The spiderweb defense

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The Study Group on Alternative Security Policy has laid out the most detailed plan to date for making West German military forces strictly defensive. Like spiders, the forces would trap invaders in a web of troops and barriers.

by John Grin and Lutz Unterseher

THE VIEW THAT NATO should adopt an unambiguously defensive military posture has found increasing support in recent years. Nevertheless, policy makers doubt that such a posture would provide a credible deterrent. Critics are right in saying, as one did, that "deterrence, like beauty, lies in the eye of the beholder."[1] By describing one defensive plan, which has been proposed by the Study Group on Alternative Security Policy (SAS), a European group of active soldiers, politicians, and scientific and military experts, we aim to show that these concepts are based on sound military thinking and therefore can deter aggression.

The SAS defense concept proposes a structural change in air, naval, and land forces. This article will deal only with land forces, which have three components in this concept: static light infantry, light and heavy armored formations, and troops for rear area defense. The third component will not be considered here because it is only of secondary importance for the military rationale of the SAS proposal. It is the interaction between the other two elements that inspired Egbert Boeker to term the SAS concept "spider in the web."[2]

THE "WEB" WHICH would confine and exhaust the intruding "insect" would consist of 450 dispersed infantry battalions—approximately 300,000 men, all West German. The "spider" component would be formed by 150 combat battalions, 70 of which would be West German, the others being provided by NATO allies. In addition to these battalions there would be division and corps troops mainly incorporating artillery and logistics; in total the mobile spider component would consist of 200,000 men.

Including the rear guard forces and reserves, West German forces under this plan would number 800,000 men, about 200,000 fewer than current wartime plans call for. This reduction is possible because of more intensive use of reserves and better tactics.

The web forces would be deployed in small units, each assigned to a certain territory or "mesh." They would have four major tasks:

- to delay and wear down invading forces;
- to provide communications links and most of the information for the mobile troops;
- to provide physical and electronic coverage for the mobile forces, that is, artificial obstacles to protect them and electronic jamming to make them harder to find;
- to support the mobile elements logistically, resupplying them from numerous camouflaged decentralized storage sites.

The area covered by each unit would vary with the terrain, and there would be more soldiers per square kilometer deep inside the defender's territory than near the border. The deployment and tasks of the web units fit in well with the nonoffensive defense principle of not offering tempting targets to an attacker: the dispersed infantry teams would merely present a large number of low-value targets. (The spider elements can also be rather small, because the web would give support and cover to the moving formations, as will be explained later.) Web units would be well acquainted with the terrain. The units located forward would consist of ready troops while more rearward units could be mobilized and brought into place at very short notice. Both features are a safeguard against surprise.

Web units would fight from prepared positions. Each small team of soldiers would have several hardened sites at its disposal to give flexibility, to deceive the adversary, and to confront the invader with more targets than he can deal with. The units mainly would use obstacles, such as minefields covered by very-large-caliber automated bazookas, and short-range indirect fire from weapons like mortars and fiber-optical combat drones to accomplish their fighting mission, which would primarily be to hold their own mesh as long as possible, delaying and decimating intruding troops. Secondarily, web units would assist neighboring

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units when requested, if possible, using the range of their firepower rather than moving to cross mesh borders.

For obvious reasons, forces should not be deployed too close to the border or in parts of the country where terrain conditions impede close-quarter fighting. These areas should be blocked by minefields and controlled by sensors that would direct fire to these zones if necessary.

The communications network would be underground. Much of the information on the adversary that would pass through this network would be collected by web units; the rest would be provided by the intelligence facilities of the more numerous mobile troops. The network would also carry logistic and other data and would facilitate consultations between and within the various levels of the mobile force component, between web and mobile troops, and between neighboring web units.

The spider forces would be a mixture of three types of mobile elements: shock troops (armored units for concentrated tactical counterattacks), infantry on light armored vehicles, and antitank cavalry. Most of the mobile forces would be deployed within the web, with most of the cavalry and parts of the infantry deployed forward and most shock troops and some infantry located farther back.

These mobile formations would have the following tasks:
• to delay, channel, and decimate intruding troops by cooperating with the web to form a bottleneck that increases in density with depth;
• to perform blocking actions;
• to perform counterstrikes to disrupt invading formations that have penetrated too deeply;
• to help web units as needed, boosting their morale or extricating them from dangerous situations.

As the spider would be unable to operate outside the web, which would be confined to West German territory, the concept is unambiguously defensive.

