Whither SDI? Strategic Defenses in the Next Administration

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PREFACE

This Note examines the legacy of strategic defenses the next president will inherit from the Reagan administration. Concentrating on SDI, it describes the programmatic, budgetary, arms control, and political contours of the strategic defense agenda that the new president is likely to confront. It then considers the options he will face and plots a course he should take.

This essay is intended to stimulate and structure debate about the future of strategic defenses. An earlier version of this paper was prepared for a Council on Foreign Relations study group on the "Arms Control Agenda of the Next Administration." Since it was initially drafted in spring 1988, the politics of SDI have changed with a speed that few could have predicted. Abruptly and unexpectedly, SDI all but disappeared from the political debate at precisely the time when a multitude of candidates were vying for their parties' nominations, and then the two nominees were seeking to define and distinguish their positions. Despite these changed circumstances, this Note should be of interest to those who are concerned with how developments in strategic defense bear on nuclear policy, programs, and arms control.

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SUMMARY

Five years after Ronald Reagan's March 23, 1983 "Star Wars" speech, there is a wide diversity of views about the future of SDI in the post-Reagan era. These range from a prediction (or hope) that the program will revert to something like the pre-1983 level of effort on ballistic missile defense research, to a belief that the political facts of life will push the next president into pursuing a program leading to near-term deployment of ballistic missile defenses. By the spring of 1988, the latter possibility seemed real enough that SDI critics were brooding about how to limit the "damage" such a course of action would cause. Then the politics of SDI underwent an unexpected and abrupt shift. Only a few months later, even SDI advocates were all but ready to concede that the goal of near-term space based deployments was a long shot at best.

This Note considers the choices the next administration will face on strategic defenses—especially SDI—from the perspective of both what it ought to do and what it is likely to do in light of the Reagan legacy it will inherit and the political forces that will operate on it.

The next administration will inherit an SDI program that has reached a spending plateau of about $4 billion annually. It also is a program whose technical accomplishments have impressed even some critics while highlighting how hard it will be and how long it will take to achieve a respectable defense capability against a determined Soviet ballistic missile attack. These programmatic and budgetary facts of life probably will be sufficient to preclude massive budgetary cutbacks (much less cancellation) on feasibility grounds alone.

The next president also will inherit an arms control legacy that will bear importantly on the future of SDI. The new president—be he Republican or Democratic—will be reluctant to reopen any questions on which tentative agreement with the Soviets had been reached and will likewise hesitate to accept any conditions that his predecessor had flatly rejected.

The state of negotiations about SDI, however, has turned topsy turvy, with each side having all but reversed its previous position. It is now the Soviets who seemingly are prepared to accept an "agreement to disagree" approach that papers over continuing differences about what SDI-related activities can and cannot be undertaken within the boundaries of the ABM Treaty. Meanwhile, the United States is the country now seeking
an agreement that clearly records a shared understanding of activities that are and are not permitted.

One of the main reasons for this role reversal is that both sides now believe that, even without formal treaty restrictions, a combination of political, economic, and technological considerations may well lead SDI to become moribund in the post-Reagan era. On the one hand, this means that SDI is no longer the roadblock it once was to agreement on START. On the other hand, it means that at least some SDI supporters view the prospect of a START agreement as less a threat to the program than a lifeboat for it. Thus the Soviets—who believe that time may be on their side—are indicating they can accept an ambiguous formula on SDI that leaves its future status uncertain, while the United States—for the same reasons—is suggesting that it no longer can.

The key domestic political choice the next President will inherit on SDI is whether he will commit himself to a course of action leading to the deployment of ballistic missile defenses in some form during the 1990s. Here too, the next president will inherit a political debate that has turned topsy turvy. Until recently, many SDI critics—including some who are widely considered to be clear-eyed political realists—seem to have persuaded themselves that near-term deployment in one form or another is all but politically unavoidable. To that end, others have promoted a scaled-down alternative proposed by Senator Nunn—the Accidental Launch Prevention System (ALPS)—as a lesser evil. At the same time, those Republican candidates who most clearly and enthusiastically endorsed SDI were defeated soundly and early (although hardly because of their support for Star Wars), while the Republican nominee (who also happens to be Reagan’s vice president) has remained distinctly noncommittal about early deployment.

The next administration will face three broad issues as it charts its own course on strategic defense:

- First, it will need to decide whether and how to proceed with the various proposals for early deployment it will inherit.
- Second, it will need to establish a set of principles or guidelines to help shape and explain its decisions on strategic defenses.
- Third, it will need to determine what, if anything, it needs to do about the ABM Treaty.
In its decision about whether to proceed down a path leading to early deployment, as well as in its approach to the broader issue of ballistic missile defenses, the next administration's policy will be shaped by how it responds to three questions:

- Is the goal of strategic defenses to enhance the survivability of our retaliatory forces or do we mean to transcend deterrence by acquiring the capability to defend ourselves? Strategic force survivability can be enhanced in several ways, and a preference for strategic defenses probably should be based largely on cost-effectiveness. However, there are no alternatives to strategic defense if we mean to replace our current strategy of deterrence.

- Are we prepared to proceed with deployments unilaterally—before we have successfully negotiated a "cooperative transition" to a defense-dominant world with the Soviets? If so, it should be in the knowledge that we are embarking on a race that we can neither withdraw from nor lose.

- Are we prepared to proceed with deployments contingent only on the successful negotiation of such a "cooperative transition"? If so, we should realize that it would mean a radical transformation not only of our nuclear strategy, but also of our fundamental security policy and relationships with our major allies.

For many, such implications lead to the conclusion that, at least on strategic grounds, the weight of argument is against a commitment to early deployment. If the next administration agrees, it could instead commit itself to pursuing an aggressive R&D program. The twin goals of such an approach would be to explore promising technologies and to hedge against the risks of militarily significant breakthroughs by the Soviets. This argues for an emphasis on advanced rather than near-term technologies—concentrating on those areas that are not well understood rather than on conventional technologies that we already are reasonably confident do not harbor the potential for Soviet—or American—breakthroughs.

