AMERICAN STRATEGIC NUCLEAR WEAPONS POLICY, 1975-87:
A CRITIQUE OF THE CONSERVATIVE PERSPECTIVE

by

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Abstract

This thesis examines and critiques conservative prescriptions for American strategic nuclear weapons policy between 1975 and 1987, with a specific focus on the programs and priorities of the Reagan Administration. The essay will use a tendency analysis approach to assess the conservative view within the context of overall the American nuclear debate. In the past decade, this debate has become increasingly polarized, with the various schools of thought moving further apart from one another on the central questions of American nuclear weapons policy.

The conservative view calls for the United States to secure nuclear escalation dominance over the Soviet Union, which conservatives argue, is essential to the success of American coercive diplomacy on behalf of those nations to which Washington extends the deterrent effect of its nuclear arsenal. During the Reagan administration, this has led to the pursuit of extensive counterforce capabilities, enhanced strategic ASW, and a renewed interest in strategic defence.

However, conservative policy prescriptions are based upon an analysis of American national security and nuclear weapons which has, as its principal focus, the military aspects of nuclear weapons policy. What is largely absent from the conservative analysis is a sense of how other factors, including Alliance relationships, diplomacy, and domestic considerations, can affect containment policy. The current conservative program is destined to be a policy failure, on its own terms, because it overestimates the political, economic, organizational, and technical capacities of the United States to field a nuclear
posture capable of conducting extensive nuclear operations while holding American losses to tolerable levels.

The current strategic condition of Mutual Assured Destruction is very robust, and poses severe operational obstacles to the development of a high-confidence damage-limiting posture. As a matter of policy, the pursuit of escalation dominance has, as its focus, objectives that are too singular and inefficient for the proclivities of the United States in the post-Vietnam period.

If anything, the drive for nuclear superiority in the Reagan administration has contributed to the decline of American power, especially as manifested by the current budgetary and trade deficits. In a larger sense, conservative program may be ill-suited to a politico-strategic culture like that which exists in the United States. The substantial defence budgetary increases of the early Reagan period could have been employed far better if the Administration had set more marginal objectives for its strategic nuclear program. Instead, the Administration sought nuclear policy objectives which were unnecessary, operationally unreachable, politically divisive, and managerially unsound.

Reductions in defence spending seem to be a likely feature of the post-Reagan period. The paper concludes with two recommendations for American strategic policy. First, the United States should delegate more of the Western security burden to its allies, especially the nations of NATO-Europe, and Japan. Second, American nuclear planning should conform to a doctrine that stresses the capability to execute Limited Nuclear Options (LNOs). Such a posture might not be completely satisfying to either the liberal or conservative factions of the debate, but would seem to be the best way of maintaining a viable political coalition which can sustain efficient, long-range planning for American strategic nuclear forces.
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I. INTRODUCTION

This thesis assesses contemporary conservative views of American nuclear weapons policy, with a specific focus on the programs and priorities of the Reagan Administration. The conservative program is a marked departure from the policy initiatives of the preceding two decades, made all the more striking by the polarized state of the current American nuclear weapons policy debate. The essay will conclude that the conservative view, as exemplified by the defence program of the Reagan Administration, will be a policy failure on its own terms because it overestimated the American capability to field a nuclear posture that could hold out the prospect of meaningful damage-limitation.

Tendency Analysis: Criticisms and Defences

This thesis will use a tendency analysis approach, assessing the strategic debate of the past decade by dividing it into various 'schools of thought' on nuclear weapons policy. The analytical precedent for this approach, Robert Levine's 1963 study, *The Arms Debate*, provided the initial inspiration for this thesis.¹ In late-1987, Levine returned to the same subject matter, after an absence of nearly twenty-five years, in a Rand Report which provides an interesting comparison with this essay.²

Levine's model seeks to determine the underlying concepts of various schools of thought within the arms policy debate. The analysis is not a psychological study of decision-makers; rather, it examines the logical structure of a policy position, inferred from the arguments that are mobilized on its behalf.³

Arms policy is divided into separate schools of thought based upon the
nature of each school's policy recommendations, which differ in terms of degree and purpose. These recommendations are, in turn, a product of two features: analyses and values. Analyses comprise a set of perceptions about the current state of the world. Values denote desirable features in future states of the world. Recommendations, then, are prescriptions for policy that seek to realize values, with an eye to what is likely to be feasible.

In American debates about nuclear weapons policy, two values are prominent. One value Levine refers to as anti-communism—more specifically defined, this value is a desire to contain Soviet expansion and influence. The other value is a sentiment that Levine deems anti-war: the desire to avoid war, and especially nuclear war.

Values and analyses are perceptions about the very fundamentals of security policy: they are the actor's beliefs about the nature of international politics, American national security, and nuclear weapons. Some key issues in determining an actor's values and analyses are reviewed in Table One below.

Nuclear Weapons and International Politics. Key issues in this regard would include:
- The nature of international politics (realist, liberal, integrationist, globalist).
- The impact of nuclear weapons on international politics (irrelevant, crucial).

American National Security. Important issues in this area include:
- American national goals (survival, prosperity, well-being)
- Threats to American national security (Soviet Union, internal collapse, nuclear war).
- Image of the Soviet Union
- Role of nuclear weapons in US foreign policy

Views On the Preceding Consensus
- Adequacy of the Assured Destruction paradigm
- Stability theory
- Arms Control

Table I: Key Issues For Determining Values/Analyses
Recommendations are a fusion of values and analyses: they encapsulate how a speaker in the debate perceives the environment, and the priorities the speaker has for altering this environment. In this case, recommendations take the form of policy prescriptions that will be consistent with the speaker's preferred American strategic posture. Recommendations can either be marginal (advocating only small, relatively discrete changes in existing policy) or systemic (advocating large-scale departures from current policy, effecting change in many areas). Values, as noted, can be primarily anti-war, primarily anti-communist, or some composite of the two that denotes the middle school. This three-by-two classification yields the typology shown in Figure One below:

| Anti-War Marginalists | Anti-War Systemists | Analytical Middle Marginalists | Balanced-Value Middle Marginalists | Anti-Communist Marginalists | Anti-Communist Systemists |

**Figure 1: Levine's Typology of the US Arms Debate**

Levine's approach imposes a logical order on the competing prescriptions for American nuclear weapons policy. The various schools of thought are
portrayed as evolving categories in an ongoing doctrinal debate. Strategic nuclear doctrine is a statement about how the United States should view the relationship between nuclear weapons and the nation's broader foreign policy objectives. To some extent, nuclear doctrine is a matter of logic: starting from particular premises, the various schools of thought proceed to argue for their particular recommendations in a way that is internally consistent. Ultimately, however, many if not most of the positions rest on premises that are not testable, and thus not provable. To the extent that this is so, doctrinal debates stand comparison with theological disputes.\(^7\)

Nonetheless, strategic doctrine is important for a number of reasons, not the least of which is that it represents a coherent statement that relates nuclear weapons to national purpose. While actors may each have their own particular view of a strategic issue, strategic doctrine impacts upon debates over specific issues (such as appropriations or the prospective ratification of an arms control treaty) because each individual policy actor requires the support of other actors in order to secure its own objectives.\(^8\) It could be that differences over larger questions of strategic doctrine have been brought out most by recent prominent debates over SALT II, the MX/Midgetman program, the B-1 bomber, and the Strategic Defense Initiative, but quite similar differences of opinion are manifest in the less visible debates over the Trident submarine and missile system, command and control programs, and the competing proposals put forth for strategic nuclear arms control. In each case, disagreement between proponents and opponents of a particular policy position is underpinned by differing views of American strategic problems and priorities.

Of course, the strategic posture that has been passed on to current analysts is not entirely the product of rational planning. Perhaps the most obvious
manifestation of non-rational influences on nuclear weapons policymaking can be seen in the evolution of the 'Triad'. The maintenance of three separate basing modes for American nuclear forces was not as much the product of conscious strategic design as it was the outcome of bureaucratic politics. The strategic benefits of the Triad were discovered later. Other aspects of the current American strategic posture show the influences of non-rational factors in the policymaking process as well, such as the evolution of the SIOP, and the lack of attention paid to command and control issues. Clearly, the 'pulling and hauling' of bureaucratic politics shape, in some measure, the strategic nuclear posture. A key question becomes: to what extent do parochial interests shape policy, rendering a coherent sense of strategic doctrine largely irrelevant?

Lawrence Freedman points out the central problem with this view of the policy process, one which he sees as endemic to the bureaucratic politics paradigm:

The central flaw in the logic/politics dichotomy is that it involves a narrow definition of politics. The preoccupation with visible competition has resulted in consistent failure to identify any pattern of political relationships intrinsic to the system.

The institutions which are deemed to compete for their own narrow interests, whether one refers to the Office of the Secretary of Defense (OSD), the military services, the Department of State, or the Arms Control and Disarmament Agency (ACDA), are political institutions. As Freedman notes:

In the perceptions of the actors personal needs are likely to be harmoniously linked with those of the country...Halperin has a concept of 'organisational essence' which might be useful here. This essence is 'the view held by the dominant group in the organization of what the missions and capabilities should be.' Unfortunately this concept is too introverted. It does not allow for the organisation to be located within the complex inter-dependencies which make up the policy-making environment. In comprehending the environment in which it has to operate, the organisation has to address itself to the whole set of shared assumptions, images, and facts that determine the prevalent concept of the national
interest'. Though the actor's (be it an organisation or an individual) perspective on the totality of policy and policy-making may have parochial origins, and may display selective inattention to data, tortured reasoning and a peculiar slant on the world, it nevertheless will conform to a 'rational' model in which means are related to ends in an internally consistent framework.

More to the point is that the aims of these institutions reflect a broad political consensus in the United States on a variety of political issues. Bureaucratic motivations for shaping policy in a particular way are most prevalent at the margins of a particular issue. For example, no one within the American strategic community doubted the need for a new Fleet Ballistic Missile (FBM) submarine to follow the Polaris/Poseidon hulls. The focus of the Trident debates centred on the specific details of the program: the size and sophistication of the vessel, the urgency of its development, and how the Navy handled its relations with the project's primary contractors. So, as Freedman suggests, the range of issues in which parochial bureaucratic interests can influence the shape of policy is restricted by a political consensus on broader aspects of the issue.

The American Debate: Schools of Thought

In Levine's parlance, the American arms debate is made up six schools of thought: anti-war marginalists, anti-communist marginalists, anti-war systemists and anti-communist systemists. In addition, there are two types of middle marginalist: a balanced-value group (whose values and analyses are split between anti-war and anti-communist orientations), and the very interesting analytical middle marginalists, a group whose values are primarily anti-war, but whose analyses are primarily anti-communist.

A useful way to conceive of these tendencies is simply to consider them part of the nation's 'strategic culture.' This set of attitudes on military questions is
part of a country's larger 'political culture,' an amalgam of behaviours and attitudes that are the product of a nation's history. In the US strategic debate, these tendencies persist just as other foreign policy themes persist, such as the competing views on alliances, or the issue of maintaining an Atlantic, Pacific, or Western hemispheric orientation in military commitments abroad. These latter notions are, in turn, related to particular views of the American role in the world, and of the United States itself. In this regard, the anti-communist school bears close relation to 'conservative' views, while its anti-war counterpart represents 'liberal' concerns. The balanced-value school corresponds most closely to the general definition of 'centrist', while the analytical middle-marginalist could be called 'neoliberal.'

Levine contends that marginalists have dominated the US policymaking process, with systemists being effectively relegated to non-governmental positions in the debate. This is not to suggest that systemists are irrelevant, for they can be of some influence, especially on the larger public. Anti-war systemists like Bertrand Russell and Jonathan Schell, or anti-communist systemists such as the Coalition for Peace Through Strength or the Heritage Foundation, may not make recommendations that would, in their pure forms, be seriously entertained by American officials, but they can capture the imagination of the public, and thus do influence the course of the debate.

Nevertheless, the American national security policymaking community --an amalgam of legislators, bureaucrats, the armed services, private think tanks, and academics-- is largely marginalist in outlook. Between 1960 and 1975 the American strategic policymaking environment was characterized by what Levine refers to as 'the marginalist consensus.' In brief, between 1960 and 1975, a coalition of all three marginalist schools of thought that sought to
manage American national security by modernizing the American nuclear deterrent, while simultaneously participating in formal arms control negotiations with the Soviet Union, enjoyed an environment that was favourable to both.

The period during and immediately following the Vietnam War is perceived to be a stormy one for the national security policy debate as a whole, but policy debates on strategic nuclear forces and Soviet-American arms control were much more placid. There were much more divisive debates about conventional forces, and all three services (especially the Navy) suffered from long delays in the replacement of older equipment. By contrast, the only policy debate in the area of strategic nuclear weapons policy that brought out deeply-rooted differences of opinion was the ABM debate of the late-1960s.

