

The Strategic Defense Initiative: implications for West European security

by G.C. Berkhof, Brig.-Gen. RNLA

EIR is pleased to present the opening speech of Brig. Gen. G.C. Berkhof at a public debate between himself and Christoph Bertram, the political editor of the West German daily Die Zeit. General Berkhof is one of the most active proponents of President Reagan's Strategic Defense Initiative in The Netherlands. An active duty brigadier general in the Royal Netherlands Army, General Berkhof is currently on detached service as a research fellow at the Netherlands Institute of International Relations "Clingendael" at The Hague.

Given before a debate sponsored by Militaire Spectator, publication of an association of military officers of the Netherlands on Feb. 13, the general's presentation not only shows an in-depth understanding of President Reagan's SDI but also gives penetrating insight into its importance for Western Europe. Importantly, the general not only demonstrates how the SDI can redress the serious and growing military imbalance between NATO and the Warsaw Pact, but also suggests concrete proposals for implementing an SDI for Europe. One such proposal which bears mentioning here, calls for the establishment of a European space defense command for NATO under an officer of the Federal Republic of Germany.

The speech is presented without the extensive footnotes. These are available at the reader's request.

Introduction

In a television address to the nation almost two years ago President Reagan told his audience:

Let me share with you a vision of the future that offers hope. It is that we embark on a program to counter the awesome Soviet missile threat with measures that are defensive. Let us turn to the very strengths in technology that spawned our great industrial base and that have given us the quality of life we enjoy today.

He called upon the American scientific community, "those who gave us nuclear weapons . . . to give us the means of rendering these nuclear weapons impotent and obsolete."

The echoes of this address, termed the "star wars speech" by critics, still resound and one does not need a crystal ball to predict that they will continue to be heard for quite some time to come. This should not surprise us. Defense against ballistic missiles is an important and complex issue and

should be studied carefully and in detail, as should its implications for future arms-control negotiations. West Europeans should take an active part in the analysis of the Strategic Defense Initiative, SDI for short. SDI is a long-term research program from both the technological and conceptual points of view, so suggestions—preferably advanced at an early stage—can and will be taken into account. It is important, however, that they be based on a factual and thorough analysis of the realities of the 1980s, and not on vague premonitions or Utopian views that are far removed from the present strategic situation.

It would be quite wrong to suggest that most West European objections against SDI fall into the latter category. That is not the case. But it cannot be denied that some West European critics of SDI fire their broadsides at the wrong target, either from lack of knowledge, or flawed logic, or both.

Let me give you some examples, starting with one used by analysts of the "heads I win, tails you lose" variety. Their line of reasoning, put simply, amounts to this: First, they will assert that from the technological point of view an effective defense against ballistic missiles is impossible. If you reply that the aim of the research program is to look into new technologies that offer at least the prospect of a viable defense, they fall back on a different argument. "Let us suppose," they say, "just for the sake of argument, that in the remote future an effective defensive system can be deployed; then it will prove to be unaffordable, running into trillions of dollars." If your reply that "effective" surely means "cost effective" they will go on and say, "Yes, maybe, but have you ever considered the point that an effective defense against strategic missiles will mean a 'fortress America,' which would be highly destabilizing and detrimental to the security of Western Europe?" If you counter that argument by saying that one of the options of the research program will be the development of defensive weapon systems against the short-range ballistic missiles which threaten Western Europe, they change ground again. They now retort: "Maybe, maybe, but what about aircraft, cruise missiles or even atomic devices, which can be smuggled across borders in suitcases or rucksacks?" When you point out that these are threats of a different nature, that is usually the end of the discussion. One debater, however, took the argument one step further. "Do you know," he said to me, "that every

ten to fifteen years the Americans come up with some defensive scheme, and that they invariably gave up the effort? The last time was in 1975. Then they deployed the Safeguard ABM system, only to dismantle it four months later. So I do not understand why you are so fascinated by the American plans. SDI? A waste of time!"