If early deployment of ballistic missile defenses would be unwise, it follows that the next administration should work to keep the ABM Treaty intact and in force: In any near-term contest to test the limits of the ABM Treaty much less a competition between the United States and the Soviet Union that was unregulated by its provisions—the United States almost certainly would come in second. At the same time, there is virtue in working with the Soviets to update the Treaty and to clarify its
terms, so that both sides hold a common view on how it bears on technologies directly related to SDI, and on increasingly similar technologies that are scheduled to be incorporated into other systems (such as early warning satellites).

If the next president chooses to follow this course, he will have to convince the American people that, at least in the short run, "nothing" is better than "something" when it comes to defending against the Soviet nuclear threat. Although that is an unenviable task, it does seem manageable in the prevailing circumstances that have all but removed SDI from the current political agenda.
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I. INTRODUCTION

Five years after the event, the consensus across the political spectrum is that Ronald Reagan's March 23, 1983 "Star Wars" speech transformed the political debate about nuclear strategy and deterrence. Warren Strobel, writing in the Washington Times, observed: "[S]trategic defenses have become a permanent feature of America's national security debate." From the other side of the spectrum, Los Angeles Times reporters John Broder and Melissa Healy concur: "'Star Wars'... has become an undeniable and at least temporarily irreversible part of American reality."

People now talk differently about strategic defenses: Even most critics of the Strategic Defense Initiative (SDI) typically begin their attacks on the Reagan administration program by conceding the need for a "vigorous program of research and development on strategic defenses." Many people now probably also think differently about the issue: The role for and implications of strategic defenses figure prominently in analyses of strategic nuclear modernization, force employment, etc. It is an open question, however, how much future decisions and actions will prove to have been affected.

Indeed, five years after the Star Wars speech there is a wide diversity of views about the future of SDI in the post-Reagan era, ranging from a prediction (or hope) that the program will revert to something like the pre-1983 research effort on ballistic missile defenses, to a belief that political facts of life will push the next president into a program that will lead to near-term deployment of ballistic missile defenses. By the spring of 1988, the latter possibility seemed real enough that SDI critics were brooding about how to limit the "damage" such a course of action would cause. Then the politics of SDI underwent an unexpected and abrupt shift. Only a few months later, even SDI advocates were conceding that near-term space-based deployments were a long shot.

This Note considers the choices the new administration will face on strategic defenses from the perspective of both what it ought to do and what it is likely to do in light of the political forces that will operate on it. Section II surveys the context of strategic defense issues that will affect SDI and be affected by it. Section III assesses the SDI legacy the next president will inherit from the Reagan administration. Section IV considers the choices on strategic defenses the next administration may face and the course of action it should follow.
II. SDI "SPILOVER": THE CONTEXT OF STRATEGIC DEFENSES

The Strategic Defense Initiative is likely to affect related defense issues in at least two ways. First, the Star Wars debate increases the salience of other aspects of strategic defense—e.g., civil defense and air defense. Second, technologies developed as part of the SDI effort may contribute to U.S. capabilities to perform other military missions—e.g., early warning and antisatellite (ASAT) missions. Conversely, the broader debate about strategic defenses and about policies regarding unrelated military requirements can make SDI look more or less attractive.

ASAT

Both sides increasingly rely on space-based assets for a growing range of military and civilian functions. At the same time, SDI research holds open the near-term prospect, if not imminent reality, of substantial improvements in ASAT capabilities: Whether Star Wars proves to be feasible (or even cost effective) or not, we almost certainly are going to acquire a large potential to attack Soviet space-based assets in the process of finding out. We have to assume that the Soviet Union will be doing the same.

The next administration may find itself pulled in two opposite directions. On the one hand, renewed efforts at ASAT arms control may look attractive, both politically and strategically. Even with the growing Soviet reliance on space-based assets, the United States still is likely to remain more dependent on satellites than the USSR. At least as important, U.S. launch capacity will probably be much more limited than the Soviet Union's for the foreseeable future. For opponents of Star Wars, ASAT arms control also promises to constrain SDI in ways that ABM Treaty limits cannot.

On the other hand, there will be a growing temptation to exploit the ASAT spinoffs of the SDI program, both to hold important Soviet military capabilities at risk and to get some pay-back from the substantial SDI investment the new administration will have inherited (and perhaps added to). In any event, continued work on space-based missile defenses by either or both sides will surely complicate, if not preclude, effective and verifiable ASAT arms control.
AIR DEFENSE

The strategic defense issue other than SDI with perhaps the greatest potential to become the focus of political debate during the next administration is, ironically, air defense. First, the SDI debate itself has increased the importance of our vulnerability to air attack and reminded us of the futility of protecting the population against ballistic missile attack only to leave them vulnerable to attack by nuclear-armed bombers and cruise missiles. As General John L. Piotrowski, the commander in charge of air defense of the United States, remarked: "It's not particularly wise to build a house with a reinforced roof and then leave the doors and windows open to intrusion." To the extent that Star Wars remains a live political issue, continental air defense could become one.

Second, virtually nonexistent U.S. air defenses and the emerging strategic arms control (START) agreement (and its counting rules favoring penetrating bombers and, probably, nuclear cruise missiles) interact to increase Soviet incentives to modernize the air-breathing component of their strategic nuclear forces. Even if they do not respond to these incentives in the near term, the possibility that they might do so could well fuel a domestic U.S. political debate, particularly if START or SDI appears to substantially reduce the ballistic missile threat we face.

Third, the Soviet air-breathing threat is, in fact, growing. Perhaps most notable are the evolving Soviet nuclear sea launched cruise missile (SLCM) capabilities. The Soviets already have a modern Tomahawk-like SLCM and are at work on a large, supersonic cruise missile. One concern is that the Soviets might be tempted in some future crisis to use these capabilities in an admittedly risky "leading edge" attack against alert bombers on coastal bases, key command and control and warning nodes, and national leadership assets. Because the number of nuclear SLCMs required for such an attack is so small (perhaps 100 or fewer), START almost certainly will not—and probably cannot—substantially constrain this potential threat. It is, moreover, a threat that will grow as the Soviets eventually field their own "stealthy" air-breathing systems.