As long as the modernization of the strategic nuclear forces remained incremental (such as the gradual introduction of more accurate ICBM warheads and cruise missiles, as well as the almost 'casual' development of the Trident program), appropriations were readily forthcoming. By and large, the conservative claim that the American military had suffered from a 'decade of neglect' did not apply to the steady, if gradual pace of strategic nuclear programs between 1965 and 1975. It could be the case that the strategic debate of the early-1970s was relatively placid because the Nixon-Kissinger administrations sensed a hostility toward military expenditure, and responded by maintaining a strategic modernization program that was deliberately incremental in scope. However, the lack of divisive debate can also be attributed to to other factors.

In understanding the consensus that prevailed between 1960 and 1975, it is important to appreciate that a number of features, peculiar to the environment
of the time, made for the continued viability of the detente coalition. The foremost characteristic of this period was the improvement in US-Soviet relations. After a series of intense crises over Berlin and Cuba, Washington and Moscow embarked on a more cooperative relationship. Despite momentary upsets (such as the Soviet invasion of Czechoslovakia in 1968, or the Yom Kippur War of 1973), the superpower detente flourished, reaching its apex with the conclusion of the SALT I Accords in 1972.

Although the predilections of the Kennedy, Johnson, Nixon, and Ford Administrations show some differences, each found detente and arms control to be a suitable way of advancing American foreign and security policy objectives. McNamara was animated by the fear of an action-reaction arms race; one in which the usable advantages to either side would indeed be ephemeral, at best. Kissinger's diplomacy seems to have had, as its central objective, the constraint of the Soviet Union as American capabilities declined. Clearly, these motives are not exactly the same. But there was sufficient common ground between them (captured, perhaps, in a notion of 'threat control') so as to allow the program of detente to be acceptable to all four Administrations through this period.\textsuperscript{16}

After 1975, however, detente started to falter. Progress in arms control was not readily forthcoming (despite the 1974 Vladivostok accords), and the political relationship began to deteriorate in other areas. Some Americans looked askance at a continuing Soviet buildup in conventional as well as strategic arms, Moscow's objectionable human rights record (despite the signing of the Helsinki agreements), and Soviet intervention in the Third World. The Soviets, for their part, saw their own buildup as mere modernization, which suggests just how far apart Soviet motivations were from the more optimistic hopes for stability entertained by American liberal arms controllers. The Soviets
also found American moralizing about human rights to be irritating and 
hypocritical, and saw their own involvement in the Third World as the 
legitimate exercise of a great power’s perrogative. By 1979, the relationship 
had collapsed completely and a new round of hostility came to characterize 
US-Soviet relations. At that point, the detente coalition in US domestic politics 
was no longer viable.\textsuperscript{17}

Table Two (Pg. 11) shows the state of the Soviet-American strategic nuclear 
balance through this period.\textsuperscript{18} The quantitative balance (in terms of strategic 
launchers) favoured the US through much of this period, and the US retained 
certain qualitative advantages after 1975. This situation had a significant effect 
on the character of the American debate.

The period of American nuclear superiority, particularly during the 
early-1960s, is often credited with making possible a so-called 'golden age' of 
American atomic diplomacy. However, the character of American nuclear 
superiority may have been more apparent than real. For the United States to 
have threatened the Soviets with first use, even during the early-1960s, would 
been for Washington to run severe operational risks. The strengths and 
weaknesses of the American nuclear arsenal through this period are only 
 imperfectly understood, but it is apparent that American strategic forces were 
not configured for either discriminate use or protracted nuclear war. As the 
Soviet strategic reserve began to increase (especially, as the table shows, after 
about 1970), meaningful damage-limitation became increasingly unlikely. 
Indeed, given the absence of a capable continental air defence, American society 
has been quite vulnerable to nuclear devastation since the late-1950s. Thus, 
the onset of strategic parity neither introduced American vulnerability, nor the 

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**a:** Deployment figures from *The Military Balance: 1971-72* and *1977-78*. (London: International Institute of Strategic Studies: 1971, 1977). Figures in **bold** face indicate the particular year when Soviet deployment comes closest to parity; in the case of ICBMs and SLBMs further deployments would exceed American totals.

**b:** Includes only operational aircraft with a range of over 9,000 km. Thus, American totals do not include B-47s, nor do they include B-52s and B-58s in storage; Soviet totals are less some 50 Tu-95 and My-4 aircraft converted to a tanker role.

**c:** Data here is uncertain; IISS publications refer to Soviet SLBM totals for these years in this manner to the present day.
conceptual difficulties such vulnerability poses for flexible response —it merely sharpened Western perceptions of these problems.19

To put it another way, less attention was paid to the coherence of the US strategic posture during the 1960s because American nuclear superiority seemed to make this less urgent. As such, it was easier for the marginalist coalition to hold together; American strategic problems seemed tolerable. With the onset of strategic parity, disputes about the finer points and problems of American strategic doctrine were thrown into much sharper relief. Thus, we should not be surprised to find that more conservative members of the coalition found the loss of superiority (and the onset of what they would call 'clinging parity') to be very troubling. This would lead them to make policy prescriptions which quite markedly departed from the parameters of the consensus.

Through the 1960s, liberals in the marginalist coalition, had not been forced to assess the adequacy and coherence of American doctrine. The break-up of the detente consensus forced these groups to examine their own strategic preferences --and here too, policy prescriptions began to have less in common with those of their conservative opposite numbers.

What we have seen since 1975 has been nicely summarized by Leslie Gelb:

Arms control suffered from the collapse of the political middle ground, the traditional home of the pro-arms-control camp. The middle was sacked first by the political left over the Vietnam war, and then by the right, because of disillusionment with detente...Centrism, bipartisanship and pragmatism no longer dominated the politics of American foreign policy. The New Left and the far more powerful coalition of conservatives and the New Right began to hold sway. Legislators with rigid ideological convictions began to people Congress in greater numbers...polarization spread.20

As Gelb notes, the dominant faction since 1975 espouses a strident sort of anti-communism, a type that has strong systemic tendencies, especially when seen in the light of the preceding consensus. Since the late-1970s, conservative
spokesmen have ventured the following judgements about American strategic nuclear policy:

- American defence policy in the 1970s can be characterized by the phrase, 'a decade of neglect.' American policymakers, entranced by detente and arms control, failed to respond to an unremitting Soviet buildup in nuclear as well as conventional forces. The current state, and immediate prospects of the strategic nuclear balance are profoundly disturbing and may foreshadow an extended period where American military prowess is precariously inadequate to the task of ensuring foreign policy commitments that are essential to the security and welfare of the United States.

- The United States should adopt a posture that allows for the rational employment of nuclear weapons with an eye to being able to secure political goals other than the survival of American society. Given that the US will likely be forced to lead the escalation process in the defence of its threatened interests, this will likely require operational nuclear superiority.

- To this end the US should invest in an extensive prompt hard-target kill capability (MX, Trident D-5, and the Pershing II) as well as a non-prompt capability (ALCMs, SLCMs). In addition, the US should procure the necessary command and control infrastructure that would allow it the prospect of sustaining protracted nuclear operations.

- The United States should invest in some measure of strategic defence. Most notably, some form of ballistic missile defence should be pursued, but complementary programs would include increased air defence, as well as an active ASW program, such as that implied by the US Navy's Maritime Strategy.

The notable feature about these recommendations is how far removed they are --in their call for nuclear superiority, a war-fighting approach to deterrence,
and a renewed interest in strategic defence--from the common ground of the security debate of the 1970s. Furthermore, this 'urgent' style of recommendation--depicting, unless immediate, drastic action is taken, condemnation to a world hostile to the survival of American values--is more characteristic of systemist, rather than marginalist, schools of thought. To the extent that this is so, conservative participation in the current security policy debate reflects the general trend toward polarization.

Conservatives: A Cast of Characters

As Gelb notes, what has come to be known as the conservative view has been advocated by what is more correctly seen as a coalition between 'classic' conservatives and 'neoconservatives'--or, in Levine's parlance, anti-communist marginalists and anti-communist systemists. More moderate Republicans may have had some misgivings about the scope and magnitude of the neoconservative security policy agenda, but changing public attitudes in favour of an increased defense effort made it expedient to follow suit. It has only been in the past five years that serious fissures have become apparent within this grouping of actors which I will term 'conservative.' More prominent advocates of the conservative view, whose prescriptions will be reviewed in this paper, include the following:

The Reagan Administration. By and large, the Reagan Administration shares the conservative sense that the deterioration of the US-Soviet military balance in the 1970s placed the United States in an urgent situation. The extraordinary expenditures on nuclear forces envisaged by the Strategic Modernization Program of 1981 (as well as those on conventional force programs designed to
enhance the effectiveness of the modernized deterrent) could only be justified by portraying the current situation as grave. Accordingly, the Department of Defense (DoD) began publication of its high-profile annual, *Soviet Military Power*.

Close scrutiny of the Reagan Administration reveals, more clearly than any other comparison among conservative actors, the split between classic and neoconservative elements within the conservative coalition. After a period of very aggressive anti-Soviet diplomacy and extraordinary military budgets between 1981 and 1983, the pronouncements of the Administration became more measured and complex. Eventually, the Administration became noticeably factionalized on nuclear weapons policy issues, as typified by the policy battles waged between Secretary of Defense Caspar Weinberger and his Undersecretary of Defense (Policy) Richard Perle on the one hand, and Secretary of State, George Shultz and the Administration's special advisor on arms control, Paul Nitze, on the other. This ongoing policy struggle was further complicated by two factors: the not always predictable or informed preferences of President Reagan, whose views on nuclear weapons policy do not lend themselves to conventional classification; and a growing concern among Republican legislators about the growing American budgetary deficit.

**The Armed Services.** One could expect the Air Force, Army and Navy to take an active part in promoting the conservative program for greater military spending. In the case of the Reagan Administration, weak leadership on the part of the Secretary of Defense and Congress has allowed the services to shape much of the resulting defence program as well.

Of the three services, clearly the Navy has benefitted the most from the
Reagan program. In no small part, this is due to its formulation of maritime strategy which has postulated a central role for the Navy in almost every military contingency the United States might face. The Air Force has not done badly, although the MX ICBM and the B-1B strategic bomber have been the focus of contentious public debate. The Army does not generally fare very well in the strategic planning process, in large measure because the Army's nuclear role is relegated to the deployment of tactical nuclear weapons.

The Committee on the Present Danger. This group of neoconservative intellectuals functioned as an extremely effective special interest group whose opposition to strategic arms control and support for a redoubled defence effort seems to have been vindicated by American policy between 1979 and 1984. The Committee's policy studies chairman was Paul H. Nitze, and his public statements between 1976 (when he resigned from the American SALT II delegation) and 1980 were extremely important in the Senate's eventual tabling of the SALT II Accords. Many of its members were often disillusioned public officials from the Nixon, Ford, and Carter administrations. They subsequently became high-ranking public officials and advisors in the Reagan Administration, such as Richard Allen, George Shultz, Fred Ikle', Max Kampelman, Kenneth Adelman, Eugene Rostow, William Casey, Jeanne Kirkpatrick, Edward Teller, David Packard, and John F. Lehman. Conservative academics who have been members of the Committee include, Colin S. Gray (see below), Richard Pipes, Amoretta H. Hoeber, Francis P. Hoeber, Robert Pfaltzgraff, William Van Cleave, Ray S. Cline and the late Donald Brennan. The Committee has also counted among its members, Commentary editor, Norman Podhoretz, retired US Army General Matthew Ridgway, and a few individuals not commonly associated in
recent years with deeply conservative views, including William Colby, Dean Rusk, Maxwell Taylor, Ernest B. Lefever, and Seymour Martin Lipset.  

Private Research Organizations. Of these organizations, commonly referred to as 'think tanks', the contributions of two are especially noteworthy and will receive particular attention in the following chapters:

- **National Institute for Public Policy.** This organization, the latter-day disciples of the Hudson Institute, operates under the presidency of Colin S. Gray, perhaps the preeminent conservative writer on nuclear strategy. Irrespective of how his policy recommendations have been received within the wider debate, Gray's work is widely regarded as among the best of its kind. Lawrence Freedman notes that Gray "makes for stimulating, if exasperating reading" and that he "can probably find more nuances in nuclear strategy than anyone else." As Stephen J. Cimbala notes, close reading of Gray may lead to an interpretation that is not so far removed from the mainstream of the strategic debate; certainly, there is a more moderate tone to much of Gray's recent work. The Institute, which is clearly as much engaged in policy advocacy as in disinterested analysis, has also included Keith Payne, Rebecca Strode, and Barry Schneider, all of whom have contributed high-quality work to the defence policy literature.

- **Rand Corporation: James Tritten and Carl Builder.** I have grouped these two authors together because they published seminal work on counterforce strategies while they were at the Rand Corporation in the early 1980s, and because they represent the conservative side of that organization. Tritten has
since moved on to his current posting at the Naval Postgraduate School, while Builder has remained with Rand in various capacities, including a posting as chief analyst at the organization's office in Washington, D.C. Builder's work, in particular, is particularly innovative, and careful study shows much of it to be useful to students from a number of different policy perspectives on national security matters.