IF THE SAS CONCEPT is applied to NATO's defense of central Europe, it must be able to withstand a blitzkrieg type of attack, that is, a very rapid conventional offensive. Of the realistically conceivable types of attacks, this is the most difficult to deal with. In the unlikely event that the Warsaw Pact would attack NATO, a blitzkrieg attack would probably be used. This type of warfare is described in current Soviet operational concepts.

In a blitzkrieg, it is essential to maintain the momentum of attack. Momentum is proportional to both mass and velocity. Thus the defender must break the attacker's momentum either directly—by reducing the size of the force or the speed of the attack or both—or indirectly, by confronting the opposing commander with a situation that changes more rapidly than he can respond to it.

It is primarily the area-covering web that would reduce the velocity of the adversary. Occasionally spider formations would assist the web in carrying out this delaying task. Since the web would make it difficult for dispersed forces to advance, it would compel the opponent to concentrate.

Spider in the web

Legend

Connecting road

"Dug-in" communications line

Mobile spider unit

Hardened site for web unit

National border
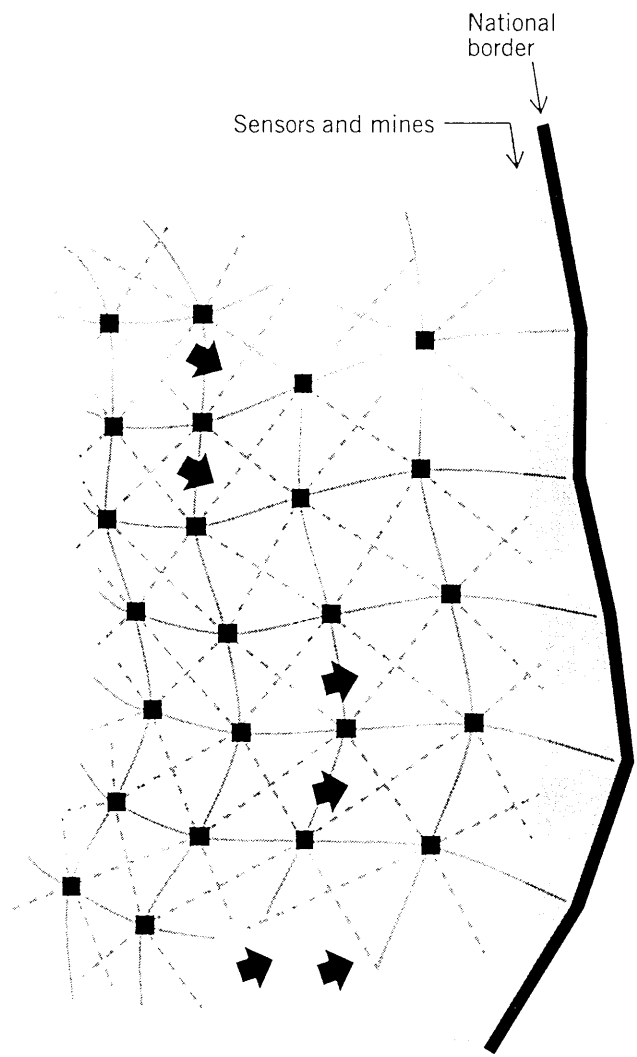
Sensors and mines

This nonliteral diagram represents the SAS nonoffensive "spiderweb" defense. An invader's first contact with the web is a network of sensors and mines along the border. Attacking forces that get beyond this area meet the main mesh of the web—dispersed infantry teams which fight from protected (hardened) positions, represented by black squares in the diagram. The farther from the border, the more closely the web units are spaced. Web units are connected to each other and to mobile forces by an underground communications network.

The "spider" forces, indicated by black arrows in the diagram, are armored and mobile. Spiders move throughout the web as needed to delay, channel, block, and destroy invaders. Lacking logistic support for long-range attacks, the spiders' mobility is confined to home (web) territory; thus they are nonoffensive.

Informational graphics: Michael Yanoff

With the help of the spider formations, it would drive the invaders into a bottleneck or in some cases block them by forming a wall. In addition, the mobile formations would cut off the opponent's forces, throw them off balance, and disrupt their cohesion and combat power.