Fourth, and perhaps of most direct and immediate concern to the next administration, will be the growing cost and visibility of "air defense" programs already underway, driven in part by the evolving Soviet threat referred to above. The bill for modernizing and upgrading air defense aircraft for the Continental United States (CONUS) has already been largely paid. During the next administration, however, the North Warning System (modernizing the DEW line) is scheduled to be completed at a cost of more than $1 billion, and the early-warning aircraft dedicated to CONUS air defense are slated for a $500 million radar upgrade. The biggest ticket item remaining by
far is the network of OTH-B radars being constructed. The East Coast system is well underway, and the West Coast system is getting started. The Central and Alaska OTH-B systems are scheduled for construction during the next administration.

These are expensive undertakings: Whether he serves one term or two, the next president will face a $1 billion per year bill every year he is in office just from these programs. They will compete with other defense priorities and their advocates in the context of no-growth, or even declining, defense budgets.

For most of these efforts, the term "air defense" probably is a misnomer. They would more properly be characterized as modernization of our "tactical warning and attack assessment" capabilities, which is essential to sustain our strategy of deterrence. Moreover, the goals of the currently programmed improvements—reducing the vulnerability of key assets to surprise attack by means of improved warning, but tacitly forsaking efforts to greatly enhance defenses—probably are about right.

Misnomer or not, these programs could come to be treated in the political debate as "air-defense" improvements. Fairly or not, they probably will be attacked by some critics as expensive undertakings that do nothing to protect the country. Opponents will point out that following the expenditure of several billion dollars over the next few years (and concomitant cutbacks in other defense programs), most places and people in the United States will be just about as vulnerable to attack by air-breathing systems as they are today.

Depending on the course the broader debate about strategic defenses takes, these arguments could fuel an effort to direct substantial additional resources to air defense, even though a highly effective air defense system could cost as much as or more than SDI. It remains to be seen whether this will become an important issue in the strategic debate during the next administration and, if so, how easily a consensus will emerge that we are on the right track. The answer probably turns in part on how well the next administration succeeds in distinguishing a realistic requirement for "tactical warning and assessment" from the probably unaffordable—if not unachievable—goal of "air defense." More important, however, is how the new administration deals with Star Wars.
III. THE SDI LEGACY OF THE REAGAN ADMINISTRATION

This section will consider the next administration's approach to ballistic missile defenses from three perspectives: the Reagan programmatic and, especially, arms control legacy; the competing political forces likely to operate on the next president and how these may combine to frame his choices; and the course that he ought to follow.

THE REagan Legacy: PROGRAM AND BUDGET

   Every year between FY 1985 and FY 1988, the administration's budget requests for SDI, Congressional appropriations for the program, and the difference between the two steadily increased. The result of these interactions has been a rapidly growing, impressively large, and increasingly controversial effort: After final Congressional action on the FY 1989 budget, the Reagan administration will have requested about $22 billion for Star Wars research and Congress will have appropriated about $16 billion during the last five years. With the possible exception of the Apollo program, it has been the largest and fastest growing R&D effort in U.S. postwar experience.

   These expenditures also have produced results. Some of the SDI experiments have impressed even the critics while highlighting how hard it will be and how long it will take to achieve an effective defense capability against a determined Soviet ballistic missile attack. Skepticism about SDI's technical feasibility may have eroded a bit (although at least as much as a result of scaled-back objectives for the program as the technical progress achieved to date). Few minds have been changed about the probable cost effectiveness of the large-scale ballistic missile defenses under consideration. Meanwhile, aside from articles by and for the strategic cognescenti, not much attention has been devoted to whether (or under what conditions) large-scale ballistic missile defenses would be desirable, even if they prove to be both feasible and cost effective.

   Finally, the objectives set by the administration for SDI have been modified, or at least obscured. Reiterations by official spokesmen of the original goal of transcending the current strategy of nuclear deterrence by "rendering nuclear weapons impotent and obsolete" are rarely heard now. As he did in his most recent "State of the Union" address, even President Reagan talks less about the potential for SDI to replace the strategy of deterrence based on the threat of nuclear retaliation than to "offer the world a safer, more stable basis for deterrence." The proclaimed goal for the "Phase I" deployment (to which
approximately half of the SDI budget is now being devoted) is limited to "increasing Soviet uncertainty" by being able to destroy approximately 25–30 percent of incoming Soviet ICBM RVs. As conceived by some defense contractors, the much more modest Accidental Launch Prevention System might be able to intercept the seven to ten RVs carried by a single Soviet missile.

In sum, the next administration will inherit an R&D program for ballistic missile defenses whose funding will have reached a plateau of about $4 billion per year, whose technical accomplishments probably will be sufficient to preclude massive cutbacks (much less cancellation) on feasibility grounds alone, whose potential remains very much the subject of debate, and whose purposes are increasingly hard to pin down.

THE REAGAN LEGACY: ARMS CONTROL

The principal thing the next administration will inherit—in addition to the SDI program itself—is the arms control legacy of the Reagan presidency. One part of that legacy will be the status of the ABM Treaty and various interpretations of it. Without a completed U.S.-USSR arms control agreement, the question of which interpretation the United States plans to abide by, and for how long, is unlikely to be settled during the remainder of this year. The new administration's hand probably will not be forced by any of the SDI tests conducted between now and the election. Secretary Carlucci recently testified that: "There are no tests scheduled for [fiscal year] 1989" that fall under the "broad" interpretation of the ABM Treaty, and that tests currently planned for 1990 and 1991 "probably will not raise the treaty compliance issue." Meanwhile, the Congress has transformed that assurance into a requirement in the course of passing the FY 1989 defense authorization act by extending the current ban on tests outside the "narrow" interpretation.

The major part of the arms control legacy, of course, will be indicated by the status of the Geneva negotiations on January 20, 1989. One theoretical possibility is that a START treaty and a companion agreement on the ABM Treaty/SDI will be concluded before the end of the Reagan administration. Given the strong incentives that Ronald Reagan has to reach a START agreement as a monument to his presidency, that the Soviets have to commit him to such an agreement (if only to inhibit his later criticism), and that the presidential contenders have not to inherit an unfinished piece of business for which they cannot get much credit but could receive substantial blame, this scenario might even seem likely.
There is, however, a shared urge on the part of the Congress and the bureaucracy to "go slow" in the wake of the INF Treaty, while the administration is inclined to defer hard decisions about the remaining issues to the negotiating "end game." These considerations increase the likelihood of a scenario that would leave the negotiations about where they are now, or perhaps would have the two sides narrowing their differences and specifying the points of agreement with increased precision (even to the point of a fairly comprehensive and detailed summit statement signed by the two leaders) but still falling short of a treaty they can sign.