Other prominent conservative speakers within the contemporary debate include Georgetown scholar Edward Luttwak, whose work on military history and strategy has attracted much attention; and Norman Podhoretz, Melvyn Krauss and Irving Kristol, all of whom have contributed to the public debate from a neoconservative perspective.

Competing Perspectives: Liberals, Centrists, and 'Neo-liberals'

Opposing the conservative view are a number of related, yet distinct perspectives on national security policy. Unfortunately, a more detailed review of each of these schools of thought is beyond the scope of this essay, but a thumbnail sketch of each will be useful in illuminating what has become a very polarized policy environment.

- **Liberals.** As mentioned earlier, the risk calculus of the liberal school places a higher priority on the avoidance of war—especially nuclear war—than it does on taking additional measures to contain the Soviet Union. This school sees the agenda of international politics as fundamentally altered by the existence of nuclear weapons; to many liberals the role of force has been greatly diminished, while other considerations, such as economic issues, regional disparities, and environmental concerns have come to the fore. Liberals take a much more
positive view of the Soviet Union than that expressed by conservatives, and harbour a great deal of hope for a stable, mutually beneficial relationship with the Kremlin under Mikhail Gorbachev.

Liberals believe that escalation is essentially uncontrollable, and that further modernization or expansion of American nuclear capabilities is unnecessary and provocative. Furthermore, many are alarmed by what they perceive to be an increasing departure from mutual deterrence in American policy since the mid-1970s. Dissatisfied with the progress of the strategic arms control process to date, and now demanding that the superpowers make more drastic cuts in their nuclear arsenals, liberals see technological advance as something which has been destabilizing, and many have come to support a nuclear freeze. Failing this, they have been strongly opposed to the deployment of the MX missile, the B-1B strategic bomber, and SDI; they have expressed more muted opposition to the Trident II, sea-launched cruise missiles (SLCMs), and the deployment of NATO's INF weapons, the ground-launched cruise missiles, and the Pershing II.

Prominent liberal authors include the so-called 'Gang of Four' (Gerard C. Smith, George F. Kennan, McGeorge Bundy, and Robert S. McNamara); of the group, the odyssey of Bundy and McNamara from the centre of the American arms debate in the 1960s to the standard-bearers of the liberal view in the early-1980s, is most remarkable. Scholarship of very high quality written from this perspective has come from Robert Jervis, Richard Ned Lebow, and Oxford historian Sir Michael Howard, a British citizen who is widely read in the United States. Others making valuable contributions to the debate from the liberal perspective are William Kincade (from the Arms Control Association), and the analysts affiliated with the Union of Concerned Scientists.
• **Centrists.** As reviewed earlier, this group assigns a more or less equal priority to preventing war and containing the Soviet Union. While they may believe that force still plays a pivotal role in international politics, a strong desire to change this situation may also manifest itself in their pronouncements. And while a cooperative relationship with the Soviet Union would quite obviously be a positive development, centrists realize that a relationship that is more or less competitive in nature is more likely. Indeed, the majority of the analytical work reviewed in this paper done by those whose primary focus is US-Soviet relations, including Raymond Garthoff, Benjamin Lambeth, Arnold Horelick, and William Hyland, conforms most closely to this view.

Most are agnostics on the issue of controlled nuclear use, and seem to believe that issues like technology, arms control proposals, and new weapon systems ought to be examined on a case-by-case basis. For this group, consensus and bipartisanship in security policy is a most prized commodity. Centrists do not believe that either the threat posed by the Soviet Union, or the threat of nuclear war can be entirely 'resolved' in the near future. Consequently, one of the central policy prescriptions of this group is to 'manage' these problems over the long-run by adopting a series of incremental policy goals over the short-run.

Although an important premise of this thesis is that the centre no longer commands the political salience it enjoyed during the detente period, there is not a shortage of worthy centrist literature. Besides Garthoff, the liberal side of this group is ably represented by Stansfield Turner, John Mearsheimer, Joel Wit, Alton Frye, Leon Wieseltier, and Stephen J. Cimbala. Leaning neither one way nor the other are Richard Betts, Kevin Lewis, and Steven Miller. From the more conservative side, valuable contributions have been made by Richard Burt, Barry Blechman, and the President's Commission on Strategic Forces, which was
more widely known as the Scowcroft Commission.

- Neoliberals. Some of the most valuable, interesting work in strategic studies over the past decade has been done by a group of scholars that are most accurately characterized as 'neo-liberals.' Under Levine's typology, this group (referred to by the awkward name of 'analytical middle-marginalists') hold anti-war values but perceive the world in ways that are more akin to the anti-communist school. In his 1963 study, Levine selects Robert McNamara and Thomas Schelling as archetypal members of this school. Certainly in Schelling's case this remains so, as the rationale that continues to animate his work is the proposition that the competitive dynamics of superpower relations can still be harnessed to construct security regimes of mutual benefit and security. Others who hold this view include Glenn Kent and Bruce Berkowitz.

In the past 15 years, however, another variant of this sort of analysis has slowly matured. This is the literature concerned with the possible implications of cybernetic behaviour for the US-Soviet strategic relationship; most of the contributions from this perspective have appeared in the growing literature on superpower command and control systems. The pioneering work in this area has been done by John Steinbruner, Desmond Ball, Bruce Blair, Paul Bracken, and Ashton Carter. Graham Allison, Joseph Nye and Albert Carnesale are broadly sympathetic to this group, naming them 'owls' in an initial compendium of this type of analysis, Hawks, Doves and Owls: An Agenda for Avoiding Nuclear War.26

On the whole, these neoliberals are not hostile to the idea of developing a broader range of nuclear options, but merely skeptical about their feasibility. The limits of organizational performance is a central theme in their analysis.
Indeed, at a superficial level, the analysis seems almost apolitical in its emphasis on technical-organizational detail, but the performance of political and military institutions is as essential to satisfactory deterrence as that of the hardware at their command, and thus represents an important aspect of capability in any realistic assessment of national security strategy.

There seems to be a fundamental congeniality between centrist and neoliberal schools of thought. Indeed, the author subscribes to an incrementalist approach to strategic nuclear policy, involving a fusion of neoliberal and centrist views. The policy prescriptions argued here are sensitive to the limitations of command system performance, the pitfalls of the American strategic planning, and the wide range of policy viewpoints that characterizes the current American debate.

In attempting to arrive at recommendations for American strategic nuclear policy that create a viable, long-term policy coalition like that which governed American policy during the detente period, this essay starts from the premise that each school of thought contributes vital insights to the formulation of sound policy. A refusal, by both liberals and conservatives, to recognize the contributions of competing perspectives on nuclear weapons policy has led to debates that have generated far more heat than light.

In the case of the Reagan administration, which, ostensibly, should have been trying to command the support of a viable security policy coalition, the single-minded pursuit of its own priorities eventually backfired, leading to policy debates that were needlessly acrimonious -- and to policy outcomes that occasionally verged on the bizarre. Many of the central issues and outcomes of the American strategic debate in the 1980s have been embarrassing spectacles that conform to no one's strategic logic -- conservative, liberal or otherwise: the
deployment of 50 MX in Minuteman silos, the notion of a leakproof defence against nuclear attack, and serious contemplation, at the executive level, of a world without nuclear weapons. Furthermore, after defence budgets that recorded astounding increases in expenditure and which have had no small effect on the American budget deficit, the strategic forces of the United States are not appreciably closer to either a warfighting capability, escalation control, or stable peacetime operations; the unfortunate consequence of the Administration's lack of sensitivity to the limits of its own power in a policymaking environment that has always been pluralized, and is now deeply fragmented.

What follows is an examination of the political and strategic concepts which underpin the conservative view, as well as the relevant liberal and centrist critiques of these concepts. Chapter Two will examine the conservative view: its underlying strategic concepts, and its policy recommendations, many of which were taken on by the Reagan Administration in 1981. Chapter Three is an extended critique of the conservative perspective. This is followed by the concluding chapter, which summarizes the essay's analytical conclusions, and points to possible future directions for American strategic nuclear policy.
II. The Conservative Perspective

Reaction to the failure of detente was the key factor in bringing about the predominance of the anti-communist marginalists. If anything can be noted about the character of policymaking initiatives since the mid-1970s, it is the increasing attention that has been paid to the conservative critique of extant liberal approaches to national security, particularly in the area of nuclear weapons policy.

As such, an accurate portrayal of the conservative perspective is essential. It is especially important to avoid the caricatures of the conservative position that are often put forth by some liberal speakers in the debate. This not only harms the overall quality of the debate, but ultimately weakens the positions of liberals themselves. The conservative case is coherently argued, and liberals will continue to lose policy debates (particularly at the level of elites/specialists) unless they come to grips with the structure and nuances of the conservative perspective.

This chapter will begin by examining the political and strategic concepts which underlie the conservative position. It is from these fundamental beliefs about the strategic environment that conservatives derive their policy recommendations, and they include conservative images of: 1) the relation between nuclear weapons and international politics; 2) the Soviet Union; 3) American strategic culture; and, 4) the Assured Destruction paradigm and its corrolaries, stability theory and arms control.

The chapter will conclude with a review of conservative policy recommendations, highlighting those areas of policy which conservatives feel deserve special attention. These include: 1) a geostrategic assessment of American defence requirements; 2) the development of extensive prompt counterforce capabilities; 3) the development of conventional operational
concepts which affect the nuclear balance; 4) a renewed interest in strategic
defence; and, 5) the capacity to fight protracted nuclear campaigns.

Fundamental Beliefs of the Conservative View

Conservative Images of Nuclear Weapons and International Politics

It should come as no surprise that the view of international politics that
underpins the conservative view is strongly realist in character. Unhindered by
a formal sanctioning authority, all states continue to act primarily in their own
interests. Security issues continue to dominate the agenda of international
politics. This is because the course of interstate relations is determined by the
balance of power between states, a calculus predominantly influenced by the
military balance.27

As far as the conduct of security policy is concerned, conservatives maintain
that that states have no choice but to adopt a code of ethics that has come to be
called 'realpolitik.' In a 1975 article, Colin Gray notes:

Power politics, as analyzed in the writings of Nicholas Spykman, in
particular, and in the earlier writings of Hans Morgenthau, is generally
dismissed today by political scientists as comprising only one, somewhat
passe, approach to the study of international politics...Realpolitik, for all
the amibivalences of the central concepts of power and interest, is the
enduring condition of international politics. In international affairs, it is
sometimes necessary to lie, to cheat, to subvert, and to bomb...The creed of
realpolitik is often brutal and unattractive, yet it remains the only creed
appropriate to the conduct of foreign relations. Power politics...is the only
game in town.28

Conservative strategists further note that the United States is not exempt
from these precepts; the fact that it may or may not be a 'Lockeian' nation is of
little consequence to its foreign policy. Gray draws this conclusion in the same
article:

Deceit and subversion are not and should not be, let it be stressed, the
dominant characteristics of American foreign policy... [but] if the
American polity is unwilling, albeit with great reluctance, to resort to such measures, then it had better acknowledge that it cannot conduct an effective foreign policy...international politics is an arena wherein no holds are barred. American foreign policy, if uniquely guided by domestic values, would, equally uniquely, be handicapped.29

A striking feature of this perspective is that it does not recognize the competing liberal claim that nuclear weapons have fundamentally rewritten the ground rules of international politics.30 Much of the conservative program is based on the premise that in the nuclear age, the use or threat of military force --including nuclear weapons-- continues to play a vital role in securing a state's foreign policy objectives.

Because nuclear weapons are instruments of national power, the state of the nuclear balance is a matter of great importance. Relative advantages in certain measures of capability can yield significant operational --and thus, political-- advantages.

By taking a balance-of-power perspective on nuclear forces, conservatives argue that the state of the nuclear balance will shape the character of a nation's diplomacy. The nuclear balance impacts upon both routine diplomacy and crisis management. In this sense, nuclear weapons are most clearly as much a part of a calculus of national power as other measures such as conventional forces, economic capabilities, and moral suasion. The acquisition of nuclear capabilities adds new dimensions to a nation's foreign policy, just as increases in other measures of capability would lead to a more assertive foreign policy.

This analysis bears a striking similarity to Soviet views on the 'correlation of forces' and its general impact on the course of superpower diplomacy.31 Essentially, this view argues that the nation which enjoys a favourable balance of power in relation to its principal adversary will be able to pursue its foreign policy aims assertively; as the balance becomes less favourable, the state's freedom to pursue these aims will become proportionally more restricted. The
nuclear balance, while obviously not the sole measure of the 'correlation of forces', forms an important part of this calculus.

