armed forces and the population had been made. Such preparations would be identifiable and would afford a comparatively long warning time. Time enough for NATO to make political decisions and to prepare the defense psychologically, economically, and militarily. In case of such an attack the Warsaw Pact would forego strategic surprise. It might merely seek to achieve operational surprise and advantages by the choice of the exact time and location of the main effort and the axis of advance of that attack. The risks and costs inherent in this kind of attack would, however,

be extremely high for the Warsaw Pact and under the present circumstances this kind of aggression seems unlikely.

If limited strategic objectives were sought, the Warsaw Pact could attempt to launch a surprise attack. The Pact would then refrain from making extensive preparations in order to reduce NATO's warning time. The operational objective of such an attack would be to defeat the defender before he had organized his defense. Under these conditions the chance of an initial operational success would be great in view of the conventional superiority of the Warsaw Pact forces. Initially, the Pact would be able to attack without nuclear and chemical weapons. There is, however, little likelihood that the Warsaw Pact would be able to sustain any initial success, particularly after the arrival of NATO's reinforcements. Thus, it may be assumed that the Pact would only attempt to launch a surprise attack if it could expect to force a favorable political decision by a geographically limited success which caused a politically unstable situation in the Atlantic Alliance.

In an attack following a comparatively short period of preparations the Pact might seek to combine the advantages of a surprise attack with those of an attack following a full buildup, while avoiding the disadvantages inherent in each of these offensive options. With a short period of preparation, the Warsaw Pact could see a chance of reducing the warning time available to NATO

so much that the Alliance would not succeed in initiating timely political countermeasures, preparing a cohesive defense or strengthening its forces by overseas reinforcements. Therefore, the Pact might plan to make a swift, deep thrust into NATO territory, employing those of its forces which are immediately available. Early initial success could be sought by the Pact in an attempt to dodge NATO's nuclear weapons - expecting that in such a situation the Alliance would no longer be in a position to master the political will to resort to nuclear escalation. This would result in a situation where the Pact might offer negotiations with the declared aim of avoiding a Third World War, trusting to keep as booty the territory already captured.

Over the past few years, the Warsaw Pact has concentrated its efforts on tailoring the structure and the equipment of its forces and its operational doctrine and training principles to this offensive option. The pattern of its major military exercises shows clearly that it would probably seek to achieve its strategic objectives by an attack combining surprise and strength. These trends suggest that the Warsaw Pact forces will attack on a wide frontage, attempting to find or develop gaps and weak sectors in the defense by using reconnaissance, rapid movement of forces, and massive conventional fire support. The principle of echelonment at all operational levels as part of an integrated operation of advances and repeated reinforced attacks from the depth of the area will

probably be retained. However, it will be supplemented by elements of greater flexibility and a potential for initiative. The so-called "Operational Maneuver Group" is one indication that points in this direction. In this scenario, the Pact would aim at conventional victory but would not rule out the possibility of using nuclear and chemical weapons if military objectives were not achieved, or if NATO resorted to a nuclear response.

THE GEOGRAPHICAL STRUCTURE AND TERRAIN ENVIRONMENT

The geographical environment in Central Europe is far more favorable for the Warsaw Pact than for the Western Alliance. NATO is compelled to defend on a long convex curving line of about 1000 kilometers, extending from the Baltic Sea in the north to the Alps in the south. The geographic structure is unbalanced. Frontage and depth of the area are heavily disproportionate. There is no sector in Central Europe where depth matches the operational requirements. The defensive front is marked by the narrowness of the deployment area behind the first line defense forces and by the narrowness of the area available for air bases and the short distance to the harbors.

The geographic dimensions of the Federal Republic of Germany - which is the combat zone - illustrate this unfavorable ratio between frontage and depth. The shortest distance between the eastern and western border is only 225 kilometers. A 200-kilometer penetration would reach such strategically important objectives as the

German North Sea ports of Hamburg, Bremerhaven, Wilhelmshaven, the Ruhr industrial area, Frankfurt, and the Rhine River crossings. It would also split NATO's Northern and Central Army Groups. Because of its lack of geographical depth, Central Europe is highly vulnerable in terms of both its population and its industrial resources. The people total three-fifths of Western Europe's population and earn four-fifths of the combined gross national products of the West European nations. In Germany, about 33 percent of the population and 25 percent of the industrial capacity, most of it concentrated in major urban conglomerations, are located in a strip only 100 kilometers wide which is immediately adjacent to the eastern border.

The lack of geographical depth and the vulnerability of this area restricts the operational concepts suitable for Central Europe. We cannot pursue defensive operations which are excessively flexible in the context of trading ground to attrite enemy formations deep in our territory or which attempt to gain time for own countermeasures and operational options. To apply operational lessons learned in World War II, for instance those of the German Wehrmacht in its campaign in Russia, is therefore not practicable.

