SOME THOUGHTS
ON
THE NATO ALLIANCE
AND
THE STRATEGIC DEFENSE INITIATIVE
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INTRODUCTION

History will record that the last half of the 20th Century saw weapons become available that, for the first time since the Old Testament, could destroy entire civilizations overnight. Worse, their devastation was completely out of proportion to any previous measure of military balance.

But in the beginning they were few in number, delivery was difficult and imprecise, and they had little military value as preemptive weapons. Western policy thereby evolved about the rational avoidance of their use by assuring these weapons would survive any first strike -- and total destruction of any attacker would immediately follow. History will also record that 20th Century Man gradually became more concerned about these weapon's survival than his own.

Technical advances in only fifteen years, especially in the ICBM, led to real concerns for the prospect of an escalatory arms race and continued stable balance between East and West. Starting in 1960, an almost frantic decade of arms control agreements culminated in the SALT I Treaty. By its own wording this was only a stop-gap measure establishing a framework. Real arms control was to take hold rapidly thereafter.¹ Seven years were spent trying to produce SALT II. It failed -- ostensibly because of intolerable Soviet actions such as Afghanistan. But there were deeper problems.

¹ On May 9, 1972, Ambassador Smith made the following statement, included within the documented text of the SALT ABM Treaty Section 3, Unilateral Statements:

"The U.S. delegation has stressed the importance the U.S. government attaches to achieving agreement on more complete limitations on strategic arms, following agreement on an ABM Treaty and on an Interim Agreement on certain measures with respect to the limitation of strategic offensive arms. The U.S. Delegation believes that an objective of follow-on negotiations should be to constrain and reduce on a long-term basis threats to the survivability of our respective strategic retaliatory forces. The USSR Delegation has also indicated
On the one hand, there was an awakening that technology -- and a massive Soviet strategic investment in ballistic missiles -- produced a situation vastly different from that of SALT I days. That the strategic balance had shifted was recognized. The only discussion was over exactly when: 1978, 1979, or 1980? There was graver concern, however, that the underpinnings of stable deterrence had begun to shift as well.

They had begun to shift militarily as the 1970s closed when ICBM's lost their survivability. The flexibility, payload, and accuracy of Soviet missiles had increased to the point that the West could find no survivable basing mode. The even broader implications were that the even more fragile National Command Authority, C^3 networks, and bomber escape routes were also at risk. Worse, an explosion in data-processing coupled with this offensive power might have the ability to better localize (not necessarily locate) and destroy the presently secure SSBN force.

The Scowcroft Commission foreshadowed these concerns when they pointed out we depend more and more upon the threat of having to launch our forces under attack^2 if they are to have

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1 (Cont'd) "...that the objectives of SALT would remain unfulfilled without the achievement of an agreement providing for more complete limitations on strategic offensive arms. If an agreement providing for more complete limitations were not achieved within five years [emphasis added], U.S. supreme interests could be jeopardized. Should that occur, it would constitute a basis for withdrawal from the ABM Treaty. The U.S. does not wish to see such a situation occur, nor do we believe the USSR does. It is because we wish to prevent such a situation that we emphasize the importance the U.S. Government attaches to achievement of more complete limitations on strategic offensive arms."

2 Commission Rpt Page 8: "...In such a case the Soviets should have no confidence that we would refrain from launching our ICBM's during that interval after we had been hit [by SLBM attack on our bombers]. It is important to appreciate that this would not be a 'launch-on-warning,' or even a 'launch-under-attack,' but rather a launch after attack -- after massive nuclear detonations had already occurred..."

[Ed. Note: I must assume no attacker would allow free interval between SLBM and ICBM arrival. I therefore have to consider ourselves having to plan for launch under attack.]
any hope of survival. This increasing tendency to shorter decision times and spasm warfare has clearly indicated a tendency toward decreasing stability as well.