Soviet disinformation refuted

This method, without the last twist of course, was also used by Soviet scientists in their "appeal to all scientists of the world" issued on April 10, 1983. This swift reaction to President Reagan's plan came as no surprise to anyone who is even vaguely familiar with the methods used by the "disinformation" branch of the First Main Directorate of the KGB. What was surprising, however, was that a large number of the "concerned scientists" who signed that letter occupy prominent positions in the Soviet defense industry. From the Ministry of General Machine-Building, the ministry which is responsible for the development and production of ballistic missiles, signatories included A. D. Nadiradize, the designer of the SS-16 mobile ICBM and the SS-20 IRBM, V. N. Chelomei, designer of the SS-19 ICBM, and V. P. Makeyev, the chief designer of the submarine-launched ballistic missiles. Others are engaged in research on laser weapons, chemical weapons and anti-ballistic missiles. It could be that these scientists of the Soviet armaments industry are professionally concerned about the work of their American counterparts, but they do not seem to me to be the perfect guides "along the path of curbing the arms race and subsequent disarmament."

Another group of critics uses the "inverted logic method" to denounce President Reagan's plan. They usually reduce the complex strategic reality to a simple formula, and then determine whether SDI—as they see it—fits into it. One such formula is called "mutual assured destruction" or MAD. MAD is a concept which gained some popularity in the early 1970s after the signing of the ABM Treaty. What it amounted to, in greatly simplified terms, was that abandoning the idea of defense against intercontinental nuclear missiles would mean that the populations of the United States and the Soviet Union could be regarded as "hostages for peace." In the absence of strategic defense, no more than a comparatively small number of intercontinental nuclear systems would be needed for this purpose. The deterrence value of offensive weapons then became proportionately greater, offering good prospects for their limitation in arms-control talks. By signing the ABM Treaty, so the reasoning went, Moscow had also embraced the MAD theory and the way was open for a drastic reduction of the offensive nuclear arsenals. Admittedly, leaving aside its moral implication, MAD possessed an abstract and even fascinating logic. It was certainly simpler than the complex counterforce strategies, and in theory offered the prospect of smaller nuclear arsenals. But the theory could only work if

both Washington and Moscow were to regard MAD as the cornerstone of their nuclear doctrine, which they did not.

Washington never used MAD as a basic premise for its strategic analysis. For their part the Soviet leaders never publicly indicated that they countenanced holding the people of Moscow and other major cities as "hostages for peace." On the contrary, they stressed the importance of active and passive defense: They pursued an active research policy on laser and particle-beam weapons technology, upgraded their ABM complexes around Moscow, continued to strengthen the national air defense forces and at the end of 1972, shortly after the ratification of the ABM Treaty, reorganized their civil defense organization: All measures that were a direct negation of the MAD theory. Moreover, American hopes that the combined ABM/SALT treaties would lead to a reduction in offensive nuclear weapons have proved to be somewhat optimistic, to say the least. At the beginning of the 1980s the Soviet nuclear arsenal of intercontinental weapon systems was larger than the original 1972 CIA estimates of the possible ten year growth rate if no SALT Treaty were to be concluded. One of the reasons for this spectacular increase in the Soviet stockpile is that the SALT Interim Treaty contained a loophole which allowed the Soviets to enlarge the payload of their ICBM's very substantially. The so-called "cold-launch technique" used for this purpose was not a de jure violation of the 1972 SALT Treaty, but was decidedly contrary to its spirit. The buildup of offensive nuclear weapons was likewise at variance with the American unilateral statement appended to both treaties. This statement, though not legally binding, concludes that "if an agreement providing for more complete strategic arms limitations is not achieved within five years, U.S. supreme interests could be jeopardized. *Should this occur, it would constitute a basis for withdrawal from the ABM Treaty.*" Yet in 1977, and again in 1982, the United States reviewed the ABM Treaty without pressing for modifications. On both occasions American proposals concerning reductions in the levels of offensive weapons were rejected by the Soviet Union.

So it would seem that MAD bears no relation to the present strategic situation. Nor, as the history of arms control shows, can it be used as a guideline for future arms-control negotiations. To denounce SDI on the basis of MAD by arguing, for instance, that a "leak-proof" defense of cities will be impossible to achieve, is unrealistic. It is true that the defense of cities will be a very difficult undertaking, to say the least. But an attack on cities is not the basic tenet of Soviet military doctrine. And it is this doctrine that SDI seeks to render untenable.

How long will negotiations take?