Given this shallowness and vulnerability, any defensive operation must make its defensive stand close to the border. Our objective must be to stop the enemy before he obtains his initial objectives. The Pact, in contrast, is able to operate from

"interior lines" concentrating its efforts on the Central European sector and combining it with thrusts against strategic-operational objectives elsewhere. The Pact is able to move forces from the rear, to shift the focuses of its main attacks, to position its strategic reserves favorably and commit them at short notice wherever it chooses. Its vulnerabilities are limited, since many of its assets are well dispersed in its deep rear areas.

In contrast to the disadvantage of the geographical structure, terrain is one factor that tends to favor the defense in Central Europe. First of all, being on his own terrain, the defender enjoys a much greater familiarity with the battlefield. He can enhance natural obstacles and close gaps by barriers in order to retard the attackers rate of advance. He can also exploit existing cover to reduce his own vulnerability. Thus he can extract a high rate of attrition from the attacker in the initial moments of an engagement.

The terrain environment in border areas of the Federal Republic of Germany is well suited for the defense. Especially within the first 50 kilometers along the eastern border, the terrain provides favorable interlocking defensibility for the following reasons:

- increased urbanization throughout the region;
- wooded and marshy areas in the North German plain, and a large number of water obstacles, which cannot be crossed without engineer support;

- wooded and mountainous terrain in Central Germany and along the eastern border of Southern Germany.

Thus, in spite of the extended and excellent road network, even in the border areas, high speed advance by massed mechanized forces is particularly difficult. An armored attack would have to split into many independent or sequential operations if it was to advance. However, the terrain is only of advantage to the defender if he occupies it. A continuous defense, without any major gaps, is thus necessary in order to prevent deep penetrations from the outset.

Moving to the west, behind this 50 kilometer band, the terrain tends to open up more and more to the west with much better possibilities for larger mechanized operations. There are still large areas of concentrated urbanization and forest, but their locations do not provide the interlocking defensibility available near the border.

THE BALANCE OF FORCES

Over the past two years the numbers of NATO and Warsaw Pact divisions available in Europe - either immediately combat ready or operational upon completion of mobilization - have scarcely changed. Of its total number of 85 divisions in all of Europe, NATO has 35 in Central Europe. The Warsaw Pact concentrates his land forces still more distinctly on this area. Ninety-five, of

its total of 173 divisions, face Europe and are deployed in eastern-Central Europe. This provides a numerical ratio of 1 to 2.7.

In the Soviet combat divisions the numbers of artillery guns and armored combat vehicles have drastically increased. These increases have added considerably to the firepower and armored mobility of these units. NATO has, on the other hand, introduced new major equipment which adds to its mobility, firepower, and antitank capability.

For the air forces, the numerical ratio of combat aircraft has changed only slightly. The Warsaw Pact continues to maintain about twice as many combat aircraft in the region as NATO. However, in view of the fact that air forces can be deployed rapidly over long distances, this predominance must be seen against the background of the approximately balanced overall ratio between the two alliances. In addition, the Pact has an effective air defense system which also permits the protection of attacking land forces in mobile operations. This makes it difficult for NATO to penetrate into enemy air space and it makes it easier for the Pact to provide air support for its offensive operations. On the battlefield the large number of Soviet combat helicopters (about 1000) represents a serious threat.

In naval forces, the Pact has a great superiority in the Baltic Sea. For Central Europe's northern flank, the increasing

capability of these forces to carry out amphibious landing operations with strong air support, is a growing threat.

The analysis of the available forces and the operational capabilities of both sides leads to the conclusion, that the first critical situation is to be expected during the initial phase of a conflict. About 61 Pact divisions would probably be confronted by only 22 NATO divisions. An initial success of the Pact forces must be prevented, since otherwise the establishment of the full NATO defense capability, and thus the success of all defense preparations, would be endangered. In this initial phase, the friendly air forces will have to prevent the full development of the Pact's combat air potential in support of the attack by means of air defense, and by counterair operations against their operational airfields.

The unfavorable balance of forces at the beginning of the conflict can be temporarily improved by the introduction of about six divisions to the allied forces. However, the balance will rapidly change to the disadvantage of NATO if, after about seven days, the Soviet second strategic echelon, with about 34 divisions, is committed to the attack into the Central Region. By this time the arrival of major reinforcement forces from the United States cannot be expected with a high degree of certainty. This situation would provide a very critical situation for the defense if, during their attack, the forces of the Pact's second strategic echelon

meet the already weakened NATO forces before the arrival of the US reinforcements. It will therefore be necessary to delay the projection of the enemy forces already in the depth of their area and thus to weaken them at an early stage.