Simultaneously, the ethical underpinnings of present deterrence have come under fire. Scowcroft notes: "Deterrence is not, and cannot be, bluff. In order for deterrence to be effective we must not merely have weapons, we must be perceived to be able, and prepared, if necessary to use them effectively against the key elements of Soviet power." But it is this issue -- bluff vs planned use -- that the Bishops develop as the central ethic against present policy. That they argue themselves into a paradox, i.e., weapons and deterrence are acceptable as long as you don't think seriously about using them, is at the heart of our problem.

There is expanding popular confusion as to just what comprises our justifiable self-interest -- evidenced by the broadly based Freeze movement. The unmistakable trend is that of decreasing popular support for future nuclear systems, both within nations and between nations. Western leaders can forever fend off such pressures. The trend is clear. Western strategic options are becoming alarmingly narrow. And at the same time, even Henry Kissinger points out that conventional arms control measures alone are insufficient, and are at a justifiable "...impasse in thought..." Continuing upon the present course, with deterrence maintained solely by an ever-increasing offensive threat, presents little hope and even fewer options. On the other hand, reestablishing historical check-and-balance effects of offense vs defense might offer new avenues to catalyze the process to effective arms control. That is:

- To reduce the risk of war
- To reduce the arms of war
- To reduce the consequences of war

Two years after President Reagan assumed office, the Chairman of his Joint Chiefs of Staff recommended a new "strategic vision" to provide new options for the future. While obligatory modernization of U.S. strategic offensive forces had already begun in 1981, they were seen likely to be inadequate as we ended the next decade.

On March 23, 1983, the President proposed we explore the feasibility of a new strategy. Such a strategy would use greater reliance upon defense rather than offense to move toward a goal of someday making nuclear weapons effectively impotent and obsolete. He proposed we initially explore the technologies to defend against the principal source of today's instability, the ballistic missile.
Such a strategy, even in early stages, could restore stability -- first by making preemption infeasible, and ultimately by greatly reducing our reliance upon the weapons themselves.

In that same speech -- often overlooked -- the President noted this would entail increasing our conventional leverage. We have to address the complete problem, not simply the veneer. It is my professional opinion that these goals can readily be met -- and sustained -- by the superior technical industrial bases of the allied free nations.

Such a change from "conventional" doctrine presented a ripe target for the Western press and Soviet propaganda. But it has survived the criticism. Two years later it receives increasing support from the public, the media, defense strategists, scientists, and even key political figures in the ranks of opposing parties.

It is the larger implications of SDI that motivated the Soviets to return to Geneva; and redirected the initial knee-jerk reactions to "Star Wars". The U.S. media is now giving more serious discussion to the feasibility of both the technologies and policies in a view toward a future that seeks to defend -- not simply avenge -- a free society. Moreover, it is the first enforceable catalyst to arms control in almost thirty years; and the only means by which I can foresee securing the implications of any truly drastic cuts in nuclear arsenals.

From the perspective of the West, concerns expressed about the SDI fall into four broad categories:

Technical Feasibility:

Many of the defense and scientific community have renewed the debate preceding the 1972 ABM treaty. Missile defense was then only feasible during the last seconds of missile flight, and then only with nuclear weapons. Interception while the missile was still in boost-phase was not even a serious option. From this perspective, otherwise highly distinguished spokesmen have commented that the objective of "rendering nuclear weapons impotent and obsolete" is simply impossible. A number of scientific groups and leaders have commented likewise. But during just the last few years, remarkable advances in the technology of directed-energy such as lasers and particle beams; as well as sensors, optics -- and most emphatically -- data processing and satellite survivability; have permitted a wholly new and realistic approach to the concept of ballistic missile defense, one that emphasizes boost-phase intercept.
It is feasible to build large, short-pulse lasers emitting very high frequency (visible) light -- and place them on the ground. New deformable, phased-array mirrors can not only compensate for the atmosphere, but permit what otherwise would be impossibly large optics and aim them precisely and rapidly. Only the simple, cheap, proliferable, and highly survivable components of any defense might then have to be in space. Demonstrations of as much as 100 megajoules of energy compressed into pulses of less than 100 microseconds -- many times per second -- would clearly be seen by Soviet planners as signaling the end of the ICBM's strategic reign.