Either way, the incoming administration will face a set of political facts that will be substantially structured by the answers to three questions about the state of arms control negotiations (or agreements) with the Soviets:

1. On what terms regarding the ABM Treaty and the SDI program had the Reagan administration and the Soviets reached agreement?
2. What terms regarding the ABM Treaty and the SDI program had the Reagan administration rejected?
3. What issues regarding the ABM Treaty and the SDI program remained unsettled when the Reagan administration left office?

The new president, be he Republican or Democratic, will be reluctant to reopen any questions in this area on which agreement with the Soviets already has been reached. If he can avoid it, he also will not rush to accept conditions that his predecessor had flatly rejected and open himself up to attacks by conservative critics led, perhaps, by the former president himself. He will instead try as best he can to confine his early arms control maneuvering on SDI and the ABM Treaty to the area bounded by the issues left unsettled by the Reagan administration.

At the moment, the status of SDI and the ABM Treaty in the Geneva negotiations surely is unsettled, if not paradoxical. At the December 1987 summit, the two leaders agreed "not to withdraw from the ABM Treaty for a specified period of time." The Soviets reportedly are insisting on a nine-to-ten year period of nonwithdrawal, starting from whenever the new agreement is signed. (According to news reports, they also have proposed dismantling the Krasnoyarsk radar, which the United States argues violates the ABM Treaty, in exchange for U.S. acceptance of their proposed nonwithdrawal period.) The official U.S. position reportedly has been that the nonwithdrawal period should run through 1994, but there have been some recent rumors that the United States might accept
a ten year nonwithdrawal period dating from the Reykjavik summit. Depending on when a new agreement on ABM nonwithdrawal is completed, the rumored U.S. position could amount to a split-the-difference compromise.

Some U.S. officials, especially among the Joint Chiefs of Staff, have serious doubts about the prospects for a practical SDI system over the next decade and believe that a shorter period of nonwithdrawal would favor the Soviets and their near-term advantages in exploiting nonxotic BMD technologies. These officials accordingly would not object to the Soviet definition of a ten year nonwithdrawal period.

Both sides also concurred in December that the agreement on the ABM Treaty would have the "same legal status" as the START Treaty and the ABM Treaty itself. Finally, and probably most important, the two sides agreed to disagree about which activities would be permitted and prohibited during the period of nonwithdrawal. After some initial efforts to walk back from the December summit agreement, the Soviets reportedly have acceded to the U.S. insistence that there be a separate agreement on Defense and Space. At the same time, they have taken the position that such a separate agreement be confined to a simple reiteration of the "agreement to disagree" recorded at the December summit. In brief, they have offered to accommodate the form, but not the substance, of the U.S. proposal.

Although the United States had previously argued that there was no necessary linkage between the START and the Defense and Space talks, much less between SDI and a START agreement, it reportedly has rejected the new Soviet proposal to leave the boundaries of permissible activities under the ABM Treaty ambiguous by formalizing the "agreement to disagree." The United States instead is now insisting not only that there be a separate agreement on Defense and Space, but also that the agreement record a mutual understanding about what activities would and would not be allowed. For example, the United States has recently floated the idea with the Soviets that tests of space-based "sensors" would be allowed during the period of nonwithdrawal, but tests of space-based "kill mechanisms" would not (a concept whose origins some trace back to earlier Soviet suggestions). Another idea circulating within the administration is that the two sides should agree on a "test range in space" analogous to the ground-based test ranges sanctioned by the ABM Treaty.

Several factors account for this curious turn of events, which discussions during the June 1988 summit in Moscow did little to clarify or advance. First, there is the not unreasonable suspicion that the Soviets might well exploit the ambiguities embedded in an "agreement to disagree" to press their near-term BMD advantages, but that the United
States (particularly under a president less committed to SDI than Ronald Reagan) would not. The result obviously would be to our strategic disadvantage.

Second, there are serious doubts that the Senate would ratify an agreement openly acknowledged to be subject to widely diverse interpretations. In part these doubts can be traced to Congressional sensitivities—stemming from the controversy about ABM Treaty interpretation and questions arising during its recent consideration of the INF Treaty—about the ratification equivalent of buying a "pig in a poke." Perhaps more important, however, is a strong Congressional reluctance to be maneuvered into a position in which it has to police U.S. compliance with the ABM Treaty.

If the Senate ratifies a U.S.-Soviet "agreement to disagree" now, it might soon—and repeatedly—find itself in an uncomfortable position. It might have to choose between (1) approving (and funding) some SDI activity amid Soviet accusations of ABM Treaty violations and threats to withdraw from their START obligations, and (2) opposing the SDI action in question only to be accused of buckling under to Soviet pressure and unilaterally conceding what Moscow could not achieve at the negotiating table.

(Reinforcing this concern are reports that the Soviets have a provision in their version of the proposed START Treaty that would relieve either party of its obligations to reduce strategic offensive weapons if the other signatory "materially breaches" the ABM Treaty.)

Third, there has been a substantial shift in the estimates of SDI's future prospects by its opponents (including the Soviets) and its proponents alike. The Soviets simply seem to be less concerned than they were previously about the potential strategic and military threat posed by SDI. Although they still cling to their "bail out" provision in START and undoubtedly would prefer explicit prohibitions on further SDI work, they no longer insist on explicit Treaty provisions that would freeze or roll back the SDI program. They instead now seem willing to take a chance that the American political process will operate in ways that will achieve much the same outcome, and that even if the new administration were to share President Reagan's enthusiasm for SDI, the new Congress would be unwilling to place START implementation in jeopardy. (This shift in the Soviet position preceded the recent spate of unofficial reports, recommendations, and decisions to slow down, cut back, and reorient SDI. Presumably, these domestic developments reinforce the Soviets' confidence in their predictions about how the U.S. political process is likely to treat Star Wars.)

Domestic supporters and opponents of SDI alike seem to have made a similar (and similarly prescient) forecast. Both groups are more inclined than previously to believe that for a variety of technical, economic, and political reasons SDI will not fundamentally
change the strategic relationship for the foreseeable future. As a consequence, SDI's advocates and critics have flip-flopped in the positions they take on the relationship between an agreement regulating SDI and a START treaty.