Soviet writers felt that the emergence of strategic parity was key in bringing about the superpower detente of the 1970s; decision-makers in Washington accorded Moscow an equivalent international role out of recognition of the new Soviet capabilities. Paul Nitze, writing in 1976, extends this reasoning, in warning the reader of the consequences of Soviet superiority:

There is a major risk that, if such a condition were achieved, the Soviet Union would adjust its policies and actions in ways that would undermine the present detente situation, with results that could only resurrect the danger of nuclear confrontation or, alternatively, increase the prospect of Soviet expansion through other means of pressure.

Conservatives clearly believe that the nuclear balance can determine the outcome of superpower crises. As Alan Tonelson writes of Paul Nitze:

Moreover, it also reflects views Nitze has held since the early years of the nuclear era about the implications of strategic superiority, the military significance of nuclear weapons, and the need for and feasibility of using force in support of US foreign policy. Throughout his public life, Nitze has maintained that military force is the prime level of influence in international affairs, and he has been a steadfast believer in the viability of limited war in the nuclear era.

As Tonelson notes, "In Nitze's view, the Berlin crisis of 1961 and the Cuban missile crisis proved beyond any doubt that strategic nuclear superiority can determine the outcome of US-Soviet showdowns." Nitze is clearly in a position to have an opinion: during the 1961 Berlin Crisis, he headed a team that found that a full-scale disarming strike against the Soviet Union would still allow for Soviet retaliation that would claim between two and fifteen million American lives. Despite such vulnerability, Nitze still believes that American nuclear superiority determined the outcome of the Berlin crises, and, one year later, of the Cuban Missile Crisis.

In this view, American crisis diplomacy owed its success to American
nuclear superiority. Moscow retreated from its initial positions because the United States would have been able to envisage relatively favourable outcomes in a central strategic war. In such a situation, coercive diplomacy was effective because it was credible to invoke the nuclear arsenal as a final arbiter of disputes. Keith Payne summarizes the link between American strategic forces and the escalation of superpower crises in warning of the dangers of 'self-deterrence':

US escalation to limited strategic nuclear use cannot lead to a more favorable position for acceptable war termination if the Soviets choose to compete and are "essentially equivalent" (much less if they possess strategic superiority). What would be the strategic justification for escalating a regional conflict into a process of strategic nuclear competition which could not ensure Soviet conciliation, but would in fact license Soviet attacks on the vulnerable American homeland?...There is little logical integrity to such...reasoning. If the U.S. cannot envisage an acceptable termination of an escalation process, then the threat to initiate that process --even at low levels-- should be paralyzed by self-deterrence...Without a clear anticipation that the US could survive the process of escalation it initiated, and attain a relatively more favourable position vis-a-vis the Soviet Union, there would seem to be limited reason for a President to initiate such a process --and good reason not to.

Important in the conservative structure of beliefs about nuclear weapons policy is the notion that nuclear use can remain controlled. In formulating American strategic doctrine, the prospects for nuclear use must bear some relation to American national interests. The American interest in the territorial integrity and political freedom of the countries of the NATO alliance (or, for that matter, Israel) might be substantial, but it is not infinite; consequently, a commitment to use nuclear weapons in the defence of these interests must be correspondingly limited.

Conservative views on escalation tend to be only imperfectly understood. There is a tendency among many liberal writers to construe the conservative analysis as providing sanguine guarantees that nuclear use is subject to precise manipulation. Colin Gray more precisely delineates the conservative view:
Pessimists, or realists, may be correct in claiming, on the basis of no more evidence than that held by the people they criticize, that nuclear war cannot be controlled or limited. Theorists of mutual assured vulnerability often do not appear to understand that their caricatured opponents are not offering nuclear wars of a pseudoguaranteed nature. Counterforce/damage limitation theorists do not exclude the possibility of catastrophe should the Soviet leadership either be unable or choose not to cooperate. Their argument is to the effect that mutual assured vulnerability guarantees unlimited catastrophe, whereas their preference at least holds open the hope of containing the scale of potential damage. No one is offering guarantees of nuclear war with strictly limited liability, but controlled and limited nuclear war is more likely to be a reality if it has been considered well ahead of time.39

This belief carries with it an interesting corollary; conservatives tend to be 'technological optimists'. While critical of the perceived imbalance in US strategic planning which favours technological prowess as a substitute for strategy,40 conservatives see technology as a valuable assistant in resolving American security dilemmas. In this sense advances in launcher, guidance, warhead, and data processing technologies are not symptoms of an arms race out of control, but instead are new opportunities for the American security planner.41

In setting out the objectives of American national security policy, conservatives focus on the threat posed by the Soviet Union and its allies. By emphasizing only the East-West conflict, conservatives have chosen to ignore (or pay relatively little attention to), other problems in for American security policy. These include (but are scarcely limited to) the dissemination of sophisticated military technologies to the Third World, international terrorism, and the emergence of actors whose antipath for the United States is not connected to any sympathy for the Soviet Union.42

Conservatives see two dimensions to the Soviet-American competition, the ideological and the geopolitical.

The Ideological Dimension. Levine notes that one of the characteristics of
systemist analysis is that it portrays the outcomes of policy choices in 'either/or' terms; this tone of impending doom is the only way that their recommendations can solicit wider support. The way in which conservatives refer to the ideological aspect of the Soviet-American competition is almost crusading in tone, and lends a systemist flavour to more recent conservative analyses. It is made to sound as if the range of outcomes is constricted to either the survival of American ideals (such as liberal democracy or free-market economics), or the triumph of Soviet-styled totalitarianism. One might argue that marginalist analysts who conclude that the choice between these two extremes is illusory are also manifesting a particular ideological view, but their contention is that the US-Soviet competition is not so much about ideology as it is about other matters. The conservative view is that ideology is a primary focus for the US-Soviet rivalry.

The Geopolitical Dimension. One of the most interesting aspects of conservative analysis is the use of a geopolitical framework to assess the US-Soviet rivalry. The analysis conforms closely to that put forth by British geopolitical thinker Sir Halford Mackinder. The goal, for each side in the East-West competition since 1945, has been to secure dominance over the resources of the 'Eurasian island.' A maritime alliance led by the United States in conjunction with threatened states on the Eurasian periphery is poised to deny hegemony to the Soviet Union --the primary land power in this vast region, enjoying superior lines of communication and resupply in all potential theatres of conflict). It is, primarily, a question of resources and capabilities: to allow the Soviet Union hegemony over this region would be inimical to an international environment conducive to the American way of life.

In choosing to place primary emphasis on either dimension, the containment of Soviet influence remains the prime goal of conservative national security
policy recommendations. This, of course, is scarcely new: containment has been the irreducible objective of all American security policy since the end of the Second World War. But as John Lewis Gaddis notes, in describing the evolution of containment in the early postwar period, deeper examination of the concept raises vexing choices:

There soon developed a line of reasoning reminiscent of Sir Halford Mackinder's geopolitics, with its assumption that none of the world's 'rimlands' could be secure if the Eurasian 'heartland' was under the domination of a single hostile power...the President approved NSC 20/4, which concluded that "Soviet armed domination of the potential power of Eurasia, whether achieved by armed aggression or by political and subversive means, would be strategically and politically unacceptable to the United States"...But there were at least two ways to defend the 'rimlands' and hence preserve global equilibrium. One way, which might be called the 'perimeter defense concept,' assumed that all 'rimlands' to be of equal importance, and called for resistance to aggression wherever along the periphery of the 'heartland' it occurred...Kennan had begun toward the alternative of 'strongpoint containment' --concentration on the defense of particular regions, and means of access to them, rather than on the defense of fixed lines.46

By this standard of comparison, conservatives are advocates of perimeter defence; and in this sense, their recommendations represent a departure from the practice of the Nixon, Ford and Carter Administrations, which identified particular areas of vital interest to the United States.47 A number of commentators have noted that the Reagan Administration has endorsed this departure from strongpoint containment. Barry Posen and Stephen W. Van Evera make this assessment:

The first fault with President's Reagan's defense program lies with its lack of a clearly articulated defense strategy. Second, insofar as the administration does have a strategy, it seems extravagant and dangerous. Fragmentary statements and administration procurement programs suggest that the administration has adopted a more demanding strategy than any since the Eisenhower administration, or perhaps earlier...All administrations since Truman have adopted defense strategies that included more missions than a pure containment strategy would seem to require, but the implicit Reagan administration strategy departs further from containment than its predecessors.48
Christopher Layne argues that the emphasis on perimeter containment appeals to universalist themes in the American foreign policy debate, a certain desire to remake the world in the image of the United States. This passage suggests an integration, in the minds of prominent conservatives, of the ideological and geopolitical dimensions of the East-West conflict:

Pushed by a group of neoconservative intellectuals, global containment is making a comeback as the cornerstone of US foreign policy...Global containment--recast as the Reagan Doctrine--commits the United States to resisting Soviet and Soviet-supported aggression wherever it arises...The Reagan Doctrine aims to create an ideologically congenial world, and it assumes that America's security requires nothing less...Because it equates American security with an ideologically compatible world, the Reagan doctrine is classically Wilsonian. Thus Secretary of State George Shultz frequently says that America must use its power to preserve an international environment conducive to the survival of its values...it does not differentiate between what it vital and what is merely desirable, the doctrine holds that US security is endangered by communism wherever it takes hold...The Reagan doctrine is a throwback to the global containment policy that characterized the cold war liberalism of Presidents Harry Truman, John Kennedy, and Lyndon Johnson...that US national security required nothing less than making the total international political environment ideologically safe.

Ultimately, the promotion of American values seems to be the essential goal of the conservative analyst (even though a recurrent theme in conservative analyses is that these values are ill-suited to the conduct of foreign policy in a harsh international environment). Conservatives urge that American policymakers retain an image of a desirable postwar environment when formulating American strategic doctrine; American security policy should aim toward the promotion of an international environment favourable to the American way of life.

As Nitze notes, a policy of preserving detente at all costs is thus unacceptable for moral and strategic reasons:

On the US side some say that there is no alternative to peace and therefore to detente. This attitude misses two points. The first is that capitulation is too high a price for free men. The second is that high-quality deterrence, not unilateral restraint to the point of eroding
deterrence, is the surest way of avoiding nuclear war. As far as nuclear weapons policy is concerned, the goal of the conservative school of thought is the same as any other: deterrence. However, conservatives are less willing to endorse the accepted division between deterrence and defence. Conservatives argue that the maintenance of an absolute dichotomy between deterrence and defence would preclude an American threat to use nuclear weapons in a limited fashion, a threat which is vital to the security of those countries to whom the United States extends the deterrent value of its nuclear arsenal. Given that the United States may find itself as the party that initiates nuclear use (in response to emerging, unfavourable outcomes in a conventional war), the United States should have a nuclear weapons policy that has some idea of just how the United States would employ nuclear weapons in a limited fashion if deterrence fails.

Again, this theme is rooted in the conservative analysis of war as a political concept. Conservatives claim that American policymakers tend to think in ways that are fundamentally astrategic: that is, they do not conceive of war as being something that is explicitly waged for political goals. Consequently, American strategic doctrine is often formulated with no image of how to relate the use of military force (and nuclear weapons in particular) to political objectives.

**Conservative Images: The Soviet Union**

One of the stronger themes within the conservative structure of beliefs about nuclear weapons policy is that, in its relations with the Soviet Union, the United States is dealing with a culturally distinctive adversary. It is not merely that the political systems of the two nations are different, but rather that these differences trace to deeply-rooted differences in each nation's political culture.

Clearly, this carries with it the warning that immediate shifts in Soviet
diplomacy do not, in and of themselves, signal fundamental change in Moscow's outlook. Conservatives seem to feel that liberals are a group without a sense of history, and are thus particularly subject to this sort of manipulation at the hands of Moscow, whose essential goals are unchanged.

Conservatives feel that the character of Soviet political and strategic culture, while not monolithic, is not as diverse as liberal assessments would have us believe. It is not that there are not 'hawks and doves' in the Kremlin: differences of opinion on the conduct of internal and external policy do exist in the Soviet Union. The conservative argument is that these differences are less significant in their policy implications, as John Lenczowski argues:

The orthodox American interpretation...emphasizes the differences rather than similarities between Soviet factions....Real differences do exist between factions in the Kremlin...But this situation should not obscure the fundamental reality of the Soviet political system, namely, that the end products of the Kremlin's policy-making process are more representative of consensus rather than division, of shared values rather than a struggle over differences.51

In the conservative view, Soviet political culture finds its roots in Russian history. Features of contemporary Soviet political life --an authoritarian regime with an instrumental view of its acquiescent citizenry, the quasi-mystical claims to legitimacy made on behalf of the state, and the perception of a hostile external environment-- lead conservative analysts to argue that the predilections of the current regime are not so much different from those of its Tsarist predecessors.52

At a more general level, conservatives are worried that the Soviet Union shows the characteristics of an empire in mortal decline. As the weakness of the Soviet empire begins to manifest itself over the near term (perhaps within the next two decades or so), Soviet bellicosity may increase as Moscow seeks external triumphs to reinforce internal legitimacy. Containing this imperial
dynamic is perhaps the most central American foreign policy objective. A

In identifying the salient features of Soviet strategic culture, conservatives emphasize a number of different considerations. In sharp contrast to the American experience, war has been a constant feature of Russian/Soviet history. Soviet thinking about war (as well as Moscow's prodigious defence program) become less surprising in light of the fact that, for Moscow, war has always been well within the realm of possibility. A violent history (both at home and abroad) encourages a certain deference to force. As far as foreign policy is concerned, this finds its best expression in the Soviet concept of 'the correlation of forces.' Although not a purely military concept, it does accord the military balance a central place in its analysis of international relations. Further, it defines the way in which the Soviets view other foreign policy matters like intervention and crisis management.

