The Allure of High-Tech Weapons for Europe

The failure of nuclear weapons to resolve the European security problem has created new enthusiasm for a conventional buildup

Canadian Prime Minister Pierre Trudeau sparked a small controversy several months ago by questioning the reliability of U.S. plans to defend Western Europe. In the heat of debate at a conference in Switzerland, Trudeau wondered openly about the credibility of the U.S. threat to use nuclear weapons in response to a conventional Soviet invasion, at the peril of starting World War III. He was promptly attacked by others at the conference and by members of his parliament at home—not for raising the question, but for doing so in public.

The implausibility of a decision by the United States to sacrifice its own citizens as a means of rescuing Western Europe from a Soviet assault has long been an unwelcome topic in the North Atlantic Treaty Organization (NATO). Since the late 1950's, Europeans in particular have publicly preferred to ignore any possibility that the U.S. nuclear guarantee lacks authenticity. When concerns nevertheless became pervasive in the late 1970's, alliance officials chose to install nuclear-tipped Pershing II and cruise missiles in Europe as additional, tangible evidence of the U.S. security guarantee.

Fleeting though it was, Trudeau's expression of continued concern was thus an important sign that this strategy has not worked. Stimulated by public opposition to the deployment of the Pershing and the cruise, alliance officials are taking yet another look at the present formulation of deterrence. This time, many appear to recognize that the U.S. promise of nuclear retaliation against a conventional attack—a pledge that forms the bedrock of European security policy-will always be fantastic. And they have openly admitted that the only reasonable solution may be to upgrade NATO's conventional forces.

Officially, the West remains firmly committed to the initiation of nuclear combat in response to a Soviet conventional attack. But public support for this policy has already dissipated as a result of growing concern that it would result in a catastrophic nuclear war. Polls taken in 1981 and 1982 show that the strategy of using such weapons first is supported by less than 20 percent of the public in

France, Germany, England, Italy, Spain, and the Netherlands. "I do not believe that Western public opinion will long continue to support a defense strategy that relies too much on nuclear weaponry," remarks Canadian Admiral Robert Falls, a former chairman of NATO's military advisory committee.

Public opposition to a primarily nuclear deterrent has not yet been translated into formal government support for a primarily conventional deterrent. But advocates of this viewpoint abound, and they are beginning to have an impact. Former U.S. defense secretary Robert



Robert Komer

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McNamara, former national security adviser McGeorge Bundy, and former British chief of staff Lord Carver are among those who have recently urged that NATO repair or overhaul its nuclear strategy. Even the Reagan Administration, which initially emphasized only nuclear weapon modernization, is increasingly interested in improving conventional forces so as to delay the moment in battle when it seems necessary to resort to nuclear weapons. "Not that we'll ever get to the position where we won't eventually have to rely upon theater nuclear weapons to defend ourselves, but as a minimum we ought to be able to raise that threshold so we won't have to cross it as quickly as we must now," says General Bernard Rogers, the Supreme Allied Commander in Europe.

Perhaps the most articulate and enthusiastic supporter of a conventional defense in Western Europe is Robert Komer, a former security analyst at the Central Intelligence Agency who has also served as a staff member for the National Security Council, a special assistant to the President, an under secretary of defense for policy, and a U.S. ambassador to Turkey. A flamboyant public speaker, Komer, 62, has long been a popular figure on the NATO lecture circuit. He argues repeatedly that raising the nuclear threshold is not only feasible but imperative. "NATO's failure to adapt itself to the realities of nuclear stalemate will over the long run seriously erode its deterrent credibilityits very reason for existence," he says. "It's time we realized that nuclear deterrence has been a wasting asset since the time it was first adopted."

Sporting a bow tie and gesturing wildly with his pipe, Komer typically begins by dispelling the popular impression that the Warsaw Pact enjoys an overwhelming advantage over the West in conventional firepower. This conclusion has been nourished, he says, by armchair analysts who point to numerical Warsaw Pact advantages in combat troops, missiles, aircraft, tanks, and artillery, and then conclude, mistakenly, that a conventional defense is either financially or tactically impossible. A proper comparison takes into account the quality and firing capacity of the weapons, the skill of the personnel, and the geographical obstacles faced by an attacker, he says. As other analysts have pointed out, when these factors are taken into account, the West is actually superior in tactical air power and the Pact's 2:1 or 3:1 advantage in personnel and groundbased weapons shrinks to less than 1.2:1, even by the Pentagon's own measurements (1). This is well below the 3:1 to 6:1 advantage that General Rogers describes as the minimum necessary for a successful infantry attack.