For many, one's position on SDI derives from one's position on START. Thus, many SDI critics formerly were inclined to support restrictions on SDI as the price of reaching agreement with the Soviets on a START treaty. Failing that, some would support a negotiated outcome that fissured the relationship between future work on SDI and the implementation of START reductions. Many of SDI's advocates, by contrast, formerly argued that acceptance of any negotiated constraints on SDI or any schemes for a "grand compromise" in Geneva would be tantamount to killing the program. They likewise insisted that an ambiguous agreement about what the ABM Treaty did and did not allow would make START reductions hostage to unilateral restraint on SDI and would be the political equivalent of legal restrictions.

In brief, SDI opponents used to see Star Wars as a potentially insurmountable obstacle to a START agreement but would take refuge in ambiguity about ABM Treaty limits as a better-than-nothing alternative. SDI supporters viewed explicit treaty language regulating Star Wars as a death sentence and a "finesse" approach as being nearly as bad.

Now everything has changed. Encouraged by shifts in the Soviet position, advocates of a START treaty no longer regard explicit limits on SDI as the *sine qua non* of a START agreement. Some supporters of SDI, by contrast, now see the prospect of a START agreement as less a threat to than a lifeboat for the program. What they once feared would be a restrictive ceiling on Star Wars research looks more and more like an opportunity to achieve a floor that will insure against the program's simply withering away after President Reagan leaves office. Consequently, the proponents of SDI more than the advocates of START may now have a stake in explicit treaty provisions that would sanction SDI (including a list of "permitted and prohibited activities" the administration had previously rejected). If this analysis is roughly correct, there are strong incentives both in the administration and on the Hill, as well as among the contenders to become Ronald Reagan's successor, to clarify the future scope and timing of the SDI program *before* the START treaty is signed. Combined with the related incentives to come as close as possible to completing a START agreement before the end of the Reagan administration, it suggests that the parameters of the SDI legacy could be fairly well defined.
THE REAGAN LEGACY: SDI POLITICS

The key issue that the new president will have to face probably will remain open: that is, whether he adopts the goal of deploying ballistic missile defenses some time during the 1990s as his own. Simply put, will the new president advocate a system whose initial operational capability (IOC) is some time in the coming decade, or will he instead confine his support to a "vigorous research and development" effort whose payoff is in some more distant future?

Whatever the next president decides, the actual deployment of any ballistic missile system surely would occur after his first term in office, probably after his second term. That is, the IOC for the Phase I "interim" SDI deployment has been moved back to 1996, with a decision on full-scale engineering development postponed from 1992 to 1994. Both dates show every sign of slipping further as a result of program restructuring, budget cutbacks, and a shortage of heavy lift space vehicles. In principle, a system to implement Senator Nunn's ALPS concept could be ready sooner, but almost certainly not until after 1992. Consequently, much of what the next president decides will take the form of setting the agenda—if not tying the hands—of his successor on the issue of ballistic missile defenses. And it may well be his successor rather than himself who experiences most of the consequences. These timing considerations undoubtedly will affect his calculations of political risks and opportunities.

At least until recently, many political participants, including some SDI critics, believed that the political facts of life alone will be sufficient to drive the next administration in the direction of early deployment because of an assumed necessity to have a concrete program and objective for strategic defenses beyond a commitment to "vigorous research and development." As Congressman Les Aspin has observed: "The Astrodome idea is hopeless . . . but, given the political reality, you have to have something."

Some observers see in Senator Sam Nunn's proposal for ALPS a vision of what a "something" might look like short of SDI but sufficient to respond to the expected "political reality"—a program for near-term deployment that takes account of public concerns about the risks of nuclear war and advantage of maturing SDI technologies while, arguably, living within the ABM Treaty and defense budget constraints. Others look to U.S. cooperation with Israel on anti-tactical ballistic missile (ATBM) defenses as a proving ground that will demonstrate the feasibility and effectiveness of the basic SDI concepts, technologies, and systems.
President Reagan's March 23, 1983, speech obviously tapped a strong popular dissatisfaction with a strategy for survival that depends on the threat of mutual nuclear annihilation: Many Americans believe that the United States already possesses the capability to defend itself against nuclear attack; and, as the public opinion polls consistently demonstrate, many more would prefer that we replace the current strategy of mutual assured retaliation with one that promises mutual assured survival. As long as perceptions of the Soviet threat and concerns about the risks of nuclear war remained high, the conventional wisdom has held that any president who proposed to abandon (or indefinitely postpone) that dream by retreating from a commitment to an early IOC would do so at his political peril. If, as the negotiating dynamics now suggest, the United States need not choose between a START agreement and an SDI program but (at least for the short term) can have both, by this logic his public opinion problem becomes even tougher.

Not least, he would have to persuade the electorate why it was better to continue to "live under the threat of nuclear destruction" (as SDI advocates will try to frame the issue) than move as soon as possible to deploy defenses against that threat. He would have to sustain political support for strategic force modernization, not as an interim solution pending the deployment of defenses but as the continuing cornerstone of our security. Those who are convinced that SDI is both feasible and desirable, as well as those in the bureaucracy and industry with a stake in the continued vitality of a $4 billion per year program, will vigorously argue the opposite case.

If the conventional wisdom was, and remains, correct, that is a heavy political burden for the next administration to take on, even if the next president were persuaded on the technical and/or strategic merits that it would be premature to go for early deployment. The fact that many of the costs of maintaining a commitment to early deployment would not have to be paid until after he left office must surely increase the temptation to defer hard choices and tough battles and instead to "keep faith" with the Reagan dream for SDI.

There are, of course, political forces pressing in the opposite direction. First, popular support for SDI is based largely on the belief that it will defend the American people, not just their ballistic missiles. As it becomes increasingly clear that, at least for the foreseeable future, any system of ballistic missile defenses at best will be able to reinforce but not replace the threat of nuclear retaliation, public opinion may well turn negative (as well as cynical and bitter). Although the current strategy of deterrence and
plans for modernization may not be the beneficiary, popular support for SDI could well be the casualty.