While conservatives argue that the Soviet Union is an experienced imperial power with a well-developed respect for traditional concepts like the balance of power, they also believe that ideological considerations preclude the Soviet Union from behaving like any other state in the international system. The legitimacy of the Soviet state is heavily indebted to its proclaimed socialist mission, and should Moscow's role as the leading socialist state come into question, so will the internal legitimacy of the regime. Conservatives worry that, as the internal legitimacy of the Soviet regime continues to erode, Soviet leaders will seize opportunities for external expansion, especially if an assessment of the correlation of forces suggests that victory is plausible.

The purpose of the Soviet military establishment is to fight and win wars. In this regard, its role is unlike that of its American counterpart (which more correctly seems to be a varied fusion of military, foreign policy, and management considerations). The Soviets see the management of foreign policy
obviously during peacetime, but even during deep crises--to be the concern of statesmen and diplomats. The armed forces exist to prosecute the unhappy event of war, and this affects the character of Soviet military policy.

The most important consequence of these features of Soviet strategic culture is that Soviet strategic planning is done with an eye to the pursuit of favourable outcomes in the event of war, and is less considerate of its impact on peacetime and crisis diplomacy. Again, this contrasts strongly with the American view, in which military programs are often assessed for their impact on a host of non-military considerations.

Similarly, the Soviet view is that war is serious business, with the pursuit of victory as the only responsible goal. In this regard, American strategic thought is often derided as not being sufficiently serious or realistic, given that its image of war seems more proximate to a 'bargaining' game than the manifestation of gravely serious political conflict.

The conservative portrayal of Soviet strategic nuclear doctrine may be one that is a logical outgrowth of Soviet strategic culture; nonetheless, conservatives find it very disturbing. Essentially, Moscow pursues a damage-limiting posture that has little in common with American precepts of mutual deterrence based on the assured vulnerability of each side's societal assets.

The posture is one that combines counterforce preemption with strategic defence so as to change the correlation of nuclear forces, while limiting damage to the Soviet homeland, and possibly to Europe, whose industrial assets would be a key element of the Soviet postwar economy. Conservatives point to aspects of Soviet doctrine that stress preemptive war, postulating that the Soviets have invested in 'heavy ICBMs' (SS-18 and SS-19, in particular) with extensive countersilo and countercontrol strikes in mind. Evidence of a Soviet predilection toward strategic defence includes the Galosh ABM system around Moscow, a
massive investment in air defence, and contingency plans for civil defence.

Conservatives argue that other aspects of the Soviet defence posture are at variance with the guiding precepts of American policy. In terms of the numerical balance of strategic launchers, Soviet totals of ICBMs and SLBMs substantially exceed those of the United States. This is especially galling in view of Robert McNamara's confident assertions, as Secretary of Defense, that the Soviet Union would not seek to even match American nuclear capabilities. Another key example in the conservative critique of the classic arms control arms race stability model is the proliferation of Soviet MIRVs, which has taken place even without the construction of an ABM system in the 1970s.

The Soviet concept of 'combined arms operations' also seems to be at odds with the Assured Vulnerability model. First, it seems to assume that a conflict which involved the use of nuclear weapons might be a prolonged affair, a war waged for political goals which remained distinct throughout. Second, it assigns nuclear weapons a military role, and does not treat them as explosive devices that are so powerful as to be beyond traditional conceptions of warfare. The complete integration of Soviet nuclear and conventional forces is a striking manifestation of this view.

Conservatives do not feel that Moscow is especially eager to fight a war with nuclear weapons: the primary role for its arsenal is to provide a counter-deterrent that will extend a nuclear umbrella over Soviet support for revolution in the Third World. However, unlike American thought, the only threshold that Soviet leaders may recognize is that between war and peace, and, should global war break out, the mission of the Soviet armed forces would be to win such a war. Soviet war aims would include the neutralization of American military and industrial capabilities, the protection of the Soviet homeland, and the occupation of prized areas such as Europe or the Persian Gulf. In short,
Soviet leaders believe in deterring the United States, but are unhappy with mutual deterrence, for this latter concept might imply an end to the utility of force as an instrument of politics.\textsuperscript{59}

Conservatives stress that the writers of Soviet defence policy are not an amalgam of disparate actors (with varying perspectives and levels of competence), but rather military professionals who reflect longstanding Soviet military traditions. There may be some speakers within the Soviet debate who lean more toward the view that nuclear war would assuredly result in mutual destruction, but the debate as a whole (and certainly the policy which emerges from this debate) tends toward a consensus on damage-limitation.\textsuperscript{60}

It could be that Soviet policy is written from a narrow perspective, particularly in the way that it is less sensitive to the non-military dimensions of strategic policy. However, conservatives argue that one does not have to be particularly enthusiastic about the prospect of war in order to appreciate the coherence of Soviet military policy, and that this coherence is the product of a certain narrow professionalism that is unavailable in the American system. Keith Payne takes this argument further, suggesting that the view of military doctrine that is articulated by the Soviet military is endorsed held by the civilian leadership:

In addition, it should be observed that before any military doctrine or discussion can appear, it must pass through the censors of the CPSU. The significance of such censorship is underscored when one realizes that Soviet military doctrine and strategy are authorized by the political leadership, particularly the Central Committee of the CPSU.\textsuperscript{61}

Much of the analysis of Soviet strategic culture has been done by conservative writers, and it has been noted that, in a number of key areas, conservative thinking seems to converge with that of their Soviet adversaries. It is interesting to speculate just how much conservatives have actually been
influenced by their Soviet opposite numbers on questions of strategy. Some, like Leon Wieseltier, argue that:

The hawks do not attack Soviet strategy; they admire it...They accept a great deal of the Soviet approach to nuclear weapons. There is indeed a convergence in doctrine taking place between the United States and the Soviet Union...it is the Sovietization of American strategy.62

Certainly if one reviews the logical structure of the conservative position, it bears a remarkable likeness to Soviet analyses. Especially striking is the agreement on the role of force in international relations in general, and the impact of nuclear weapons in particular. Underlying the detente consensus was the premise that a constructive relationship could be had with the Soviet Union, and that the superpowers would agree on a number of important points, especially with respect to nuclear weapons and the role of force. Just how much conservatives accepted the optimism of those who predicted superpower convergence is, no doubt, capable of question. But it seems plausible to maintain that conservative members of the detente coalition accepted these premises, at least in part, as a sound basis to pursue American policy with respect to the Soviet Union. To the extent that conservatives have come to stress a view of international politics and nuclear weapons which is decidedly closer to rivalry and competition than convergence, we can conclude that the conservative position has changed.

Why conservatives have come to adopt this view is a different question. It seems more likely that change in the conservative position has come more from post-detente bitterness, than from reading Soviet authors per se. In attempting to show why detente could not be a viable framework for the conduct of US-Soviet relations, conservatives have argued that Moscow's view of international politics was uncongenial to the American approach, and that the convergence so heralded by detente optimists was never taking place.
So, as Colin Gray argues, if there now seems to be a new type of doctrinal convergence, one where American outlooks seem to be moving closer to those of their Soviet counterparts, the issue is not of the relative attractiveness of one paradigm as compared to another, but rather that in order to deter an opponent successfully, one has to concentrate on what deters the opponent, not what we would find deterring. Notably, if Soviet leaders have strategic policy values and analyses that differ markedly from those of their American counterparts, then designing policy around concepts which are deeply rooted in American ways of thinking, such as escalation control, assured societal vulnerability, and stability is profoundly mistaken. The efficacy of American strategic nuclear doctrine may only be tested once every two or three decades, but on those occasions, the American posture must be able to speak resolutely to the Soviets in their own terms, and to considerations that are foremost in the minds of Soviet leaders.63

Conservative Images: American Strategic Culture

At the heart of conservative opposition to a return to the detente framework of the 1970s is a far-reaching critique of American strategic culture. In the conservative view, the failure of America's Soviet policy can be best understood as the inevitable outcome of an interaction between two vastly different world-views. Conservatives argue that, in order to avoid failures of this kind in the future, the American policymaking elite must be able to dispense with (or at least temper) aspects of its foreign policy culture which are inappropriate in dealing with the Russians.

Conservatives contend that American strategic culture is actually more 'managerial-analytic' than 'martial-strategic.' As noted earlier, American policymakers have been hesitant in relating the use of force to the attainment of foreign policy objectives. At a more general level, as Henry Kissinger
laments, to address foreign policy questions from a geostrategic or balance-of-power perspective is not deemed to be acceptable political discourse in the United States.⁶⁴

The features of American strategic culture, as in the case of its Soviet counterpart, are rooted in the history of the nation. Americans, as a people, have known a relatively fortunate history, blessed by material and security plenty -- features which do not place a premium on strategic thinking. Nations in which the art of strategy is highly valued tend to be those in which a failure to think strategically has defeat and devastation as its consequences.⁶⁵

A set of historically-conditioned attitudes, held by US policy-makers, are responsible for an American 'way' in military affairs in which management has supplanted strategy. The first of these is that in any war involving the United States, victory is the only acceptable aim; in part, this is due to the belief that the United States can only commit itself to 'just wars.' Second, there is a certain faith that American productive and technological proficiency will carry the United States to victory. Finally, war and conflict are seen as temporary aberrations in the course of international relations.⁶⁶

Taken together, this culture has an approach to war that is 'resource-pushed', rather than 'strategy-pulled.'⁶⁷ Once the decision to go to war has been made, a premium is placed on the ability to mobilize as much of the American warmaking potential as possible. Further, American warplanning reflects a preoccupation with war-termination per se rather than the emergence of a postwar environment favourable to the interests of the United States.⁶⁸ Conservatives see these tendencies as fundamentally astrategic because they reflect a concept of war that is apolitical.
Conservative Images: Assured Destruction, Stability and Arms Control

Conservatives argue that the advocacy of Assured Destruction (and later, Mutual Assured Destruction) as the criteria for sufficiency in American strategic forces reflects astrategic tendencies in American strategic culture. They make four important criticisms of the way in which American policymakers handled the US-Soviet strategic relationship during the period of detente. First, the US defence leadership (the Office of the Secretary of Defense, the Pentagon, the Joint Chiefs of Staff, the Arms Control and Disarmament Agency, members of Congress, non-governmental analysts, and academics) was more 'managerial-analytic' than 'martial-strategic' in outlook.

Secondly, American policymakers felt that a vigorous defence effort is characteristic of a nation at war, not peace, and that the American military-industrial complex is as much of a threat to American national interests as the spectre of Soviet military power. This same elite believed that nuclear war of any kind or scale cannot be won, and that discussion of nuclear war as war is deeply antithetical to American domestic values. This, conservatives feel, conforms to the lack of American experience with truly devastating war.

Thirdly, the United States ceded a favourable strategic nuclear balance to the Soviet Union, justifying this policy on the basis of stability theory, and codifying it with the SALT negotiations. Indeed, the arms control process as a whole, was pursued in an astrategic manner.

Finally, the character of the Soviet nuclear force buildup was misperceived, and it was thought that the Soviets could be 'educated' as to the wisdom of dominant American strategic concepts (that is, the inevitability --indeed, the desirability -- of mutual societal vulnerability).

Again, the real danger in this approach was that it imputed a constellation of
American values to an opponent whose very different history had produced a markedly different perspective on strategic affairs. In designing American strategic posture, conservatives counsel that policymakers must not ask, "What would we find deterring?" --but rather, "What would deter a culturally distinctive adversary like the Soviet Union?" Conservatives warn that if policymakers continue to avoid speaking to these concerns, the misperceptions thus engendered between the Washington and Moscow could lead to recurrent deep crises, and even worse. 

