On the need for preserving a first-strike option

W. GERMANY: LOOKING AT GOTTERDAMMERUNG

by Gary L. Guertner

If a war broke out today, much of the combat in open spaces would have to take place in the West German national park system.

—Paul Bracken, On Theater Warfare (The Hudson Institute, July 1, 1979)

In the time of the Roman historian Tacitus (circa 55-117 A.D.), the area now watched over by NATO and Warsaw Pact armies was covered by a vast forest penetrated only by a network of narrow trails. A traveler could walk from Poland to the Rhine without even glimpsing the sun. As populations grew, forests gradually gave way to pastures and arable land. By the beginning of the twentieth century German geography—and military strategy—had undergone such radical transformation that Field Marshal von Schlieffen could see the North German Plain as a corridor for maneuvering thirty-four of the kaiser’s divisions to outflank the French “if the last man on the right brushed for maneuvering thirty-four of the kaiser’s divisions to outflank the French ‘if the last man on the right brushed the [English] Channel with his sleeve.’"

In the seventy years years since von Schlieffen directed the German general staff, West Germany has undergone additional and no less remarkable changes in its physical geography. These rapid changes may be even more dramatic than the gradual evolution from dense forests to gentle pastures. They are certainly no less significant for military strategy, force levels, and weapons-modernization decisions that currently confront NATO planners. The open spaces created by centuries of forest clearing are being reclaimed by the rapid urbanization of Germany. Population density has nearly tripled—from 265 per square mile in 1890 to 645 by 1973—and in urban areas the growth rate is typically two to three times higher than the rate of population growth. Cities extend outward to form suburbs; the suburbs of one city extend toward the suburbs of the next to form vast developed areas. These are the forces driving geopolitical changes throughout West Germany.

The largest urban complex is the Rhine-Ruhr, closely linked with the Dutch Randstad. Farther east, Hamburg and its surrounding suburbs couple with the natural defensive positions afforded by the Taunus and Harz mountains, which in turn meet the metropolitan Frankfurt area, providing defenders with sizable built-up areas to slow invading armies.

From a military point of view, such extensive urban complexes constitute major obstacles to any Warsaw Pact plan for a quick dash through Germany to the English Channel. The famous Fulda Gap through the German Central Highlands too is quickly being filled by the sprawling city of Fulda. Farther south, at the Hof Corridor, the terrain is rough, heavily wooded, crisscrossed by streams and small rivers, and the roads on which enemy armored columns must pass are surrounded by hills and mountains. Year by year all over Germany urban sprawl grows ever nearer to natural barriers, devouring the open space in which recent wars have been fought.

Where, then, would the fighting take place in the event of a Warsaw Pact invasion of NATO’s central sector? From its inception, West German military policy has been to defend as close to the East German border as possible. The forward-defense concept and the fears that motivated it were described in detail by the West German minister of defense in 1976:

In view of their high degree of industrialization and the density of their population and the consequent vulnerability of all their state machinery, the NATO countries of Western Europe are hardly in a position to incur territorial losses without jeopardizing their existence. This is particularly true of the Federal Republic of Germany, situated along the dividing line between NATO and the Warsaw Pact in the center of the field of political tension.

Here, the great concentration of population and economic potential is marked by 24 areas of density, in which 45 per cent of the population and even 55 per cent of those gainfully employed live and work—in fact in an area comprising only 7 per cent of federal territory. These areas of density are expanding still farther and accreting along the main traffic arteries to form urbanized corridors. Such corridors and broad settlement areas limit extensive military movements. This applies to both the attacker and the defender. Moreover, the structure of the settlements makes the control of comparatively large military formations difficult.

Clearly, West Germans did not create their “urban corridors” as military obstacles to blunt a Soviet blitzkrieg. Rather, they are considered vital centers that must be kept
free of destruction. For West Germans the forward-defense strategy is the assumption on which they rest their participation in NATO. Nevertheless, if NATO's forward defense were to fail and allied forces were rushed back or fell back deliberately to trade space for time, the fighting inevitably would approach Germany's urbanized corridors. The millions of Germans living and working in these areas quickly would be engulfed by it. Many would be trapped or would choose to remain in their cities. But millions of others would form refugee columns, choking German roadways. Such was the case during the Red Army's advance to the Oder Niesse Line in 1945, when ten million took to the roads in the dead of winter. Any effort to deploy troops, distribute supplies, and engage enemy forward columns under such conditions would be like fighting through the New York-Washington urban corridors at rush hour. (The official West German position is that civilians will be instructed to remain in place. Indeed, a primary mission of the territorial army is to ensure the security and freedom of maneuver for all NATO forces. Yet one can only view with skepticism its ability to keep refugees off the roadways in the face of a Soviet invasion.)

In my judgment, the mass urbanization of NATO's central sector is a geopolitical factor of utmost importance when it comes to maintaining a credible deterrent to Soviet military threats or political pressure on Western Europe. Limitation of collateral damage and civilian casualties is essential and must be given the highest priority in NATO's weapons-development decisions and the policies it declares.

Should NATO forces in the central sector fail to hold their forward positions and repel Warsaw Pact invaders, a protracted struggle for Western Europe is certain to ensue. Combatants would be unable to bypass West Germany's heavily populated areas. In fact, Pact forces are very likely to aim for them. An expedient tactic for their armored columns would be to "dash" for the cover provided by West Germany's urbanized corridors. "Urban-hugging" deployments of armor and mechanized infantry could fight through the more penetrable suburbs while avoiding the more numerous obstacles in the inner cities as well as the open terrain of NATO's nuclear killing zones.