Changing perceptions of the Soviet threat and the risks of nuclear war are at least as important. The INF Treaty, the Gorbachev "magic," and the picture of the American president and Soviet general secretary arm-in-arm in Red Square are rapidly transforming the conventional wisdom and reinforcing the public's intuitive skepticism about the feasibility of SDI.

There are rapidly multiplying signs that politicians believe they can manage and mold rather than simply react to public opinion on SDI. Although the presidential campaign thus far has hardly been marked by great debates on national security policy and it therefore is difficult to discern the candidates' positions on such issues as SDI, it is perhaps noteworthy that only Robertson and Kemp took strong stands in favor of early deployment of SDI. George Bush's position is somewhat more nebulous, supporting continued research and development for now, and deployment if "scientists convince him that it works." (Michael Dukakis's position, predictably, is both less nebulous and less surprising. He calls SDI a "technological illusion" and would return R&D spending on strategic defenses to their pre-1983 levels.)

Meanwhile, the behavior of the current officials suggests some concern that SDI could become an albatross. In 1983, SDI seemed to have long coat tails and all manner of ongoing programs were brought under its politically protective umbrella. By 1988, SDI seems to have contracted what some have described as a bad case of leprosy, and the services are now working hard to disassociate key programs from SDI lest they be tainted.

The current influence of the constituency spawned by SDI spending may be overrated, and the role of those with an opposite view may be overlooked. SDI is indeed something like a $4 billion a year program, but as Gordon Adams has noted: "This isn't a $4 billion elephant in someone's budget; it's more like a string of $300 million camels spread all over the country." A large and growing SDI program may well produce a substantial constituency among defense contractors four or eight years from now. At present, however, it is spread too thin to be much of a factor and probably is seen by many in industry to be more a competitor to existing contracts than the promise of new business. In addition, the recent Pentagon procurement scandals have at least temporarily diminished both the inclination of contractors to try to influence defense programs directly and their political clout.

Inside the government, SDIO has been largely independent of the traditional bureaucratic structure. Initially politically sacrosanct and implicitly promising some
benefits for certain service priorities, it has been the object of increasing efforts by that structure to bring it under control, if not into the fold. One of the first consequences of the 1987 decision to subject the SDI program to the regular acquisition review process was to make any decision (now scheduled for 1994) to move Phase I into full-scale engineering development contingent on demonstrating that the more exotic technology needed for Phase II was in hand. Some observers saw in this action a plan to postpone a commitment on interim SDI deployments almost indefinitely.

The Army and the Air Force (and to a lesser extent the Navy) increasingly see SDI as a program that could wreck their plans, if not the services themselves. In the current era of no-growth defense budgets (or worse), the five year defense program already exceeds projected resources by $200 billion or more. Against this backdrop, the requirement to fund a $10–20 billion program to deploy ALPS would wreak havoc. The requirement to fund a $75–150 billion Phase I deployment (which some outside experts believe could easily cost twice that amount) is inconceivable. If the services initially viewed SDI with a mixture of suspicion and opportunism, they now are universally and openly hostile.

Finally, although the next president might be tempted to pass the hard choices and many of the costs to his successor by committing himself to the goal of early deployment, he cannot escape paying at least some of the bill. In part, the costs would be monetary. A commitment to an early IOC almost certainly would require a steadily increasing SDI budget. In part, the costs would be political. Such a commitment would keep the controversy about ABM Treaty compliance on the political agenda. Depending on the timetable for testing (as well as the eventual outcome of the current Geneva negotiations), the next president might well face a choice between delaying the deployment to which he had committed himself, and crossing the ABM Treaty line. It would cast a cloud over the prospects for completing START and/or negotiating "START II" and other arms control agreements. Broader political relations with our allies as well as the Soviets also would be likely to suffer.

In sum, the next president is likely to find himself pushed and pulled by opposing political forces, each of which is volatile and whose interactions are unpredictable. Indeed, in many respects the next administration will inherit a political debate about SDI that has turned topsy-turvy.

Until very recently, many SDI critics behaved as though they had persuaded themselves that near-term deployment of ballistic missile defenses in some form was politically unavoidable. To that end, others have sketched a scaled-down alternative to
SDI as a lesser evil. At the same time, those Republican candidates who most clearly and enthusiastically endorsed SDI were defeated soundly and early (although hardly because of their support for Star Wars), while the Republican nominee (who also happens to be Reagan's vice president) has been distinctly noncommittal about early deployment. Meanwhile, the Geneva negotiations have become more likely to be the salvation than the undoing of SDI in the post-Reagan era.

Indeed, some time during the spring and summer of 1988—in the midst of the presidential primaries and the run up to the Moscow summit—SDI all but disappeared from the political agenda. Its disappearance was abrupt, as though a bubble had burst. But the sound it made as it dropped off the agenda was more like a whimper than a bang. In particular, the goal of deploying "Phase I" space-based missile defenses during the 1990s—the centerpiece of the SDI program earlier in the year—has been all but dismissed.

No matter which route the next president takes on ballistic missile defenses, he will encounter strongly held but opposing views. However he chooses, he will probably make new friends and new enemies. He also to some extent will be hostage to Soviet behavior and the shifting environment of superpower relations. Just as the decline in the importance of SDI as a domestic political issue has occurred in the context of recent improvements in those relations, a sudden downturn could lead to a resurgence of interest in strategic defenses. In particular, if a new debate erupts about a long-term Soviet program of large-scale ABM deployments, public opinion will be catalyzed and SDI will skyrocket back to the top of the defense agenda.

The obvious question is whether the next president will be skillful—and lucky—enough to take advantage of these competing and shifting political considerations to maneuver his way toward his own objectives for strategic defenses. This in turn raises the question of what those objectives should be.
IV. BALLISTIC MISSILE DEFENSES IN THE NEXT ADMINISTRATION

The next president will face decisions about two interrelated subjects: the SDI program and the ABM Treaty. Virtually everyone is in favor of a continued program of research and development, and at least as many now doubt the feasibility of anything like an "Astrodome" defense for the foreseeable future. The question is what course should the next president chart between these two boundaries.

As suggested above, his core decision about whether to maintain the present administration's plan to deploy some form of BMD system during the coming decade will both flow from and shape his choices about the appropriate near and longer term objectives for ballistic missile defenses, the appropriate R&D priorities, and the appropriate level and allocation of resources devoted to strategic defense activities. His decisions about these issues, in turn, will shape his approach to the ABM Treaty (within the parameters set by the Reagan arms control legacy).