The momentum of the attack would be neutralized more indirectly by confronting the opponent with a rapidly changing problem structure. This would result partly from the very nature of the web. It would produce many signals to irritate adversary sensors, most of them false. (There are simple devices that simulate movement of motorized columns, for example.) It would have a randomized obstacle system and could present varying concentrations of fire. This complexity, which would be dangerous to an invader, would also be a result of the close cooperation and interaction between web and spider forces. Benefiting from the physical and electronic coverage provided by the web, these mobile elements could carry out sudden, intense hit-and-run actions. The intruder would never know what he would meet next.

TWO MAJOR OBJECTIONS are often raised against a nonoffensive defense that restricts its area of operations to its own territory. One is that the posture leaves the initiative to the adversary; the second is that such a defense is unlikely to be able to respond adequately to operational challenges—that is, major multidivisional efforts as opposed to smaller-scale tactical assaults.

The first objection has two sides to it: critics assume that the defense would not be able to break the initiative of an attack, and then they assume that in such a situation the defender would not be able to take the initiative. A fundamental confusion is at the root of both these assumptions, however: the confusion between initiative and mobile action.[3]

Having the initiative does not necessarily mean being continuously one step ahead of the opponent. Rather it means being the one who defines the situation, making the other dance to one's tune. A comparison can be made with the Old Testament story of Ruth and Boaz, in which Ruth defines the situation by laying herself at Boaz's feet so that he has no choice but to marry her.

Current NATO thinking, with its renewed emphasis on agility, closely links "gaining the initiative" with movement.[4] This is not a necessary connection. In the SAS concept it is possible to define the situation with relatively moderate dynamics. The web structure makes it possible to frustrate an adversary's plans and break his momentum. This can be done directly—attrition everywhere and no easy bypass—and indirectly: by creating a constantly changing problem pattern in cooperation with spider forces.

Moreover, as the web enhances the effectiveness of the spider forces, both the need for and the demands on a mobile force are considerably reduced. A massive mobile component is not necessary. In most cases such troops would only need to be moderately rapid, and when rapid displacements are needed, these would be facilitated considerably by the web. Thus we have a defense system that is static

and nonoffensive, if seen as a whole, yet with enough built-in flexibility to control the situation.

As for the second objection, we contend that the SAS defense could well react to an operational offensive, for these reasons:

• The mere existence of the area-covering web, with its delaying action, would frustrate the most feared type of operational offensive, the blitzkrieg.

• The ever-changing problem structure would affect the whole of an adversary's force disposition, not just the micro-level.

• Operational thrusts need tactical successes. These would be prevented at an early stage by spider-web cooperation.

• The depth and supporting structure of the web would make repeated action possible, giving the defender cumulative victories.

It is true that the SAS posture would make it impossible for NATO to launch a counteroffensive into Warsaw Pact territory after having broken the momentum of an attack. Throughout history, counteroffensives have been considered an essential part of any operational concept. But in the nuclear age, the party that counterattacks would have to reckon with the risk of nuclear retaliation, however irrational and self-defeating such a reaction would be.

In the present era the only acceptable role for the military is to be a political instrument to prevent war. Since this means stimulating détente and enhancing crisis stability, it also means relinquishing the ability to launch an attack against the other side's territory.[5] A historical study by John Mearsheimer shows that retaliatory elements are counterproductive in preventing war.[6] Finally, the manifest ability to frustrate a blitzkrieg in a strictly defensive way denies such an option. (SAS also deals with other types of aggression which are beyond the scope of this article.)

Discussions of military postures emphasizing defense have got underway only recently in NATO and the Warsaw Pact. Concepts such as the SAS plan deserve thorough, careful consideration by military leaders on both sides. Only a military posture that confines itself to self-defense can build confidence in the long run and lead the way out of the arms race. □

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2. Egbert Boeker, *Europese veiligheid—alternatieven voor de huidige defensiepolitiek* (Amsterdam: Free University Press, 1985).

3. Peter M.E. Volten, "Denken over Strategie: Back to Basics," *International Spectator* (May 1984), pp. 273–279.

4. Lutz Unterseher, "Bewegung, Bewegung! Zur Kritik eingefahrener Vorstellungen vom Krieg," *Sicherheit und Frieden*, no. 2 (1987), pp. 90–97; John Grin, "C³I Requirements of Planned NATO Posture," unpublished paper, Free University, Amsterdam, 1987.

5. Marlies ter Borg, "Von Clausewitz en de kracht van het defensieve," unpublished paper, Free University, Amsterdam, 1987; Egbert Boeker, *Europese veiligheid*.

6. John Mearsheimer, *Conventional Deterrence* (Ithaca, N.Y.: Cornell University Press, 1983).