Critics would note that the USSR might shift to cruise missiles and bombers. But such shifts would themselves move the Soviets toward a more balanced, stable, posture. But the President's Strategic Defense Initiative did not see the ICBM as its only priority, just the first and most difficult. SDI technologies will rapidly evolve toward these other systems as well.

Although many scientists remain skeptical, those who have examined the state-of-the-art have concluded boost-phase intercept is entirely feasible today. This makes defense of whole areas -- not merely limited military targets as in the pre-1972 debate -- entirely plausible. Boost-phase kill negates two generations of heavy-lift and highly MIRV'd Soviet ICBMs. It reverses the arguments of the 1972 Treaty, a technologically different era. It makes the ICBM a totally unproductive military system for preemption. It makes it negotiable.

Arms Race in Space:

The earliest outcry -- and the continuing theme of Soviet propaganda -- stresses "arms race in space." This virgin-sanctity-of-space is the entre into their moral argument against muddying up an otherwise pristine environment. This ignores five simple facts: It is in space that military intelligence has long been gathered. It is in space that the military battle-management and C^3 systems reside. It is in space that only the Soviets have tested national command exercises within the Soyuz missions. It is in space that only the Soviets have yet tested anti-satellite weapons. And it is from space that tens of thousands of nuclear warheads will descend upon the earth. Space -- far from being sanctified -- has in fact been a "free-fire" zone for more than 15 years.

In contrast, both the Joint Chiefs' call for strategic vision and the President's SDI proposal seek alternatives to the existing offensive spiral. Defense threatens weapons, not people. It can be accused of stimulating an arms race only if it succumbs to ill-advised actions inviting Soviet attempts to simply proliferate "more of the same." Here then remains a central misunderstanding born of the 1972 debates.
Terminal defenses of this earlier era -- interceptors standing alone or as first moves in any defensive shift -- degrade catastrophically to simple proliferation. No new Soviet approaches are needed. No radical shifts in Soviet investment or strategic priority are necessary. No technological lead is gained by the West. No real protection is afforded by stopping five out of six warheads against an adversary who has the throw-weight to put as many as necessary on the target. And not even the hope of protection is offered to those who will pay for this defense -- the people.

In contrast, boost-phase defense technologies, degrade gracefully. Attempts to proliferate result in only a slowly diminishing defense effectiveness. Boost phase defense systems don't kill a half dozen warheads, they destroy hundreds of boosters -- thousands of warheads -- each. Boost-phase systems don't cover tens of square miles, they cover tens of millions. Boost-phase systems can't be decoyed with simple lightweight penetration aids, they attack multi-megawatt rocket exhausts. There is tremendous leverage on the defender's side. Attempting to overcome it through simple arms proliferation is implausible. And the defense chooses what to protect.

Concerns have also been introduced, both in the U.S. and abroad, that SDI would create a first strike capability for the West. I find this a specious argument. The President has repeatedly voiced his desire that both sides undertake defensive measures, and that the Soviet Union should be encouraged in this effort to maintain a stable transition. In any event, it is difficult to conceive of how democratic governments could develop the tools and tactics to execute a preemptive strike. For example the Soviet Union has developed a system for evacuation of its population centers. Because some retaliation is inevitable after first strike -- even with thoroughly effective and reliable defenses, a Soviet preemptive attack would presumably be preceded by massive socio-economic movement.