Before giving you my views on Soviet military doctrine and SDI, I should like to cite one more example of unfair criticism of the defensive research program. Most commen-

tators in the leading Dutch newspapers take the view that SDI is one of the major reasons for the Soviet Union's return to the negotiating table. It therefore constitutes an important bargaining chip. Starting from this premise, the author of the editorial printed in the *NRC/Handelsblad* on Jan. 28 characterized President Reagan's remark that the negotiations could take longer than his last term in office as "shocking." For a number of reasons I consider this a lack of insight into the arms-control process; it falls far short of the standards expected of a quality newspaper. Let me explain why.

Firstly, from the point of view of negotiating tactics it would be very unwise giving away the only bargaining chip you possess without pressing for reductions of the offensive nuclear arsenals. It would be even more foolish, of course, to give it away before the start of the negotiations, as the Soviets demanded in Geneva. This would have left the Americans empty-handed, and as the arms-control record shows, the chance of reducing the number of "heavy" counterforce ICBMs—one of the most destabilizing elements of the Soviet offensive arsenal—would have been zero.

Secondly, as I stressed earlier, SDI is a research program. Actual weapon systems will probably not emerge before the start of the next decade. Of the three major technology areas that are relevant to ballistic missile defense, namely sensor systems, fast computers and directed energy weapons, the United States is ahead in the first two while the Soviet Union leads in laser- and particle-beam weapons research. In Semipalatinsk and Sarysjagan the Soviets have constructed prototype installations that are tested against satellites and nuclear warheads.

The Soviet demand that the Americans stop their research program was therefore unfair and was mainly motivated by propaganda reasons. A more balanced proposal would have been to strive for an agreement under which both sides would stop their military research. Such an agreement, however, is no real-world option for two reasons. The first is that there is basically no dividing line between research on military and civilian applications of computer technology. The same is true of research on directed energy weapons, which is closely related to research in fusion energy. As no one has yet come up with a feasible idea for pressing ahead with computer and fusion energy research for purely civilian purposes, while refraining from the results in weapon systems, an agreement to stop military research would be meaningless. The second reason, closely related to the first, is that verification of such an agreement by satellite or other means is out of the question. In my view all that can be done is to draft a "framework treaty" under which both sides agree to maintain strategic stability, report actual deployment of weapon systems and components well in advance, and begin negotiations on the basis of the treaty afterwards. Such "along-the-road" negotiations would most certainly take longer than President Reagan's second term in office.

So even if both sides wish to conclude meaningful and verifiable agreements, negotiations will take a long time and one cannot blame President Reagan for saying so. The editorial writer in question was barking up the wrong tree, to say the least. This was a particularly serious mistake because the Soviet Union, as the letter of the "concerned scientists" shows, uses every trick of the trade to confuse and mislead Western public opinion. Minister Gromyko's insistence on the inclusion of the word "prevention" in the passage in the Geneva final communiqué relating to the "arms race in space" is another case in point. It highlights the American plans for space weapons and conveniently distracts attention from the Soviet ground-based laser and particle beam weapon prototypes that can also be used against satellites, missiles and warheads. The object of this political ploy is clear: to fuel anti-American feeling in Western Europe, drive a wedge between the United States and its West European allies, and induce Congress to cut SDI funds. I believe that the Soviet Union will negotiate seriously if this propaganda effort shows no results. Arms control can contribute to mutual security, but we must first analyse the facts properly, show patience and above all resist propaganda efforts. Arms control would be reduced to a mockery if the signing of treaties, whatever their contents, were to become its sole purpose. It would give us a false feeling of security and ultimately endow the Soviet Union with a "droit de regard" in West European affairs.

I have devoted some time illustrating the lack of knowledge and flawed logic of some of the critics of SDI. I thought it important to demonstrate that the real issues of SDI are more complex than most critics would wish us to believe. I hope I have also made it clear that some of them—probably unwittingly—have echoed the tunes orchestrated by the Soviet propaganda machine. I know perfectly well, of course, that showing some arguments to be wrong is no proof in itself that the SDI is a program which is vital to Western security or one which should be supported by Western Europeans. To do that it is necessary first to view the American space program in its proper perspective.