OPERATIONAL CONSIDERATIONS AND CONSEQUENCES

Considering the above-mentioned factors of the strategic parameters, the fundamental problem for NATO's conduct of operations in Central Europe will remain that of defending on a wide front of limited depth, with limited resources and, possibly, a short preparation time against numerically superior, highly mechanized Warsaw Pact forces.

An Alliance which a priori limits its military strategy to the defense, automatically gives up many operational advantages, i.e.,:

- options for a spoiling attack;
- the opportunity to seize more advantageous positions, and;
- the choice of timing, location, and the method of engagement.

Due to the lack of available operational depth in Central Europe the classical operational factors of forces, time and space are unbalanced. The lack of space impedes in particular the operations of the land forces. The factors of forces and time are therefore of decisive importance to offset the advantage of time and space enjoyed by the aggressor. The prerequisites for a

successful forward defense will be to complete defensive preparations in time with sufficient quantity of forces to maintain the cohesion of the defense. Within this context, there are two other aspects to be considered:

- First, by nature, the defender will probably never be in a position to be fully prepared at the outbreak of hostilities;
- Second, there is the problem of maldeployment of forces in peacetime which is at variance with wartime defensive positions. This may lead to a delay in defensive preparations and to overextended defense sectors from the very beginning.

The lack of forces, and the overextended defense sectors, combined with possibly uncompleted defensive preparations could lead to a high attrition role of our own forces right at the beginning of the war. This may result in an early breakthrough and, consequently, in the necessity of escalation.

Again, time is a decisive element. To establish defense readiness in time it is of critical importance that the available warning time be utilized purposefully. The factors of warning period, actual force level, mobilization reinforcement, and logistic support, must be orchestrated in such a way that forward defense readiness is established before an attack is launched. That is the basic requirement for effective initial defense against an attack by the Pact's first echelon.

This leads to the question of what is the quantity of forces needed to defend successfully.

At first glance, the force ratio - mentioned in the balance of forces - of about three to one in favor of the Pact forces does not seem to be unmanageable for NATO, in light of the traditional argument that the defender only needs one third of the attacker's forces. That theoretical argument may be valid on the tactical level, but certainly not on the operational level. The aggressor, having the initiative to decide when and where to launch his main thrust, is able to concentrate his forces and means for breakthrough operations in order to change this ratio to his advantage by weakening his forces in other areas.

Another approach is to take into account the defense density, that means the ratio of forces to space. Assuming that a mechanized division can defend successfully a 30-kilometer sector, about 26 divisions would be needed to establish a cohesive defense along the overall frontline of about 800 kilometers. As a consequence of this theoretical calculation, there would be no sizable reserve forces left at the corps and army group level. Without additional forces, which cannot be expected, a cohesive defense would be reached in theory, but it would be tied to a more or less linear and static battle. Because of the above-mentioned advantages held by the aggressor, there would be no possibility of a successful defense without early nuclear escalation.

Fortunately, the terrain environment in the Forward Combat Zone, particularly favorable for the defense - as shown under the strategic parameters - provides both for the necessary cohesion in the main defense areas and the establishment of operational reserve forces. If the cohesion of the defense is maintained the aggressor will have no opportunity to penetrate gaps or to envelope our forces from the very beginning, but, rather will have to attack frontally and be forced time and again to concentrate his forces.

Reserve forces are critical to the success of a defense on the operational level. They are the prime means to provide staying power and the necessary elasticity in dealing with anticipated and unexpected developments in the battle by:

- reinforcement in the attacker's point of main effort, to prevent the defense being shattered and to block the momentum of a breakthrough, or;
- large-scale counterattacks to regain lost territory, to exploit an attacker's open flank, or to counter vertical envelopments.

Because of force availability limitations and the commitment to forward defense it will be necessary to establish operational reserves first at the corps level and later - after the arrival of reinforcements - at the army group level. The higher the level of command the more time is needed for the deployment of operational reserves, and, once such a reserve has been committed, it probably

cannot be used for another task during the whole battle. On this level, a new reserve cannot be created without dangerously dismantling the defense forces in front. The decision on how and when an operational reserve is to be committed is of critical importance.

The aggressor's numerical superiority allows him not only a local superiority, but also the ability to replace worn-down leading units by new ones from the follow-on forces. Despite a well-prepared forward defense, the overall trend would be a constant shifting of the force ratio to our disadvantage. We cannot win, we are bound to lose if we focus all our efforts on the close-in battle. We must extend the fire to slow down, disrupt, break up, and destroy, as much as possible, the follow-on forces. This will relieve the pressure on our defending forces engaged in the close-in battle and may weaken and delay them enough to create periods of friendly superiority in which the initiative can be seized.