It is inconceivable that any Western leader could call for such actions prior to striking first. Neither our society nor our offensive deterrent is structured for such an event. In contrast, the Soviet Union has chosen to build a strategic force -- primarily ICBMs -- that is emphatically preemptive in nature. Whereas the West has tended to de-emphasize the various aspects of civil defense, the Soviets have invested hundreds of billions in passive and active defense measures, and discipline, for both their key socioeconomic assets and political/military leadership. They have the largest air defense in the world. Further, the Soviet Union has had a massive effort underway for fifteen years, using some of their finest technical talent, to develop just such advanced defenses as the SDI. Comparing capabilities, the West can hardly stand accused of preparing for first-strike.
Decoupling the U.S. from its Allies:

There is concern that SDI would produce "fortress America." In contrast, the President has clearly stated that our goal is to defend not just the United States but our allies as well. "Our security and theirs is one."

It is again boost-phase technology that made this possible. It can defend Europe, the U.S. or other nations. For example, the SS-20 is as vulnerable to its intercept as the SS-17, 18 or 19. Boost-phase intercept can occur even before an ICBM's precise target is known. What's more it destroys the missile threat close to its origin. Defense need not wait until the last second -- surrendering both time and tactics to the attacker.

As I discussed previously, other delivery systems, such as shorter-range tactical weapons, cruise missiles or aircraft are also targets for defensive technologies. The SDI is only the first step toward a major change in strategy. That first step addresses ballistic missiles, because they have been the dominant contributor to the erosion of stability. It is the ICBM, with its ability to destroy civilizations in minutes, that has most clearly displayed the central flaws of a doctrine allowed to evolve without deep thought for the clear long-term implications -- under which we now face grave decisions.

By maintaining strong cooperation under the alliance, a necessity well-recognized in the United States, development of defensive technologies can both strengthen the alliance and allow us to embark upon a path free people can support.

Unaffordable:

Immediately after the President's March 23rd speech, wild cost estimates of trillions of dollars were offered for his "dream." While such figures tend to boggle the mind, it is instructive to note that the United States alone will spend more than $1.5 trillion on defense in the next five years. Not only are such cost "guesstimates" therefore totally unfounded; but they are deliberately used in scare tactics which ignore the cost we already incur in the West to preserve our freedoms. Defense is not cheap under any circumstance.

Even cost estimates since then have been (both mistakenly and deliberately) based on past terminal-defense concepts and old technologies. They do not reflect the leverage emphasized in the SDI program. Moreover, the President's 5-year, $26 billion research program -- large in absolute terms -- is a rather small fraction of U.S. commitment to defense, less than 1%. More important, a continually reemphasized goal of SDI research (for that matter any research) is to it affordable.
It is often pointed out that any reduction in our reliance upon nuclear weapons will result in an increasing dependence upon even more costly conventional systems. In fact, a number of technologies are emerging from the intense high-technology trade competition that promise extremely high military leverage -- at reduced cost. An example is the clear prospect of carrying out many of the missions traditionally attributed to manned aircraft by pilotless vehicles using modern sensor and data processing technology with new materials and manufacturing techniques to produce highly effective systems at low cost. Developing these technologies jointly can spur economic growth throughout the alliance by stimulating the development of technologies with commercial benefits.

Coupling the rapid acceleration in commercial technologies to conventional military requirements can restore the "force multiplier" that languished as tactical nuclear weapons became more and more prevalent. The nuclear threshold can be elevated, and affordably, and with it the prospect of escalation to global nuclear war will diminish. While some would argue that the differences between nuclear war and conventional war are diminishing. In fact, modern conventional weapons are becoming far better able to discriminate between combatants and non-combatants. And it is this central theme of Western civilization that has become obscured by the brute-force nature of nuclear weapons over the last decades.

CONCLUSION

In looking to the future, the President is therefore focusing upon the forest rather than the trees. His view stretches toward the next century, and he is concerned at the lack of options he sees for his successors. It was this long-term issue, not some delusion that we might pull some incredible technological rabbit out of the hat that made him willing to rethink our collective national course. It was his conclusion -- his vision -- that we not continue to depend solely upon steadily increasing nuclear firepower to ensure our posterity. Rather -- and this is the essence of what he said two years ago -- we should look to our strong suit, technology, in creating better options for our national defense.