Komer believes that "a high-confidence non-nuclear defense is indeed feasible," but he cautions that there are two complementary ways to go about it, and the Reagan Administration seems interested in only one. Backed by a coalition

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In this 1982 test of Assault Breaker technology, the Avco Corporation launched a submunition from the ground and successfully struck a stationary M60 tank containing a simulated heat source.

of technology enthusiasts and large weapons contractors, the Administration wants to raise the nuclear threshold by developing a large variety of so-called smart weapons capable of destroying targets deep in enemy territory from launch pads in Western Europe. As Rogers recently explained to the Senate Armed Services Committee, the idea is "to target and strike deep in the enemy's rear ... with very accurate, very destructive conventional warheads, interdicting choke points, bridges, railroad yards, and disrupting, delaying, or destroying their forces as they move forward toward the battle area."

At the heart of this weapons system, commonly known as Assault Breaker, are surface-to-surface missiles to be aimed at targets identified by a reconnaissance aircraft flying high over friendly territory. After a swift flight, the missiles eject a handful of small tube-like delivery vehicles, which descend over the targets by parachute. During the descent, each of these delivery vehicles begins to spin, and at prescribed intervals they would eject a dozen or so smaller missiles. Using infrared sensors for homing, some of these missiles try to hit the targets directly, while others merely fire explosively forged armor-piercing slugs at them. This, at least, is how the system operates in theory. Development is continuing and its cost has been estimated at between \$10 billion and \$30 billion. The concept has been endorsed by a bevy of prestigious weapons experts and important congressmen (2).

Although the Reagan Administration wants to deploy this system within the next decade, skeptics both inside and outside the Pentagon say that it suffers from overwhelming complexity and is unlikely to come to fruition. They point out that in 14 major tests of Assault Breaker to date, only a handful of the small missiles were able to hit some

tanks. Even then, according to a recent article in *National Journal*, the test conditions were highly artificial. Hot, immobile tanks were situated on bulldozed terrain in fine weather. Targeting was assisted by nearby ground-based radar. No countermeasures were employed, such as cheap radar reflectors or infrared decoys. As Robert Everett, the president of the MITRE Corporation, recently noted, today's "smart bombs" are not yet intelligent enough to meet the requirements of the modern battlefield.

In Europe, the predominant concern is not that the Pentagon's new strategy will fail, but that it will work well enough to pose a significant offensive threat to the Soviet Union, thereby attracting-not deterring-a Soviet attack. "I have had very intelligent individuals in Western Europe who should know better, who, because of a little bit of knowledge ... accuse me of [planning to] have massive forces attacking across the German border headed toward Prague and toward Warsaw," says General Rogers. "Nonsense," he adds. But Egon Bahr, who chairs a committee on arms control in the German parliament, is nonplussed. He notes that U.S. intentions are not as important as how the weapons look to the Soviets, and he thinks that any conventionally armed long-range missiles will look provocative. "The Soviets will simply not be in a position to wait and see if the weapons flying toward them are armed with a conventional warhead instead of a nuclear one, and so they will launch a preemptive attack," he says.

Komer notes that additional resistance comes from Europeans who see the Administration plan merely as a plot to sell a lot of new military hardware. "They view this very suspiciously, because they regard the aerospace industry as a strong influence here," he says. Partly because of U.S. unwillingness to share the microcomputer and sensor technolo-

gy used in Assault Breaker, the Europeans vetoed a U.S. proposal last December to assign a high priority to its development and acquisition. Opposition is likely to persist until more substantial efforts are made to redress the gross imbalance between U.S. and European weapons exports. Substantial concessions will be blocked, however, by influential congressmen who worry about the leakage of technology to the Soviet Union through Europe or who simply favor U.S. manufacturers. As one U.S. official recently told the International Herald Tribune, "Defense jobs for Europeans in an election year? No way."