STRATEGY AND GEOGRAPHY

West Germans are understandably sensitive to America's declared policy of flexible response. This doctrine proposes to defend Europe with conventional forces, trade space for time and reinforcements, and escalate to nuclear weapons only if defeat is threatened. By that time the battle would have penetrated deep into the German heartland.

"At what point nuclear weapons will be released to field commanders to "halt major aggression" is a matter of both ambiguity and controversy. The controversy stems largely from the lack of specific criteria for what constitutes the "failure" of conventional defense, and also from the complex process involved in requesting, authorizing, and releasing nuclear weapons. U.S. Army Field Manual FM 100-5 anticipates a lapse of twenty-four hours between a commander's request for authority to use a nuclear warhead and the time he receives the order to proceed.

If conventional defenses were to fail, geopolitical realities would place Warsaw Pact forces in West German urban corridors, where collateral damage from nuclear weapons would be highest and credible threats to employ them lowest. What is more, the technical capabilities of many theater nuclear weapons contribute to their self-destructing potential. The Pershing I A, for example, is reported to carry a warhead with a yield of 60-400 kilotons (kt). A prominent feature of U.S. warheads is selectivity in yield, with most designed to permit a choice of at least two yields simply by dialing "high" or "low" before firing. Selectivity is intended to minimize collateral damage; but in the case of the Pershing, its "low" yield exceeds that of the Poseidon missile, and its "high" is twice that of the Minuteman III and nearly the same as what is reported for warheads on the MX missile. Both the Honest John (no longer deployed with U.S. forces) with a 20-kt warhead and the Lance missile with a warhead in the range of 1-100 kt have capabilities exceeding the 13 kilotons that destroyed Hiroshima.

Tactical aircraft assigned to NATO are capable of delivering weapons ranging from the low-kiloton to those of more than a megaron—the same yields assigned strategic strike missions. The lowest-yield nuclear weapons are fired from nuclear-capable artillery. Projectile yields range from as low as a hundred tons to several kilotons, but, like their conventional counterparts, nuclear artillery do not guarantee single-shot accuracy. "Low-yield" nuclear artillery barrages in West German suburbs offer rather limited prospects for reducing collateral damage.

FORWARD DEFENSE AREAS AND POPULATION IN THE FRG


The neutron bomb has been defended by its proponents as a means for allaying European anxiety about collateral damage. But this too has major disadvantages if one distinguishes between damage to physical structures and damage to the civilians who occupy those structures. The radiation that penetrates Soviet tanks is also lethal to civilians. In fact, the neutron bomb has a greater killing radius than an ordinary fission weapon of the same yield. A 1-kt neutron explosion will result in delayed radiation deaths to a distance of three thousand feet from its impact.
point. To accomplish the same results with a “standard” nuclear device, NATO would have to use a 10-kt warhead. The decision to employ neutron weapons would confront NATO planners with the difficult choices described by Paul Bracken of the Hudson Strategy Group:

The effectiveness of the neutron bomb is critically dependent on catching its target without warning. Otherwise, troops can dig in for protection. In short, bursting neutron weapons without warning will also catch civilians in an unprotected posture.

NATO’s neutron dilemma would appear to provide one more incentive for Warsaw Pact commanders to employ the urban-hugging tactics described above.

Because many U.S. weapons designated as “tactical” possess yields so large that they do not permit a meaningful distinction between civilian and military targets in the highly populated urban corridors of West Germany, the tactical/strategic dichotomy merges in a single theatre of destruction for West Germans. It is obvious, then, why many European governments have favored a far stronger declaration of a policy of prompt use on or close to the NATO/Warsaw Pact border. Indeed, a no-first-use policy would serve only to weaken deterrence and destroy confidence in the American-European community of risk.

To renounce nuclear first use would also dramatically increase the significance of Soviet conventional superiority. As a result, NATO would have to produce significantly higher numbers of combat forces than today, driving costs well beyond present defense budgets. And it would transform the Federal Republic of Germany into a huge military camp in the very face of budget deficits, high unemployment rates, and an increasingly strong peace movement.

The climate of political-military opinion in Western Europe is further complicated by the widespread belief that the danger of war in Europe is very small. The assessment seems correct today, but how does one translate this into defense cuts when Western military planners are pointing to the size and capabilities of the Soviet Army?

Military power is the major component of Soviet superpower status; any reduction in its military base will be made only in response to reductions by the West. The mission of the Soviet Armed Forces is to deny military victory to any coalition of adversaries. Should deterrence fail, the Soviet Armed Forces will face not only NATO’s capabilities, but also the questionable reliability of its East European allies and the ever-present Soviet fear that a technological breakthrough in U.S. military capabilities might negate a critical Soviet advantage in manpower, tanks, or theater nuclear weapons. In short, it is impossible to place a purely offensive or defensive label on Soviet military doctrine and forces.

NATO’s intentions are less difficult to discern. Both its declared policies and its military capabilities in Central Europe are designed for strictly defensive operations. These include holding operations against attacking forces, lateral counterattacks, and deep strikes against Soviet reserves and logistic support units. Nowhere in NATO military circles can one find serious discussion of any plan for rolling back Soviet occupation forces in Eastern Europe—a ludicrous policy in the face of Soviet conventional and nuclear capabilities.

For both Americans and Europeans the first priority is a reduction in the size of the Soviet and U.S. nuclear arsenals. This must be accomplished before the Western Alliance attempts to reach agreement on its declared policies. A no-first-use declaration may sound attractive, but it is a divisive one for the United States and Western Europe, caught between contending pressures of morality and strategy.