History of space weapons

It is important, for instance, to note that President Reagan is not the first President to formulate plans for space weapons. The Americans had in fact stepped up their research efforts in the late 1970s, although this decision—taken in direct response to Soviet weapon efforts—did not receive wide publicity at the time. Suspicions concerning the use of directed-energy weapons in an ABM role were fueled in the mid-1970s when the Soviet Union embarked on the construction of the directed-energy test installation in Semipalatinsk in the Kazakhstan military district. Satellite pictures of the work in progress gave rise to a controversy within the American intelligence community that took some years to resolve. Air Force experts believed from the outset that it was a pro-

ton-beam-weapon facility, though others, most notably CIA technical experts, disagreed. The CIA analysts considered proton weapons to be beyond the ken and scope of Soviet science because it implied that the Soviet Union was ahead in seven important beam-weapon technology areas. This debate was still going on when President Carter took office in 1977. At first the President did not seem to take the Soviet efforts very seriously, but within 18 months he modified his views as satellite information confirmed the earlier reports of the Air Force. This evidence convinced President Carter that the Soviet Union had moved into the lead in beam-weapon research and that steps had to be taken to redress the balance. By Presidential Directive No. 48 he ordered an expansion of the research effort, mainly to prevent a possible Soviet "break-out" from the ABM Treaty. Funds for the programs were practically doubled. Of course a more generous allocation of funds does not produce immediate results, especially in hi-tech research projects. But with their usual flair for improvisation and extensive copying from Soviet programs, the Americans succeeded in establishing a firm research base.

This was the situation in 1981, when President Reagan was inaugurated as the 40th President of the United States. The President, who had previously shown a keen interest in ballistic-missile defense, at first charted a course that seemed to be in line with his predecessor's policies. But on July 4, 1982, he formulated a national space policy, whose basic aim was to promote research in order to safeguard the U.S. lead in space technology, to enhance security and to boost the economy. This low-key policy, though in a way a continuation of President Carter's space policy, was in fact a stepping stone to what we now know as SDI.

Why the President decided almost a year later, on March 23, to shift the emphasis from an extensive but low-key research program to a major strategic policy objective is not clear. The wording of his statement suggests that the decision was probably based on moral grounds than on the results of ongoing studies. The President seemed to be repelled by a doctrine that relied solely on nuclear retaliation, and to prefer a strategy designed to "protect the people, not to avenge them."

On the other hand it is obvious that the President also sought to enhance the technological level of American industry as a whole. General Abrahamson, the director of SDI, had this in mind when he wrote recently, "we must continue to strive to make the [SDI] program visible, affordable and, as much as possible, to make the benefits of our research available for the public at large, essentially creating a return investment for the American taxpayer that provides benefits beyond enhanced deterrence. . . . This is not a unique idea. . . . On a wide range of matters, including electronics, air transport, and data automation, military investment has been a catalyst to the flexible, adaptive, and innovative elements of our industry. The space program has yielded—and

it will continue to yield—substantial benefits to the American nation. . . . In conjunction with other programs . . . SDI could be the nucleus of a new space renaissance, the 21st-century renaissance."

Lever to boost the economy

It is not to be wondered at that the Reagan administration should use military investment in research in high technology as a lever to boost the economy. President Reagan shows a keener interest in the economic dimension of the long-term competition with the Soviet Union than any postwar President—with the possible exception of President Eisenhower. There are indeed reasons for concern. Although budget comparisons of NATO and the Warsaw Pact can only be based on estimates, most analysts agree that NATO spends more on defense than the Warsaw Pact countries. However, while agreeing on the fact that NATO outspends the Warsaw Pact, they also agree that as far as "classical" military equipment is concerned the Warsaw Pact outproduces NATO by a wide margin. In 1983, for instance, the Soviet Union, only marginally assisted by the other Pact countries, produced twice the number of tanks, twelve times as many artillery pieces, nine times the number of surface-to-air missiles and five times the number of ballistic missiles—to mention but a few items—than all NATO countries together. This is partly attributable to the fact that NATO personnel costs take a larger share of the defense budgets, leaving only 30 to 40% for investment (R&D, procurement and construction). In the Soviet Union the reverse situation obtains. Owing to low wage costs, more than 60% of the Soviet defense budget is available for investment. Another important point is, of course, standardization. Pact forces use equipment that is predominantly manufactured in the Soviet Union. As the Pact countries all have cadre/militia-type armies and are trained according to Soviet tactics, equipment is not only standardized but also specially designed for use by conscripts; that is to say rugged, relatively cheap and easy to handle. This reduces the costs of maintenance and training. All these factors are conducive to a higher growth rate than in NATO. Growth rates are important because they permit both modernization and enlargement of the inventory as older models are phased out and replaced by a greater number of advanced weapon systems. It is perhaps for this reason that after a period of growth of more than 15 years no concern was felt in the West until the mid-1970s. As one analyst noted, "it was not the rate of growth per se that was alarming, but the levels attained by the process."