Beyond the dangers of misperception, conservatives argue that a deterrence posture centred on the spectre of Mutual Assured Destruction has little to recommend it on operational grounds. In brief, the paradigm puts a wholly excessive emphasis on prewar deterrence --and, in many ways, a bolt-from-the-blue attack. Because the Assured Destruction paradigm focusses on how much destructive power the United States would have at its disposal rather than how US strategic forces might be used, it is an inadequate formula for strategic sufficiency. The doctrine seems to have been designed in a political vaccuum. For conservative analysts, strategy is not a static, quantifiable subject. One cannot determine a set level of military preparedness that will last for all time, and be adequate for all contingencies. The bolt-from-the-blue scenario that was used as the analytic standard for strategic force sufficiency in the McNamara Pentagon was never politically realistic. Conservatives argue that American strategic planners would have been better served if successive American governments had taken a serious look at plausible paths to war, determining America's strategic nuclear requirements with an eye to plausible contexts in which those forces might have to be used. Specifically, American nuclear forces must 'extend deterrence' so as to protect threatened states on the Eurasian periphery. As noted earlier, extended
deterrence is a mission that raises different considerations that that of merely deterring a bolt-from-the-blue-strike.

The argument is familiar: because nuclear weapons are instruments of national power, adopting Assured Destruction as the measure of sufficiency in strategic nuclear forces is only adequate where lower-level imbalances do not exist. American political goals can no longer be preserved by Assured Destruction: the manipulation of risk provides no leverage against Soviet conventional force advantages, given the absence of near-perfect area defences.\textsuperscript{72}

As an extension of this point, American strategic forces will backstop American crisis diplomacy in confrontations over areas of vital interest, and are an indication of American commitment to the defence of these interests. If the strategic nuclear posture is predicated on the objective of non-use (as is the Mutual Assured Vulnerability paradigm), then a high degree of irrationality must be perceived to rule the decision-making process in Washington in order for the threat to deter.\textsuperscript{73} At its worst, the reliance on Assured Destruction has meant that US nuclear forces have been developed without an eye to the political objectives to which those forces are coupled. Because the Assured Vulnerability paradigm does away with the need for strategy, (as the condition of Mutual Assured Destruction is seen to be unalterable) it is also impossible to argue for procuring the capabilities to terminate a war on terms favourable to the US and its allies.\textsuperscript{74}

Additionally, despite best efforts to the contrary, deterrence could fail. In this event, deterrence based on the threat of societal devastation offers very little in the way of ensuring that catastrophe would not automatically become holocaust. If the dominant strategic paradigm is Assured Vulnerability, it is very difficult to argue for procuring forces that are capable of ensuring discreet
strikes instead of massively indiscreet ones. And yet, a purely countervalue posture cannot, realistically, be calibrated with the National Command Authority's image of a 'favourable postwar environment.'

Indeed, the way in which ballistic missile defence and counterforce prowess were eschewed by American policymakers suggests that these advocates of Assured Destruction did not find any pressing relation between damage-limitation and extended deterrence commitments. It could be argued that during the 1960s, American nuclear superiority was such that these problems faded into the background of the security policy debate (although it certainly bothered French strategists), but in a situation where the balance has shifted from one of American superiority, to parity, to 'clinging parity', the question of damage-limitation and extended deterrence has been thrown into sharp relief once more. Carl Builder makes this point in arguing for the development of first-strike counterforce capabilities:

Assured Destruction...was advanced not tell us how we should use our nuclear arms, but how we should determine the types and number of them we needed. Nevertheless, under the favourable balance of nuclear arms we enjoyed then, the concept of Assured Destruction had enough intellectual appeal to pass for a strategy as well as a way to judge sufficiency...Today, however, the appeal of Assured Destruction is dissolving in the acid bath of new-world realities. Our nuclear arms capabilities are no longer unchallenged, and such simple, lazy notions of strategy no longer enjoy the free ride afforded by nuclear supremacy.  

Stability Theory. Of the ideas that animated defence discussions during the 1960s and 1970s, the notion of 'stability' was preeminent. Weapons system appropriations and debates over doctrinal matters often turned on the question of whether the new developments represented a 'stabilizing' or 'destabilizing' trend. In the US, strategic nuclear force improvements in general, and counterforce improvements in particular, were criticized and delayed on the notion that they did not adequately meet the criteria for stability, and thus were antithetical to a notion of sufficiency. As Colin Gray notes, most debates about
stability are really debates about favoured models of deterrence, and to criticize
the extant model of stability is to criticize the Assured Vulnerability paradigm:

A discussion about stability and its possible requirements is really a
discussion of deterrence theory, which, in turn, is really a debate about
the operational merits of different postures and doctrines. There can be
no useful, doctrine-neutral exploration of the idea of stability...the ideas of
arms race and crisis stability--and the theory of deterrence to which they
most usually make reference (often implicitly)-- have misled Western
policy makers into neglecting the operational dimensions of
strategy...orthodox Western stability theory rests very heavily on the
assumption that mutual societal vulnerability is desirable, and allegedly,
inescapable. 76

In their critique of extant theories of crisis stability, conservatives do not
deny that there are some force postures that would more likely become the
proximate cause of war than others, and that such postures should be avoided. 77
Certainly the conservative desire for a militarily sound deployment of the MX,
and, in its absence, their longing for Trident II can be said to reflect a
preference for survivable nuclear forces that is not entirely unlike that of their
liberal critics. 78 And they are, to some extent, aware of the command
vulnerability problem, and its negative effects on maintaining stability in

However, as Gray noted earlier, the prevalent model of crisis stability is
derived from a deterrence paradigm which does not adequately protect
Western decision-makers from the perils of self-deterrence. Gray postulates a
preferred model:

Extant, still-dominant deterrence theory --as the leitmotiv for Western
strategic preparation --is fully consistent with a strategic force posture
that is incredible as a threat because it would not be intelligently usable
in practice... As an initial point of doctrinal reference... it is my view that
the strategic balance would be stable were it to permit Western
governments to enjoy not-implausible prospects both of defeating the
enemy (on its own terms) and of ensuring Western political-social
survival and recovery. This admittedly somewhat muscular definition,
which closely parallels the known Soviet approach to defense planning...
is not incompatible with more familiar connotations of arms race and
crisis stability... The bedrock of this definition is the proposition that
forces that do not lend themselves to politically intelligent deployment in
war are unlikely to be sufficient to deter --at least in those very rare moments when an adversary may be motivated to seek a military solution to its problems. 80

As far as arms race stability is concerned, the main conservative charge is that technology is not the prime villain in American national security policy. The driving force behind the US-Soviet rivalry is not technological advance, but a combination of political hostility and geographical circumstance. In short, the action-reaction model of the arms race is mechanistic and apolitical. 81

To support this position, conservatives are fond of pointing to the expansion of Soviet nuclear forces that has taken place since the mid-1960s. Periods of American restraint, (whether due to McNamara's desire to cap strategic force spending, or, later on, because of Congressional hostility to defence expenditures), did little in the way of curbing the growth of Soviet nuclear (or conventional) forces during detente. 82 With respect to the ABM debate of the late-1960s, conservatives note that, in retrospect, much of the Soviet nuclear force buildup which liberals warned would take place as a reaction to the deployment of an American ABM system, has taken place anyway. 83

The conservative criticisms of arms race and crisis stability are a matter of strategic culture. As far as arms race stability is concerned, conservatives contend that the Soviet defence effort is a constant factor, dictated by considerations and priorities that are largely insular (and resistant) to the American desire for a static strategic relationship. The notion that Moscow would share an interest in substantially 'curbing or reversing the arms race' was an ethnocentric projection of American strategic culture. If anything, conservatives argue, the Western desire for arms control was perceived in Moscow as a declining willingness to compete with the socialist states, or, an indication of an increasingly favourable 'correlation of forces.' Conservatives warn that the 'feast and famine' way of the American defence effort may
suggest to Moscow moments of opportunity for a more assertive Soviet diplomacy. A more sober view that the United States will have to mount a sustained defence effort, as part of a long-term competition with a determined Soviet adversary, would go further in contributing to 'stability in perception' between the two superpowers.84

As Gray notes, conservatives are not hostile to the concept of crisis stability per se: a force structure procured to deter war should not precipitate war. However, given the extended deterrence mission of American strategic forces, a satisfactory theory of crisis stability must allow for counterforce operations beyond purely demonstrative strikes. Stability in crisis will only obtain if the United States can credibly threaten to use nuclear weapons in the defence of its allies --and this will require an American strategic posture that can realistically threaten to win central, strategic wars.85

Arms Control. At its core, the conservative position on arms control argues that the arms control process cannot become autonomous from American strategic objectives. Under the arms control regime of the 1970s, conservatives feel that American policy has been inconsistent. On one hand, strategic forces were employed to extend deterrence --meaning that these forces had to satisfy certain military requirements-- while on the other hand, the strategic nuclear balance, and the agreements which impacted upon it, were assessed in isolation from these requirements.86

Essentially, this carries the striking implication that since US strategic nuclear forces extend deterrence, and since credibly threatening the first use of nuclear weapons requires a measure of strategic superiority, then parity (or essential equivalence) cannot be the guiding principle of American arms control policy. The maintenance of American political interests will require a favourable strategic nuclear imbalance, as this would more correctly reflect the
greater need, or propensity, of the Western alliance to escalate to a higher level of violence in a crisis or limited war.\textsuperscript{87}

Again, conservatives do not claim to be opposed to the \textit{objectives} of the arms control regime, but they do believe that the conduct of American nuclear weapons policy during the 1970s (both in terms of what \textit{was} done --the SALT negotiation-- and what was \textit{not} done --a significant ballistic missile defence program) did a poor job of promoting these objectives. All of which traces back to the paradigm under which US policy was formulated: Assured Vulnerability. Conservatives argue that ballistic missile defence, and counterforce capable assets are not as antithetical to the aims of arms control (deterrence and crisis stability) as liberal writers have claimed.\textsuperscript{88}

Because conservatives have a substantial mistrust of the Soviet Union, they tend to make a great deal out of compliance and verification issues. In most discussions of the prospects for arms control, conservatives will recount a litany of alleged Soviet arms control violations, aiming to demonstrate that the Soviets are interested in neither the spirit nor the letter of the arms control process.\textsuperscript{89} Consequently, any arms control proposal must assuage conservative fears that Soviet cheating could either be caught, or would not suddenly place America in a substantially vulnerable position.\textsuperscript{90}

These exacting criteria aside, one comes away from the conservative literature on arms control with a sense that they are somewhat skeptical about the utility of the process in assisting American security policymakers. The arms control process, cannot by itself guarantee US security --only a consistent, robust American defence effort can make this sort of claim.\textsuperscript{91} One of the key features of US strategic culture is its optimism about international relations; stemming from this is the notion that arms control agreements can provide the United States with a final, legal solution to its security problems. Conservatives
reject this idea: the United States is condemned to long-term political and military competition with the USSR, and while the arms control process can lend a greater degree of predictability in American defence planning, it cannot become the primary solution to the challenges of American national security.92

Table Four (Page 52) shows the state of the Soviet-American strategic nuclear balance since 1975. Clearly, conservatives were deeply disturbed by emerging trends in the balance during the 1970s.

Conservatives are particularly concerned about Soviet fourth-generation 'heavy' ICBMs' the deployments of which are listed in Table Three below:

Table III: Soviet 'Heavy' ICBM Deployments: January 1, 1985

<table>
<thead>
<tr>
<th>Missile</th>
<th>Accuracy (CEP in m.)</th>
<th>Number Deployed</th>
<th>Armament (Warhead x Yield)</th>
<th>Warhead Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS-17</td>
<td>370</td>
<td>150</td>
<td>4 x 500 kt</td>
<td>600</td>
</tr>
<tr>
<td>SS-18</td>
<td>260</td>
<td>308</td>
<td>10 x 500 kt</td>
<td>3080</td>
</tr>
<tr>
<td>SS-19</td>
<td>240</td>
<td>360</td>
<td>6 x 550 kt</td>
<td>2160</td>
</tr>
</tbody>
</table>

Warhead Total 5840

Conservatives find these deployments particularly disturbing because they epitomize (especially the SS-18) the Soviet prompt counterforce threat against the American Minuteman ICBM force. It is not as if the coming vulnerability of American fixed-site ICBMs had not been foreseen much earlier. Indeed, a sense that the Minuteman force would eventually become vulnerable formed the basis of McNamara's 'Strat-X' study of follow-on systems for the Polaris/Minuteman/B-52 Triad. Out of this study came the Trident, B-1, and

(Text continues on Page 52)
### TABLE IV: US-SOViet Strategic Nuclear Balance, 1975-1984