Komer says he knows a way out of this predicament, but the Reagan Administration has thus far been unwilling to listen. In a new book, Maritime Strategy or Coalition Defense?,* he suggests that the United States concentrate on building a credible conventional defense through closer alliance cooperation and improvements in such humdrum areas as training, readiness, and efficiency. "The typical American style is to find a technological solution to every problem," he says. "But a lot can be done without high-technology add-ons."

Specifically, he proposes that more reserves be trained and equipped for swift mobilization, that rapid airlift and sealift capabilities be upgraded, that more vital equipment be stored in Europe instead of the United States, and that civilian assets be designated for use in combat. He thinks that the lack of standardization in NATO's equipment is a travesty. "Paradoxically, NATO pursues a coalition strategy and has a combined commander under which its forces would operate closely together, yet country by country their weaponry, communications, munitions, tactics, force structure, and procedures are largely different and often incompatible," he says. "Against much more homogeneous Warsaw Pact forces, this is a recipe for disaster on the battlefield." A similar view has been expressed by former Secretary of State Henry Kissinger.

The best place to redress this problem is at the research and development stage, Komer says. "Nowhere is NATO waste greater than in R & D and procurement—at a time when inflation and increasing technological sophistication tend to make each new generation of equipment almost too costly to buy in the quantities needed." He suggests that each alliance member specialize in a particular field of weapons research.

He also suggests that inexpensive for-

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^{*}Abt Books, Cambridge, Mass. (1984).

tifications be erected and mines be emplaced near the German border in order to slow the pace of a Warsaw Pact assault. "The German argument against fortifying the inner German border has always been at bottom political—that it would consecrate the division of Germany. If West Germany is overrun, however, reunification would take place under the wrong auspices," Komer remarks pointedly. Most of his ideas were endorsed last year by a group of retired military and scientific experts organized by the Union of Concerned Scientists, including Solly Zuckerman, the former

chief scientific adviser in England; Major General Richard Bowman, a retired director of the Pentagon's NATO European affairs office; Major General Jochen Löser, a retired official in the German Army; and Brigadier General Karl-Christian Krause, a former deputy director of the policy branch in the German defense ministry.

Komer acknowledges that most of these ideas are far easier to discuss than implement. "He flies at 30,000 feet with steam coming out of both ears," says a high-ranking British defense official. "But he has trouble when it comes to the

hard grind of implementation." Indeed, Komer initially made most of his proposals during the Carter Administration, while serving as an adviser on NATO to Defense Secretary Harold Brown. Although the allies officially endorsed them after an investigation by a series of task forces, they did so unenthusiastically, and wound up lavishing much more attention on the modernization of nuclear forces, a program that was crafted merely to smooth the way for the conventional enhancements. "Regrettably, this nuclear tail came to wag the non-nuclear dog," Komer says.

A Defect in the Limited War Theory

Since the 1960's, the North Atlantic Treaty Organization (NATO) has sought to guarantee its security through the doctrine of "flexible response," under which it reserves the option of responding to a conventional Soviet attack with the limited, first use of nuclear weapons. At its core is an assumption that the Soviets would hesitate to respond in kind to this first use and that the war would be brought quickly to a close on terms favorable to the West.

Given the present level of NATO preparedness, however, the likelihood that a conflict with the Soviet Union could be won by the West or remain limited to Europe seems slim. General Bernard Rogers, the Supreme Allied Commander in Europe, says that he will be forced to request the use of theater nuclear weapons within a few days of any general Soviet attack. He adds that "I do not believe that you can fight with nuclear weapons without escalating to a strategic exchange. Here, again, I think it would be only a matter of days before there would be that escalation."

The difficulty of restricting the use of European-based nuclear weapons is heightened by the need to disperse them on warning of an imminent Soviet attack. The ground-launched cruise missile, for example, is designed to be dispersed up to 100 miles from its primary base by means of large mobile launchers. Nearly 70 people accompany each set of 16 missiles into the field, with many responsible for ensuring the survival of communications to U.S. and NATO military commanders. Similar personnel accompany the mobile Pershing II nuclear missile. Ostensibly, the purpose is to ensure that the missiles remain under the control of officials at the top of the military and political hierarchy, who will make prudent and thoughtful judgments about their release.