Before going further into this point, I want to indicate a serious weakness of the Soviet armaments industry, namely its lack of vitality in the development of advanced electronics. This is hardly surprising in view of the fact that in the Soviet Union work in advanced electronics is largely restricted to the military sphere. For obvious reasons, personal computers and other data display systems are anathema to the

rulers of a closed society. Moreover, the excessive secrecy surrounding military production precludes the dynamic interaction of the civilian and military use of electronics that we know in the West. The Western research base for advanced electronics is consequently both broader and more creative, and there is no reason to suppose that this will change in the future. "Emerging technologies" can thus buttress NATO's conventional defense and at the same time yield a cost-effective defense against ballistic missiles, thereby offsetting the Soviet advantage of a higher production rate in ballistic missiles and "classical" weapon systems.

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So the SDI research program is more than simply an expansion of the Carter program. It represents an effort to boost the American economy and a bid to change the strategic equation with weapon systems using the strong points of the Western industrial base. The fact that these weapons systems stress defense rather than retaliation, gives them an added moral advantage in the President's eyes.

After the March 23 address President Reagan issued National Security Study Directive 6-83, ordering an evaluation of technologies to counter ballistic missiles. Closely coordinated studies were conducted from June to October 1983. Dr. James Fletcher headed a team of scientists that reviewed the technologies and weapon systems for ballistic missile defense. The team concluded, amongst other things, that it

was best to aim for a defense consisting of multiple layers. They did not recommend the development of a specific system. Such decisions could probably not be made before the end of the decade. It would, however, be possible to conduct technology demonstrations at an earlier date. The team completed their work in a spirit of optimism, concluding that the scientific community might indeed give the United States "the means of rendering the ballistic missile threat impotent and obsolete."

The implications for defense policy, strategy and arms control were studied by two groups: an interagency group led by Franklin C. Miller and a group of outside analysts headed by Frank Hoffman. If the Fletcher teams considered technological demonstrations to be markers along the path to be followed by research, the Hoffman group viewed intermediate options as important in their own right. One of the intermediate options the Hoffman panel considered was an Anti-Tactical (Ballistic) Missile (ATM or ATBM) system. Such a system would combine advanced mid-course and terminal tracking systems and ATBM weapons against the shorter-range missiles threatening Western Europe and could conceivably be available in the medium term. Deployment of the system would not violate the 1972 ABM Treaty, which only limits weapons and radars against Strategic intercontinental missiles.

After the reports had been combined in one interagency report, President Reagan endorsed most of their conclusions on Jan. 6, 1984 by National Security Decision Directive (NSDD 119). He called for the initiation of a program to demonstrate the technological feasibility of enhancing deterrence and thereby reducing the risk of nuclear war through greater reliance on the defensive strategic capability. All SDI programs are to be managed by a single project manager—Lt. General Abrahamson—who is directly responsible to the Secretary of Defense. For the 1985-89 period approximately \$26 billion will be needed for the SDI program. Without President Reagan's initiative an estimated \$15 to \$18 billion would have been necessary to fund the ongoing program.

So the President's initiative constitutes a substantial increase in the pace of ABM research. But above all it means a marked change in the direction of U.S. policy. The question is whether or not West European allies will benefit from this change. This question can only be answered if the military threat to Western Europe is viewed in the proper context. ABM weapon systems cannot be judged in isolation; they are closely related to other nuclear, chemical, and conventional weapons and are thus an integral part of the total force structure.

Balance of power has shifted

At an earlier stage I referred to the fact that higher growth rates in the "classical" weapon systems permitted the Soviet Union both to modernize and expand its military forces. The

balance of military power has consequently shifted in favor of the Soviet Union. At the strategic nuclear level the deployment of a new generation of ICBMs, and especially the "heavy" SS-18, is seen as a direct threat to the American Minuteman force. A fifth generation is now in process of development. As some of these missiles are mobile, the vulnerability equation will be yet more disadvantageous to the United States.