NEXT STEPS ON SDI

As the burgeoning weight of opinion suggests, it is difficult to discern the strategic benefits that would make Phase I deployments worthwhile during the 1990s. The price tag is breathtaking, the remaining technological and engineering challenges daunting, and the promised strategic payoff—increasing Soviet uncertainty—problematical. Indeed, plausible Soviet countermeasures and expanded BMD in response to (or anticipation of) "interim" Phase I deployments could well lead to increased U.S. uncertainty about the credibility of its retaliatory capabilities, as well as to an offense-defense arms race that leaves both sides worse off.

It is likewise unclear that the Phase I deployments envisioned are a technically necessary or desirable stepping stone, in terms of either their capabilities or their fairly conventional technology, to the robust defenses planned for Phase II and beyond. The plan to deploy "Phase I" of SDI beginning in the 1990s should be put on the shelf. Reinforced by recommendations such as those contained in the May 1988 report of the Defense Science Board's Everett panel, the Reagan administration itself seems to have all but reached the same conclusion. According to some reports, Secretary of Defense Carlucci believes that deployment of space-based defenses should be deferred until "well into the next century."
In part because of its apparent near-term feasibility and lower cost than SDI, the political rationale for ALPS is more appealing. Whether such a system makes sense on the technical and strategic merits, however, is an open question. Such a system would, in principle, be able to intercept one or two (but almost certainly not several) errant ICBMs or SLBMs targeted against any point in many—but not all—of the 48 contiguous states. It would also offer some level of such "nationwide" protection against third country attacks, if the third country in question used ballistic missiles rather than aircraft or other means of delivery. If appropriately designed and sited, ALPS could help enhance the survivability of critical national leadership and command and control assets (although probably at the expense of some of its capabilities for "nationwide" coverage). Finally, it could give the United States the kind of "operational experience" with ballistic missile defenses that the Soviets have been able to derive from their Moscow ABM system.

A very modest ALPS, however, would cost at least $8–10 billion and perhaps considerably more. It is an open question whether the insurance it would provide against a fairly narrow range of threat is worth the cost of the premium. Given its dependence on space-based and ground-based early warning assets for surveillance and cueing, it also would push up against, perhaps over, the line drawn in the ABM Treaty on "ABM radars." If the goal of providing nationwide coverage is defined to include protection of the east and west coasts from an errant SLBM RV, then ALPS probably would require more missile sites than the single one currently permitted by the ABM Treaty.

Whatever we decide about ALPS’s coverage, we would still need to face the issue of its desired capabilities. Should we be satisfied with a system that could handle the seven to ten RVs carried by a single missile, or should ALPS be able to intercept more warheads—e.g., ten ICBMs or a "boattail" of SLBMs? How, in brief, do we select a stopping point for sizing ALPS before it becomes indistinguishable from Phase I or other SDI variants, and how much we want to renegotiate the terms of the current ABM Treaty in order to accommodate such a system?

Although most plausible configurations for ALPS would require us to reopen the ABM Treaty, not all ballistic missile deployments (BMD) would. If we really value "operational experience" with an ABM system, one deployed at Grand Forks Air Force Base could provide it, probably at less cost, and clearly within the boundaries of the ABM Treaty. If we assign high priority to the defense of critical warning and command assets (and assuming a successful renegotiation of the 1974 Protocol to the ABM Treaty), we could deploy a dedicated ABM system around Washington D.C., again probably at less cost than ALPS, and clearly within the boundaries of the ABM Treaty. (The political
obstacles to giving preference to the defense of elected officials over those who elected them would, of course, persist.) According to some reports, Secretary of Defense Carlucci, having ruled out space-based defenses, believes the real choice is now a system of ground based interceptors based either at Grand Forks or around Washington.

In sum, although ALPS might for political and strategic reasons be preferred to Phase I of the SDI program, it remains to be seen whether (1) it would require us to renegotiate the terms of the ABM Treaty and, if so, whether we or the Soviets would gain more from the new terms; (2) whether the political system judges the limited protection ALPS would provide to be worth the economic and strategic costs; and (3) whether it would be preferable to an alternative Treaty-compliant BMD defense with different or narrower objectives. The same questions, and probably the same answers, apply to any proposal to deploy ballistic missile defenses in the 1990s. A consensus appears to be emerging that probably no BMD deployment option makes good strategic or technical sense over the next decade, and no deployment option requiring renegotiation of the ABM Treaty makes good strategic or political sense.

More generally, the next administration should be guided by three principles as it mulls whether to commit itself to deploy ballistic missile defenses. First, it needs to be clear about the objectives of such deployments. Do we mean to strengthen deterrence and strategic stability by enhancing the survivability of our retaliatory forces, or do we mean to transcend deterrence by acquiring the capability to ensure our survival? The former kind of objective can be addressed largely as an analytical matter of comparing the cost-effectiveness of alternative means for increasing the Soviet price to attack (or, equivalently, "increasing Soviet uncertainty"). Based on the analysis to date, strategic defenses are unlikely to emerge as the preferred option for the foreseeable future, at least if offensive arms control agreements succeed in imposing substantial constraints on each side's ballistic missiles. (Ironically, arms control limits on ICBMs also are likely to be an indispensable condition for effective ballistic missile defenses.)

The goal of transcending our current deterrence strategy and its core threat of nuclear retaliation can only be achieved by strategic defenses. It is the vision projected by the original 1983 Reagan speech announcing SDI. It is the promise of being able to abandon our indefinite dependence on a strategy that, given enough time, just might succeed in blowing up the world. The problem is that it might not be achievable in any meaningful sense, and surely not in ways the next administration can forecast.

If the next administration does decide to pursue a program leading to early deployment without having first negotiated a "cooperative transition to a defense
dominant world" with the Soviets, it should do so in the knowledge that it is starting a race it may not be able to withdraw from and cannot afford to lose. Such a unilateral transition to dependence on strategic defenses is littered with all manner of instabilities. Possible Soviet countermeasures (to say nothing of ABM breakout) pose the risk of leaving us worse off than we are now. More important, neither side could permit the other to race ahead because the winner of a defensive arms competition would be able to achieve real strategic superiority (the ability to destroy an adversary while remaining substantially immune from his retaliation). Consequently, if the United States chooses to start that race, it had better be in it for the long haul; but the history of our previous forays into air and missile defense does not convey great confidence.