This is malarkey, suggests Paul Bracken, a nuclear weapons analyst at Yale University. In a recent book, *The Command and Control of Nuclear Forces*, Bracken points out that NATO officials will be under strong pressure to hand off control of the missiles at the time the weapons are dispersed. "Sending thousands of locked weapons into the fog of war flies in the face of every known military tradition," he says. Once the war has actually begun, massive refugee movements, unremitting physical and psychological pressures, the lack of any well-defined battlefront, and breakdowns in communications "would all produce such

chaos and confusion that decentralized decision-making would become a de facto reality." Bracken adds that prudent decision-making might be the exception instead of the rule, due to the fact that Germany, which is the size of Oregon, has twice the population of the northeastern United States. "The closest analogy that comes to mind would be fighting a tactical nuclear war through the New York-Washington urban corridor at rush hour."

The significance of these practicalities is that any use of nuclear weapons in Europe could be catastrophic. As former Secretary of Defense Robert McNamara says, "the risk of bungling into a confrontation that nobody wants, that nobody planned, that nobody intended, is very high." The United States would face not merely the prospect of trading Chicago for Hamburg, but also Los Angeles, New York, Boston, Washington, Denver, and dozens of other cities and military assets.

Knowing this in advance, political leaders "may be so terrified of the consequences that they will refuse to take even the most cautionary measures in a crisis," Bracken fears. Part of the problem was first described in 1949, by General Omar Bradley, who was then chairman of the Joint Chiefs of Staff. He wrote that proposals for a nuclear defense of Europe were "folly" because they failed to explain "how, if some millions of invader troops moved into Western Europe and were living off the country, we could use the bomb against them without killing ten friends for every enemy foe."

McNamara says that because of all these risks "the threat of [first use] has lost all credibility as a deterrent to Soviet aggression. One cannot build a credible deterrent on an incredible action." Lord Carver, the former British chief of staff, adds that "it makes no military sense" to initiate a nuclear attack, and that "the very irrationality" of it surely makes the Soviets skeptical that the pledge would ever be fulfilled. Similarly, former Secretary of State Henry Kissinger has publicly advised the Europeans to stop "asking us to multiply strategic assurances that we cannot possibly mean, or if we do mean, we should not want to execute because if we execute, we risk the destruction of civilization." The solution suggested by these experts is to build up a credible conventional defense so that the nuclear option need not be faced.—R.J.S.

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The centerpiece of Komer's program was a commitment by each NATO member to increase defense spending by 3 percent annually, above inflation. But it largely flopped when only Norway and the United States fulfilled their pledges. Komer ascribes this failure to the global economic downturn, a diversion of the Carter Administration's attention to problems in the Persian Gulf, and to the fact that "all of these initiatives, longterm defense program, armaments cooperation, 3 percent real growth [were permitted to] lie fallow" during the first 2 years of the Reagan Administration. He complains that the Administration has devoted the lion's share of its conventional weapons funds to building a 600ship carrier-heavy Navy while deferring funding for such needs as the prepositioning of additional equipment in Europe. Johan Jørgen Holst, a former assistant Norwegian defense secretary who now directs the Norwegian Institute of Foreign Affairs, agrees. "Apart from the [nuclear modernization], the longterm defense program seems to have been relegated to considerable and unfortunate oblivion," he said at a recent conference on European security.

This is not entirely fair, however. General Rogers has continued to pressure the allies for substantial defense budget increases, as well as improvements in training and efficiency. But some critics argue that Rogers' attention is being diverted by the high technology effort, and that his efforts have thus far had only modest impact overseas. Under the Reagan budget, even the United States is unable to meet its objectives for force readiness and weapons stockpiling, as funding has been shifted toward naval and air force weapons procurement at the expense of the army.

Komer says that "this Administration is not very NATO-oriented; it is much more unilateralist in its thinking than previous Republican and Democratic administrations. . . . Nothing works in NATO unless somebody big is behind it pushing. And yelling at them isn't good enough. I tried that. I think that you've got to make deals. I think that you've got to make trade-offs. . . . If they will buy system A from us, we will buy systems B and C from them. Or we will produce the equipment if they will man it."