<table>
<thead>
<tr>
<th>YEAR</th>
<th>ICBMs (US/USSR)</th>
<th>SLBMs (US/USSR)</th>
<th>Bombers (US/USSR)</th>
<th>RVs (US/USSR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>1054/1607</td>
<td>656/765</td>
<td>396/155</td>
<td>9444 /2867</td>
</tr>
<tr>
<td>1976</td>
<td>1054/1557</td>
<td>656/843</td>
<td>383/165</td>
<td>9367 /3145</td>
</tr>
<tr>
<td>1977</td>
<td>1054/1477</td>
<td>656/966</td>
<td>376/175</td>
<td>9808 /3834</td>
</tr>
<tr>
<td>1978</td>
<td>1054/1398</td>
<td>656/995</td>
<td>376/195</td>
<td>9808 /4970</td>
</tr>
<tr>
<td>1979</td>
<td>1054/1398</td>
<td>656/992</td>
<td>376/207</td>
<td>9776 /6023</td>
</tr>
<tr>
<td>1980</td>
<td>1052b/1398</td>
<td>576c/989</td>
<td>376/220</td>
<td>9566 /6926</td>
</tr>
<tr>
<td>1981</td>
<td>1052/1398</td>
<td>512/1017</td>
<td>376/235</td>
<td>9438 /7476</td>
</tr>
<tr>
<td>1982</td>
<td>1049/1398</td>
<td>520/969</td>
<td>355/245</td>
<td>9764 /8072</td>
</tr>
<tr>
<td>1983</td>
<td>1040/1398</td>
<td>568/961</td>
<td>297/260</td>
<td>10588 /9187</td>
</tr>
<tr>
<td>1984</td>
<td>1030/1398</td>
<td>592/946</td>
<td>297/303</td>
<td>10770 /9594</td>
</tr>
</tbody>
</table>

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b) Declining American ICBM total reflects retirement of *Titan II*.
c) Decline in American SLBM between 1979 and 1982 reflects retirement of *Polaris/Poseidon* hulls at a rate faster than the introduction of *Ohio-class* SSBN. Increase in SLBM after 1982 reflects commissioning of 24-launcher *Ohio-class* SSBN.
d) Bomber count includes for the United States, some 56 FB-111 aircraft, and, for the Soviet Union, some 130 Tupolev Tu-22M *Backfire* aircraft not assigned to Soviet Naval Aviation. Drop of 58 bombers from American total in 1982-83 reflects the Reagan Administration's decision to retire remaining B-52D aircraft ahead of schedule. Rise in Soviet procurement rate in 1983-84 reflects *Backfire* production (approx. 20 per year), and introduction of 25 new Tu-95 *Bear-H* (armed with 8 AS-15 ALCM).
MX. Although design and production of the MX missile ranks as one of the most efficient strategic weapons programs (despite recent quality-control problems with the production of its guidance system), the search for an acceptable, survivable basing mode has remained elusive. The subsequent delays in deploying the MX has come to the consternation of many conservatives, and President Reagan stressed the problem of Minuteman vulnerability in his 1980 campaign.

Conservatives have a number of concerns with the disparity in Soviet-American prompt counterforce capabilities. First, there was the famous 'window of vulnerability' scenario, which received extensive publicity from prominent conservative writers, including the Committee on the Present Danger, and Paul Nitze. The scenario postulates a general East-West war, escalating to the use of theatre nuclear weapons by both sides, at which point the Soviets, using only a portion of their ICBM force, launch a disarming counterforce strike against the Minuteman force. Confronted by such a situation, an American president would be under immense pressure to retaliate, but the remaining American forces (Poseidon and Trident C-4 SLBMs) would be suitable only for countervalue strikes, raising the spectre of Soviet countervalue retaliation.

Conservative concerns about the window of vulnerability are more fully illuminated in their dissatisfaction with using American ALCM-armed bombers to compensate for the theoretical vulnerability of the Minuteman force. Only ICBMs (or, in the future, counterforce-capable SLBMs, like the Trident D-5) can provide discreet retaliation promptly. The objective of such prompt retaliatory counterforce strikes would be to draw down Soviet ICBM forces and restore the balance, or even regain the initiative. Only counterforce reserves can be realistically correlated with a National Command Authority's image of a favourable postwar environment. In short, even at this level, war is a political
concept for the conservative school.

Finally, conservatives were most clearly dissatisfied with the competitive pace of American military programs in the detente period, especially the continuous delays in fielding the MX, the slowing pace of the Trident program, the cancellation of the B-1A, and the closing of the Minuteman III production lines. They pointed with increasing alarm to increasing Soviet capabilities, including fourth-generation ICBMs, an operational, if crude, ASAT capability, and the 'Backfire' bomber, a new (1975) bomber which was not counted under SALT II. America's position in the superpower nuclear balance was extremely discouraging, they argued, and countervailing measures were required immediately.97

Conservative Policy Recommendations

Conservative recommendations for American strategic nuclear weapons policy emerge quite readily from the perspective outlined in this chapter. The United States should procure the capabilities that will enable it to dominate the escalation process. Only with such a capability will it be able to credibly threaten the first use of nuclear weapons in the defence of those allies and interests to which Washington extends the deterrent effects of its arsenal.

The conservative program, which began to take shape in late-1974 (with James Schlesinger's decision to proceed with the advanced development of the MX ICBM, coupled with his enunciation of the 'Schlesinger Doctrine' of Limited Nuclear Options), gained further momentum during the latter part of the Carter Presidency (with the announcement of the B-1/ALCM and MX decisions, as well as Presidential Directives 41 and 59).98 However, the conservative agenda for strategic forces has found its fullest expression during the Reagan Administration, with the announcements of National Security Decision Directive
13 (NSDD-13), the Strategic Modernization Program (1981), the Strategic Defence Initiative (1983), and the Maritime Strategy (with its associated 600-ship Navy).

Five major policy-making objectives have characterized the conservative quest for an American damage-limiting capability during the Reagan years. These are reviewed in order of their significance, and they are: 1) a geostrategic approach to defence requirements; 2) an extensive hard-target-kill capability; 3) a strategic role for conventional operations; 4) the capacity to fight a protracted war; and, 5) a renewed interest in strategic defence.

A Geostrategic Approach to Defence Requirements

As mentioned earlier, the conservative view of the US-Soviet strategic relationship is heavily influenced by a geopolitical perspective, and conservative recommendations for nuclear weapons policy bear this out.

The geostrategic approach has had its most far-reaching impact on conservative thinking about force projection. One of the goals of conservative policy is to equip the United States with the capability to gain escalation dominance rapidly in all contingencies. The aim is to confront a prospective adversary with a superior correlation of forces, thus placing the burden of further escalation on this adversary.99

Theatre strategy is thus of great interest to conservative writers, as is, quite obviously the political potential of nuclear superiority. An immediate casualty of this approach is the Western body of theory that postulates the inviolability of particular thresholds of conflict in the interests of crisis management and bringing about a cessation of hostilities. Conservatives are more interested in winning crises and wars rather than merely 'managing' them.100

The Air Force idea, in the wake of the INF Treaty, of deploying
ALCM-equipped B-52s in Great Britain exemplifies this sort of theatre contingency planning, but the best instance of the geostrategic theme is to be found in the Maritime Strategy. A recurrent theme in the Navy's operational plans during times of peace, crisis and war, is the maintenance of a posture that will allow the United States to rapidly expand the scope and intensity of a conflict subject only to theatre military requirements. That the Navy's plans for a rapid transition to war, horizontal escalation, naval attacks on the Soviet homeland, and the blurring of the conventional-nuclear 'firebreak' are antithetical to extant models of crisis and intrawar stability is of little consequence to conservatives, who are very straightforward in noting that their more liberal critics are starting from a very different model of stability.

An Extensive Hard-Target-Kill Capability

Conservatives feel that if the United States is to use its nuclear arsenal to deter Soviet opportunism, then an extensive capability to threaten hard targets is essential. A hard-target capability would be able to threaten Soviet ICBM silos and the command system (enhancing the prospects for escalation dominance and damage-limitation), as well as the Soviet leadership (the most highly-valued asset under the current regime).

The MX ICBM is the best instance of the conservative desire for a prompt-hard-target-kill (PHTK) capability. Conservatives are split between those who would deploy the MX in Multiple Protective Shelters (MPS), and those who would rather see the Administration deploy the MX in existing (or superhardened) Minuteman silos. The MX-MPS system is favoured by those (including Colin Gray) who see long-term benefits in the survivability of the multiple shelters, while deployment of the MX as a fixed-site ICBM is deemed a necessary expedient by those (like William Van Cleave) who see an urgent need.
to begin matching Soviet PHTK capabilities.\textsuperscript{105}

For both groups, however, the basic point is this: ICBMs are prompt, accurate, and easy to control. The current theoretical vulnerability of the Minuteman force makes a modernized ICBM force a necessity. Both also view the current plan to deploy 50 MX as inadequate, and neither group is especially enthusiastic about the Midgetman SICBM.\textsuperscript{106}

There are other programs which, because they will add to American counterforce capabilities, appeal to conservatives. Of these, the Trident II SLBM is the most important: the deployment of between 20 and 25 Ohio-class SSBNs with the D-5 SLBM will add between 3800 and 4800 secure, prompt counterforce warheads to the US deterrent. This is especially important in view of the upcoming block retirements of the 31 Lafayette-class SLBMs, armed with some 6,000 countervalue Poseidon and Trident I (C-4) warheads. Because communication with the SLBM force is more difficult than with the ICBM force, and because an SSBN betrays its position with the firing of even a single missile, Trident II is not as highly valued as the MX. But given the relative ease with which the entire Trident program has gained its appropriations, the ability of the SLBM force to strike at the Soviet Union from many different azimuths, and possible advances in SSBN communications, it is less surprising that the Trident SSBN/SLBM program was so favoured in the Strategic Modernization Program.\textsuperscript{107}

A notable conservative argument for the D-5 deployment is that it would be capable of close-in depressed-trajectory hard-target strikes at the very outset of a nuclear exchange --\textit{very} prompt counterforce, as it were. The obvious targets of such strikes would be Soviet C\textsuperscript{3}I, but considering that an Ohio-class SSBN, its position already revealed, is reputedly able to discharge its \textit{entire} armament of 24 Trident II missiles in \textit{less than ten minutes}, the Trident II
missile force could play a major role in any extensive damage-limiting strike against Soviet ICBM fields.\textsuperscript{108}

The hard-target-kill theme can also be found in conservative support for bomber modernization (the B-1B and ATB), cruise missile programs, the development of 'Stealth' technologies, maneuverable re-entry vehicles (and other forms of terminal guidance), and NATO's deployment of its INF weapons --especially the prompt counterforce capabilities of the Pershing II IRBM.\textsuperscript{109}

A Strategic Role for Conventional Forces.

A notable, recurrent theme in conservative policy prescriptions is that, where possible, non-nuclear means should be used to attain American strategic goals. This is partially due to the maturation of particular weapons technologies: advances in inertial and terminal guidance, munitions technologies, and information processing hold out the prospect of non-nuclear strategic weapons.\textsuperscript{110}

Indeed, in the case of air- and sea-launched cruise missiles, this may already be upon us: some 2500 of the US Navy's 3300 Tomahawk SLCMs will be conventionally armed, while the Air Force will arm some 61 B-52Gs with Harpoons anti-ship cruise missiles; and some Air force studies have expressed an interest in acquiring conventionally-armed cruise missiles.\textsuperscript{111}

But by far the most striking manifestation of conventional operations which impact upon the nuclear balance is to be found in the aggressive strategic ASW of the Maritime Strategy. Admiral James Watkins, then the Navy's Chief of Naval Operations, explains the rationale for taking the ASW campaign directly to the Soviet Union's SSBN 'bastions:'

The Soviets place great weight on the nuclear correlation of forces, even during the time before nuclear weapons have been used. Maritime forces can influence that correlation, both by destroying Soviet ballistic missile
submarines and improving our own nuclear posture...Some argue that such steps will lead to immediate escalation, but escalation solely as a result of actions at sea seems improbable. Neither we nor the Soviets can rule out the possibility that escalation will occur, but aggressive use of maritime power can make escalation a less attractive option to the Soviets with the passing of each day. The real issue is... how maritime power can alter the nuclear equation... Maritime forces... provide strong pressure for war termination that can come from nowhere else. 

The probable impact of using non-nuclear forces in strategic roles which have, to this point, been assigned to nuclear weapons has yet to be exhaustively assessed. However, preliminary theorizing on the subject seems to dovetail with conservative views on the continued utility of military force, and the balance of power. Commander James Tritten (USN) writes:

Perhaps if the West took conventional nonnuclear actions, it could hasten satisfactory war termination and preclude a general nuclear exchange... Can conventional actions be taken fast enough or will vertical escalation/war termination occur so rapidly that they will become irrelevant? Conventional forces can also be used to enhance the employment of our own nuclear forces...During a war, all parties will continue to measure the overall correlations of forces and the ever-changing strategic nuclear balance. Decisions to engage in nonnuclear lateral excursions, vertical escalation, or war termination will be partly influenced by each nation's perception of the current strategic nuclear balance... Nuclear war must be taken seriously if nations desire to deter nuclear war while they are engaged in conventional conflict. Nuclear operations are neither the end of war nor the end of politics. Nonnuclear operations taken in the initial conventional phase of a war may make enough strategic difference to enhance the deterrence of nuclear war. Such operations need to be contemplated, for both short and long wars.