The same trend is apparent in the theatre nuclear forces. Although the deployment of the longer-range SS-20 missile and Backfire bomber has received most publicity in the West, what is really happening is an across the board modernization. Since the mid-1970s some 15 new weapon systems have been introduced, including supersonic cruise missiles. In comparison, the Western record on Tactical Nuclear Forces (TNF) modernization can be described as patchy at best. As a result of both the Soviet modernization program and the Western reluctance to introduce new systems, the long-time Western lead in TNF has been lost, and in most cases the Soviets have achieved a clear-cut superiority. The result is that the former "balance of imbalances" in which superiority in the nuclear forces compensated for NATO's lack of conventional combat power, no longer exists.

This is doubly serious in view of the fact that in the conventional field another "balance of imbalances," namely quality versus quantity is slowly eroding, partly because of the high cost of military equipment induces many NATO countries to phase out older equipment at a slower rate than before.

The consequences of this continuing shift in military power are serious, for it undermines the credibility of NATO's strategy of deterrence and flexibility in response. Owing to the favorable "correlation of forces" on the nuclear level Soviet strategists consider an early use of nuclear weapons by NATO to be highly unlikely. They feel this gives them an opportunity to escape the nuclear dilemma, especially as they believe their conventional forces could achieve a speedy victory. Surprise is considered to be the key to such a victory, one of the major elements of which is a massive attack with shorter-range ballistic missiles (SS-21, SS-22 and SS-23) armed with *conventional* or chemical warheads. A barrage attack with these tactical missiles could cripple NATO's communications network and air defense system, particularly if the missile attack were to be followed up with successive waves of air attacks. Such an attack could reduce NATO's ability to control the battle to the point where the defenses could collapse at an early stage.

Thus I believe it to be essential for Western Europe to support one of the intermediate options of the SDI program, namely a defense against tactical ballistic missiles. An alternative means of reversing the disadvantageous force trends, for instance increasing NATO's offensive nuclear potential, does not seem to be a viable option. The Soviet Union has

shown that it can face up to competition in this area, and probably with less financial and political difficulty than that experienced in the West. The same is true of the second possible solution of increasing NATO's conventional forces to a level enabling them to withstand any form of conventional attack. This would be unaffordable. This does not mean that an improvement in the conventional forces is not called for. It most certainly is, but it must be done in a way that is cost-effective. The minimum requirement would be to ensure that the prospects of success of a high-speed conventional offensive would dwindle in the eyes of Soviet planners to the point where the eventual use of nuclear weapons by NATO would seem almost certain.

By shoring up conventional defense, NATO would thus bolster the credibility of its nuclear deterrence. Viewed in this light, a defense against shorter range tactical ballistic missiles is a critical element in the credibility of NATO's agreed strategy.

A combination of American early-warning surveillance and tracking satellites and weapons against shorter-range missiles for the defense of essential assets would seem to offer the best solution. To ensure allied cooperation the weapons could be of West European design. For such a "strategy denial"-type defense against aircraft and missiles a separate aerospace defense command could be set up within NATO. In view of the role the F.R.G. would have to play in this type of defense such an organization should preferably be headed by a West German officer.

To sum up, I personally support SDI for the following reasons:

- 1) SDI is an effective counterweight against Soviet military doctrine and thus reduces the chances of war.
- 2) One of the early options of SDI, a defense against tactical ballistic missiles, is of vital importance for West European security.
- 3) SDI makes the long-term competition with the Soviet Union more manageable because it concentrates on technology areas in which the West is ahead. SDI thus offsets the Soviet advantage of high production rates for "classical" weapons and nuclear missiles.
- 4) SDI is likely to have a profound influence on American industry as a whole. By adopting a "wait and see" attitude, Western Europe would "decouple" itself from the United States not only on the security level, but probably on the technological and economic levels as well.
- 5) SDI is the main American bargaining chip in the coming arms-control talks. It could lead to a reduction of the "heavy" counterforce ICBMs which constitute the most dangerous component of the Soviet offensive nuclear forces. If defensive systems which are cheaper than offensive nuclear forces could be developed, as seems likely, the competition between the two alliances could gradually change from an offensive emphasis to a more defensive one.