Pressure will have to be applied at the Pentagon, Komer adds, because a strategy of cooperation and conciliation with NATO allies is unfamiliar there. As an example, he recalls an attempt to persuade the Army to buy a pistol from the Italians several years ago. "The Italians buy \$200 million worth of helicopters

from us each year, you know. The Italians were even going to produce the Beretta nine millimeter in Bethesda, Maryland, and all they were going to get out of it was a) prestige and b) license fees." But a high-ranking Army official said that "it was not high on his priority list, he said it had a priority somewhere between a stick and a rock. . . . My god, it's a whole mind-set we're up against," Komer says.

Any shift toward a credible conventional deterrent is also likely to be resisted by an element of the present military bureaucracy in Germany, which passionately believes that only the threat of global thermonuclear war can pose a sufficient deterrent against Soviet attack. "If I were an American, I would say that I don't want any war," explains a high-



Egon Bahr

Wants to substitute conventional weapons for nuclear ones, even at greater expense.

ranking German general. "Secondly, I would say that I don't want nuclear war, and if I had that bloody nuclear war, I would like to keep it limited. Quite naturally, being a German, I want it the other way around, because it is this threat of total war which provides the best deterrent." Pointing recently to a photograph of a city in ruins on the wall of his office on the outskirts of Bonn, the general explains that "this is Breslau at the close of World War II. I keep this here for my guests who speak of conventional deterrence. Any conventional war would be disastrous for our densely populated country. Only if I could win the war on Russian territory would I consider a conventional capability to be a reasonable alternative.'

This viewpoint, once widely popular throughout Germany, is increasingly being challenged in the wake of the Pershing and cruise missile debate, however. University professors, scientific groups, and even some *Bundeswehr* generals have called for increased reliance on conventional weapons and a nuclear-free zone on German territory. Egon

Bahr, who formerly supported the Pershing and cruise missile deployment plan, now says that "I would prefer to pay additional money if it would mean the removal of nuclear weapons from German soil." Willy Brandt, the former chancellor, adds that "I think there are those not only in my party [the Social Democrats] but in large parts of German public opinion, and in other parts of Europe, there is a willingness to look into this."

By seeking improvements in both nuclear forces and high-technology conventional weapons, the Reagan Administration attracts accusations that it seeks an offensive, and not defensive, military capability. If, on the other hand, it proposed to build up conventional forces through increased training, readiness, and efficiency, with the ultimate goal of removing the nuclear weapons, it could tap an enormous, politically potent reservoir of antinuclear European enthusiasm. So long as the withdrawal is balanced by equivalent efforts on the Soviet side, the result might well be a reduction of U.S.-Soviet tensions, which would in turn increase alliance cohesion and diminish incentives for aggression.

"National pride, commercial considerations, bureaucratic inertia, and the like have so far prevented more than modest peacetime cooperation among NATO's disparate and wastefully overlapping defense establishments," Komer says. "But now perhaps the declining credibility of the American nuclear umbrella and the resultant growing concern about the horrendous consequences of nuclear war, may provide sufficient incentive for a more powerful effort to overcome these obstacles."

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This is the last of four articles on the European missile deployments.

References and Notes

- John Mearsheimer, "Why the Soviets can't win quickly in Central Europe," International Security, vol. 7, No. 1 (summer 1982), pp. 3-39.
 See also Barry Posen and Steven Van Evera, "Defense policy and the Reagan Administration," International Security, vol. 8, No. 1 (summer 1983), pp. 15-19.
 It was enthusiastically recommended last year
- 2. It was enthusiastically recommended last year by the European Security Study, a group organized under the auspices of the American Academy of Arts and Sciences. Members of the study's steering group included Harvey Brooks, the former dean of engineering and applied physics at Harvard; McGeorge Bundy, a former national security adviser to President Kennedy; Lord Carver, the former British chief of staff; General Andrew Goodpaster, the former Supreme Allied Commander in Europe; Howard Johnson, the former president of MIT; Henry Long, an engineering professor at Cornell; Alasdair Shulman, the retired chief of the British Air Force; William Kaufman, a political scientist at MIT; General Johannes Steinhof, the retired chief of the German Air Force; and William Perry, a former under secretary of defense for research and engineering.