If the next administration seeks to negotiate "a cooperative transition" in order to avoid these risks, it should realize that it is proposing a radical transformation not only of our nuclear strategy, but also of our fundamental security policy and relationships with major allies in Europe and Asia. It may be a commonplace to observe that we depend on nuclear weapons to deter not only nuclear but conventional aggression, and not only aggression against ourselves but also against our allies and interests around the world. But if we manage to reach agreement with the Soviets on a "cooperative transition," it would be tantamount to conceding to them their goal of neutralizing the nuclear dimension in the East-West balance.

Such an agreement might facilitate the achievement of an American capability to defend itself against nuclear attack, but perhaps at the price of sacrificing its ability to deter Soviet aggression and counter Soviet military intimidation elsewhere in the world. Moreover, the promised benefits of such an agreement would necessarily be in the future, but its security and political costs would begin to be felt almost immediately. In particular, it would transform what is now a Western strategy based on shared security interests and risks into one in which those interests were competitive. (Indeed, these prospects might seem sufficiently attractive to the Soviets that it would be as foolhardy simply to rule out the possibility that they might be interested in some form of a "cooperative transition." ) There may be a point at which negotiated reductions in the offensive forces of the two superpowers become so deep that mutual defenses appear to be both a prudent hedge against cheating and a necessary counter to third country nuclear forces. That point, however, is likely to be some considerable distance in the future.

These three principles describe a daunting set of risks, problems, and controversies. While some may be unavoidable, it is hard to see why—politically or strategically—the next administration would want to take the initiative to raise and
confront them by committing itself to early BMD deployments. The better course, surely on the strategic and technical merits and probably on the politics, is the one proposed by Senator Sam Nunn in his January 1988 Arms Control Association speech (which, somewhat ironically, also included the ALPS proposal). That is, the next administration should instead commit itself to pursuing an aggressive R&D program. The twin goals of such a program would be to explore promising technologies and to hedge against the risks of militarily significant Soviet breakthroughs. No particular deployment goal or timetable would be projected.

This argues for an emphasis on advanced rather than near-term technologies, probably with an emphasis on the development of sensor, information processing, and communications capabilities as recommended by the Everett panel. We are reasonably confident now that conventional technologies do not harbor the potential for a dramatic Soviet (or American) breakthrough in ballistic missile defenses, and that an appropriate U.S. response to a Soviet ABM breakout in the near term probably would be in the area of offensive countermeasures. Conversely, we do not know enough about the potential of advanced technologies to be able to identify which are the most promising, or threatening. Our goal, therefore, should be to improve our knowledge over time about what we should and should not be worried about with respect to future Soviet breakthroughs and what appear to be the most promising paths for the United States to follow.

Decisions about funding levels for such R&D programs are, of necessity, fairly arbitrary, but the kinds of activities entailed by the proposed approach will be expensive. It is hard to imagine research on strategic defenses falling much below pre-1983 spending. It is nearly as difficult to imagine being able to afford a $4 billion per year expenditure in the current defense budget environment. A plausible and likely level of spending will probably be somewhere between these two boundaries.

**NEXT STEPS ON THE ABM TREATY**

If early deployment of ballistic missile defenses would be unwise, it follows that the next administration should work to keep the Treaty intact and in force: In any near-term contest to push at its edges—much less one unregulated by its provisions—the United States almost certainly would come in second. But if the Reagan administration's assertion of its "broad interpretation" of the ABM Treaty could most charitably be characterized as a self-inflicted wound, it did highlight the need to update and clarify the provisions of that agreement.
The simple facts are that the terms of the ABM Treaty are ambiguous in important respects, and especially with respect to technologies that have been developed or have substantially evolved since 1972. This applies both to technologies directly related to SDI and those scheduled to be incorporated into other systems (such as early warning satellites). The minimum goal of an effort to "clarify" the ABM Treaty would be to insure both sides acknowledge that it does not cover the latter kinds of systems. To sustain a "vigorous R&D program on SDI" or to deploy the more likely forms of ALPS might require that the terms of the Treaty be "updated" as well as "clarified."

These goals will be as difficult and risky to achieve as they are easy to state. (Although surveillance is fairly clearly inside the boundaries of the ABM Treaty and kill assessment is fairly clearly outside, such functions as tracking and discrimination fall into a very gray area.) The status quo, however, could soon become untenable as essential systems unrelated to SDI become embroiled in disputes between the superpowers (and between the president and the Congress) about what is and is not allowed by the ABM Treaty. A domestic political consensus about strategic defenses based on a vigorous R&D program or a deal on START contingent on the right to test and deploy certain kinds of "sensors" in space could raise the same dilemma.

Current circumstances, including the Soviet stake in a prompt conclusion to a START treaty and in improving the predictability of strategic modernization on both sides, may favor the achievement of these admittedly ambitious goals of "clarifying" and "updating" the ABM Treaty. In any event, if the current Geneva negotiations do not do so, it will be up to the next administration to complete the task.

**POLITICAL MANAGEMENT**

If the next administration chooses to follow this course, it will have to take on the job of redefining the objectives of SDI and redirecting the program. The former will require the next president to persuade the American people that, at least in the short run, "nothing" is better than "something" when it comes to defending against the Soviet nuclear threat. Although one cannot envy him that task, it does seem to have become much more manageable now that SDI has virtually disappeared, at least for now, from the political agenda. (Indeed, some cynics might argue that if it were not for the residual anxieties of the SDI critics and the perverse dynamics of the Geneva negotiations, SDI would quietly recede into history as another curious episode in U.S. defense policy and politics.)
It also will help that the new president would be proposing a "positive" program, consisting of a well-funded and aggressive R&D effort and emphasizing future technologies that play to America's strengths and constitute the best hedge against unexpected Soviet threats. In making a virtue of necessity, he may also find himself working to "modernize" the ABM Treaty and relieving Congress of the burden of divining which actions are and are not in compliance with it. Finally, he may find himself overseeing the completion of a START agreement that also provides an arms control sanction for continued work on strategic defenses and the pursuit of the dream of transcending nuclear deterrence.