A careful terrain analysis will help to carry out this task. Such an analysis will allow not only possible border crossings, but also main avenues of approach to be predetermined and the size of forces that these routes could support to be calculated. The forward deployment of some 30 divisions will not be a cross-country movement. In many sectors the movement is canalized by deeply cut valleys, defiles, and river crossings onto which we must concentrate all long-range weapon systems, land and air. The task of

disrupting the follow-on forces can only be accomplished by the closest cooperation between land and air forces.

Denying the enemy access to the objectives he seeks by a firm direct defense against the first echelon, the simultaneous prevention of his loading up the assault forces with reinforcing echelons, and the attrition of his tactical air power by counter air operations, are all elements of the integrated forward defense battle.

CONCLUSION

Defense in Central Europe consists primarily of combat operations against armor-heavy, highly mechanized ground forces of superior firepower supported by the air forces of the Warsaw Pact.

Through forward defense, loss of territory is to be prevented and the damage limited to the greatest possible extent. This political requirement has become a strategic principle of NATO. This, from a German point of view, central principle determines the operational mission of NATO's armed forces and decides where an attack is to be met and where the military decision is to be sought on the aggressor discontinued. In accordance with the military strategy of NATO, this principle precludes preemptive attacks. It does, however, require an ability to react quickly and calls for every effort to prevent a deep penetration of the aggressor into NATO territory. In such an effort, the territory of the aggressor cannot be inviolate.

The geographical situation and the military options of the Warsaw Pact leave the defender only little room to offset the advantage of time and space enjoyed by the aggressor. The lack of space impedes in particular, the operations of the land forces. For a successful defense it is essential that it be taken up at once and at the border. Area coverage must be assured, despite the pressure of time, and the operations of land and air forces must be combined most effectively. Forward defense includes, in addition to defending against attacks close to the border, operations to regain lost territory, defense in own rear areas, protection of the air space and deep attacks against enemy capabilities.

The most important task, initially, is to defend against the forces of the enemy attacking on the battlefield. Simultaneously, it is necessary to effectively delay the introduction of additional forces from the enemy's rear area and to weaken these forces as much as possible before they arrive on the battlefield.

The concept of forward defense does not negate the necessity of mobility in operations. It must not be misunderstood as a principle of the lines of the "Maginot Line" idea, excluding any kind of mobile operations and allowing only static defense operations along the forward edge of the battle area. It does not exclude the use of the operational factor "space," but it forces military commanders to fight the decisive battle as close to the eastern border as possible, generally within the divisional sectors

of the defense area. Here, the defender has to alternate rapidly between delaying action and defense surprise counterattacks, to avoid massive enemy fire and to form new points of main defensive effort, are included. In this manner the initiative can be regained and the aggressor's lead, resulting from having the choice of the time and point of main effort of the attack, can be reversed. Operative reserves, both, strong enough and timely available, are prerequisites for the success of those operations. The terrain close to the border is very suitable for defense and provides greater advantage for the defender than for the attacker.

A conventional attack will initially be countered with conventional forces and means. Thus, a stable forward defense will raise the "nuclear threshold" considerably but cannot replace nuclear weapons as a deterrent and a means to end the conflict quickly. The potential use of nuclear weapons also forces the attacker to disperse, reduces his thrust, and thus prevents him from making full use of his conventional superiority.

Finally, a determined and successful forward defense protects our forces and population from the psychological disaster that would result from a quick and deep enemy penetration; and equally important, it denies his forces, his allies, the psychological uplift from early success. It lessens the attackers expectations of victory and secures for the political leadership of NATO the freedom of action it needs to take to implement the necessary decisions to end the war.

ENDNOTES

1. NATO's Central Region comprises the Federal Republic of Germany - which is the Combat Zone - the Netherlands, Belgium and Luxemburg. The Combat Zone reaches from the Elbe River in the North to the Alps in the South with two army group areas: NORTHAG and CENTAG.

2. The Alliance has developed an effective set of instruments, the so-called NATO Triad. It consists of:

- conventional forces;
- short and intermediate-range nuclear systems, and;
- strategic nuclear systems of intercontinental range.

They form a fixed combination: none of the components can substitute for another or - on its own, as a sort of "compound deterrence" - guarantee a credible deterrence or effective defense.

3. With its strategic concept "Flexible Response" (MC14/3-1967) NATO has several types of response to react to aggression:

- Direct Defense is intended to prevent an aggressor from reaching his objective, which is to say reaching it at that level of military conflict chosen by him.
- Deliberate Escalation is intended to thwart an attack by expanding the scope of the conflict geographically within the NATO treaty area (horizontal escalation) or by changing

the quality of the defensive operation through the use of nuclear weapons (vertical escalation). The objective is to make the aggressor understand that he would have to expect unacceptably high losses and damage if he continued his attack.

- General Nuclear Response means, additionally, the use of the intercontinental strategic nuclear weapons. This threat is the Alliance's most powerful deterrence. Its use is NATO's most powerful military response.

END

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