Strategic Defence

A renewed interest in strategic defence did not start with the current president. Consistent with the terms of the 1972 ABM Treaty, American research into ballistic missile defence (BMD) technologies had continued throughout the 1970s. With the signing of Presidential Directive 41, the Carter Administration authorized increased research into the potential of LOAD (Low Altitude Defense) technologies.

However, the traditional conservative interest in ballistic missile defence
(which has its historical roots in Donald Brennan's participation in the ABM debate of the late-1960s), received an enormous boost with President Reagan's announcement on March 23, 1983 of the Strategic Defense Initiative, a large-scale research, evaluation and testing program with the aim of developing technologies that would eventually make ballistic missiles "impotent and obsolete."  

Most conservatives do not subscribe to the President's dream of Assured Survival. Initially, Keith Payne and Colin Gray seemed to argue that an extensive ballistic missile defence could bring about a transition to defence-dominant deterrence. This objective seems to be congenial to some of Fred Ikle's arguments as well. However, Gray and other conservatives, with the possible exception of Edward Teller, have now reverted back to a goal of deploying a limited ballistic missile defence in pursuit of the more traditional aims of escalation dominance and the coercive diplomacy that operational superiority would afford. Aware of the resistance that an expensive BMD program might engender (particularly if it involved many new, unproven technologies), conservatives do not rule out an even more limited goal of using point defences against ballistic missiles to preserve the survivability of American ICBMs and C3I facilities.

However, ballistic missile defence is not the only form of strategic defence in which conservatives have shown some interest. Clearly, the counter-SSBN mission stipulated by the Maritime Strategy shows an increased commitment to strategic ASW, and, as noted earlier, this would play a major role in the pursuit of favourable war-termination and coercive diplomacy. There has also been a renewed interest in continental air defence, typified by the Air Defense Initiative (a technology program to counter air-breathing threats along similar lines to SDI), and the replacement of NORAD's ageing F-106 Delta Dart
interceptors with F-15 Eagles.

The Capacity to Fight A Protracted War.

Conservatives recommend, consonant with their belief that conflict involving nuclear weapons may be a protracted affair (rather than an insensate, 'spasm' war), that the United States invest in a force structure capable of prosecuting an extended strategic campaign. Essentially, such a force structure would have two components: an extensive, secure counterforce reserve, and a survivable sophisticated command system capable of employing this reserve in a flexible manner.

A survivable MX deployment, or an extensive Trident fleet would contribute to the development of counterforce reserves, but the current weapons system that epitomizes the flexible, discrete qualities of the reserve is the ALCM-armed B-1B. American SSNs armed with nuclear variants of the Tomahawk SLCM would be quite effective as well. However, there would seem to be enough other missions for the American SSN fleet --the counter-SSBN mission, and keeping the sea lanes open-- to preclude SSN-SLCM deployments sufficient to make up the size of counterforce reserve that conservatives have in mind.

Countervalue strikes cannot be calibrated to an NCA's image of a favourable postwar environment. Because, in the conservative view, countervalue exchanges would likely bring about the end of politics, a countervalue reserve is derided as being essentially immune to strategy. Accurate reserve forces are necessary because only the capacity to launch discrete, counterforce strikes offers the prospect of favourable war-termination.

But to strike, assess, communicate, and --if necessary-- restrike, in the environment of nuclear conflict, will place extraordinary demands on the command system. Conservative recommendations, and a number of official
policy initiatives since the late-1970s, acknowledge the need for survivable, sophisticated C3I.123

Such C3I programs would seek two objectives: to enhance the probability that the command network will survive and endure a protracted nuclear war, and to improve the quality of information reaching American decision-makers, so that discriminate attacks can be carried out promptly.

Better survivability and endurance. In order to promote better command system survivability and endurance, the Ground Wave Emergency Network (GWEN) and the Minimum Essential Emergency Communications Network (MEECN) have been established, as well as programs that provide for better airborne communications aircraft (the Boeing E-4B Advanced Airborne National Command Post, and the replacement of the Navy's TACAMO C-130s with a variant of the Boeing 707), and mobile ground-based C3I. Greater portions (although by no means all) of the command system are now hardened against the effects of Electromagnetic Pulse (EMP).124

Improved Quality of Information. Key programs in providing decision-makers with more precise, real-time intelligence that will better afford flexible force employment include the NAVSTAR Global Positioning System (GPS) satellite program (which will provide targeting information updates to SLBMs and ALCMs), and the Integrated Operational Nuclear Detection System (IONDS), which will be able to pinpoint the location of nuclear detonations, thus providing planners with post-attack assessments, facilitating the efficient employment of counterforce reserves in any supplemental strikes. That both of these systems provide real-time intelligence allows planners to take advantage of the rapid-retargetability of ALCMs and the modern (Minuteman III and MX) ICBM force. The chronic problems of SSBN communication has been addressed, with continuing research into the prospect of using blue-green lasers to rapidly
transmit sophisticated messages to the SSBN fleet.\(^{125}\)

**OVERVIEW: PEACE THROUGH STRENGTH?**

In the conservative view, the United States should have military forces that will allow it to credibly threaten a prospective adversary with unacceptable military outcomes at all levels of conflict, even that of central strategic war. Only then will American peacetime and crisis diplomacy succeed in the face of a determined, culturally distinct Soviet adversary. The Reagan buildup was an attempt to reverse what American conservatives see as very disturbing trends in the nuclear balance; the improvement of American counterforce capabilities relative to those of its Soviet adversary is the essential task of American defense planning.

To the extent that formal arms control is granted a role in American strategic planning, such a role is, at best, secondary. At the root of the problem is that 'essential equivalence' (or rough parity) is not in the long-term strategic interests of the United States, given that the Washington will have a greater need to escalate to higher levels of conflict in the defence of threatened interests on the Eurasian periphery. Conservatives are not against formal arms control *per se*; they are very much against an approach to arms control, prevalent through the 1970s, which they deem astrategic. Thus, conservative arms control proposals have very specific American concerns in mind: the Reagan Administration's proposals at START aim to reduce very specific measures of Soviet nuclear capabilities —particularly Soviet 'heavy' ICBMs. The 'zero-option' sought to remove the threat of the SS-20 entirely. In each case, conservatives have sought verification standards that are extremely stringent.

These recommendations come from a structure of beliefs that places the US-Soviet rivalry, a political concept of war, and a realist view on the utility of force, as the vital considerations for American policymakers. The constraints
imposed by technology, the allies, and the budget, are distinctly secondary matters. Conservative policy recommendations postulate a substantial list of essential missions for American nuclear forces, and demands that these requirements be met. Otherwise, American policymakers may find themselves in a grave situation, where American diplomacy lacks the military credibility to preserve American interests.
III. Critiquing the Conservative View

That the following critique of the conservative view is so lengthy is itself a symptom of polarization within the American debate. Many of the more worthy critiques of the conservative viewpoint do not question its logical coherence: upon accepting the premises of the conservative position, the residual analysis and recommendations follow in short order. Instead, the more penetrating critiques take issue with the most basic concepts and assumptions of the conservative perspective. It is not that these concepts are without value, but it does seem that, in certain aspects, conservative positions on these fundamental issues are either too narrow or too selective; in either case the conservative analysis comes off as unbalanced.

What seems to have been especially lacking in the conservative approach is a sense of how the various means of American foreign policy (military force, diplomacy, and economic power) can be coordinated most efficiently to secure realistic American objectives. The conservative structure of belief has made the entire focus of American foreign policy the containment of Soviet influence, which it sees as omnipresent and uniformly evil. More importantly, the burden of securing this objective has been placed almost entirely on American military forces, generating military requirements that are excessive and unattainable. Allies, diplomacy, and domestic factors have received far less attention.

The following critique takes issue with the conservative position on three general points. First, the conservative brand of containment seems suspect. Their view of the Soviet Union is selective and inflexible, while the means with which conservatives would have the United States contain the expansion of Soviet influence neglects the vital role to be played by the Western allies, and places an excessively demanding burden on American nuclear forces.
Second, the pursuit of escalation dominance is hampered by severe operational problems. It is possible that some of these obstacles could be overcome given a massive commitment of scarce American defence resources, although such efforts would meet the most determined Soviet resistance. However, other troublesome aspects of escalation dominance represent inherent, structural problems (such as theoretical contradictions and physical laws) which can not be evaded.

Third, the conservative view of national security is deeply at variance with the tendencies of broader American strategic culture. Conservative policy prescriptions place an undue emphasis on the role of force in American foreign policy, and the role of nuclear weapons in American defence policy. Perhaps even more importantly, the conservative program for American nuclear weapons policy is ill-suited to the environment of American policymaking. This environment, a complex array of constraints and conflicting objectives in which policy is engineered to optimize domestic, managerial, and allied concerns, discourages the sort of maximalist initiatives that characterize the conservative pursuit of escalation dominance. Conservatives tried to move too far, too quickly. Their insensitivity to the concerns of other policy actors led to the failure of their program.

The Conservative View of Containment: Prudence or Paranoia?

Not all in the conservative view of containment is without merit. Conservative analyses of the Soviet Union show the same imaginative, fine-grained quality which characterizes their work on military matters. Conservative writers have done especially useful work on Soviet strategic culture. However, the analysis is selective and suffers from a lack of balance. Certain aspects of the problem are overemphasized while other important
considerations are neglected. To some degree, this is an enduring problem for analysts of all political colours, but it remains a shortcoming nonetheless.\textsuperscript{124}

In critiquing the conservative version of containment, one might focus the discussion on four important questions. They are: 1) To what extent do the unique aspects of Soviet political culture pose serious problems for the Western security coalition? 2) To what extent does the conservative program neglect the vital role to be played by American allies? 3) What is the exact nature of Soviet strategic nuclear doctrine, and what implications does this doctrine have for American strategic planning? And lastly, 4) What should be the role of the American nuclear arsenal in containing the Soviet Union?

**The Soviet Union as a culturally distinctive adversary.**

There is nothing inherently wrong with this notion; indeed, there is much to commend it as an essential feature of sound security policy. As Benjamin Lambeth notes, writers with impeccable liberal and centrist credentials recognize the need to avoid a projection of American norms on to a nation with a distinctly different history:

Nearly two decades ago, Bernard Brodie remarked that an ingredient often desperately lacking in American strategic policy was "a thorough knowledge of the special idiosyncracies" of the "adversary... as a complex of people organized as a state with distinctive political institutions." That sentiment was plainly out of vogue at a time when cost-effectiveness and narrow quantitative analysis remained at the height of their dominance over US defence policy. Yet it was far from being an isolated lament... As early as 1958 Raymond Garthoff pointed out that any effort to understand "the strategic thought and doctrine of an alien military culture" required that one first "escape the confines of one's own implicit and unconscious strategic concept."\textsuperscript{125}

However, the conservative portrayal of Soviet foreign policy culture seems incomplete. To note only that the Soviet Union is an empire in decline, that it maintains a certain cultural propensity for the resort to force, and that it is a
state dedicated to a foreign policy of expansion (because the legitimacy of the
state has an indebtedness to a proclaimed 'socialist mission'), can make Moscow
look very threatening indeed. However, this image needs to be tempered by a
number of other considerations which constrain Soviet behaviour.

First, while one should note aspects of Soviet behaviour which suggest a
different view of the world, this approach can be taken too far. In some
instances, Soviet objectives do concur with those of the the United States. Most
notably, while Moscow might seek to enhance its influence abroad, and
conciously seek to undermine the position of the United States in world affairs,
the risks of nuclear war almost certainly remain firmly in the minds of Soviet
leaders.

That Soviet leaders have a deep respect for military power does not mean
that they are callous about its use. Here, as Sir Michael Howard has noted, a
review of Soviet history might lead one to quite different conclusions about
Soviet thinking:

[Criticisms of] the original concept of deterrence [come from] the
widespread belief that the Soviet Union does not share it, and has never
shared it... this perception of the Soviet Union as a society prepared to
coolly contemplate the prospect of fighting a nuclear war as an
instrument of policy is [made plausible by a] historical experience of
suffering which, according to some authorities, enables their leaders to
contemplate without flinching the prospect of frightful damage and
casualties running into the scores of millions if it enables them to achieve
their global objectives... [This view rests, in part, on the notion that] since
the Soviet Union suffered some twenty million dead in the Second World
War, they might equably contemplate further comparable losses in
prusuit of a political objective sufficiently grandiose to warrant such a
sacrifice. Now the United States has never suffered such losses and I
hope that it never will. But it is a matter of historical record to what
shifts and maneuvers Stalin was reduced in his attempt to avoid having
to fight that war; and speaking as a representative of a people who
sustained nearly a million war dead between 1914 and 1918, I suggest
that the record also shows that readiness to risk heavy losses in another
war does not necessarily increase in direct ratio with the sacrifices one
endured in the last.126

It is of perhaps even greater significance to remember that political culture
changes. For conservative writers, this seems like a curious oversight to make, given how insistently they make the point that defence planning is an enduring, dynamic process. Howard gives this impression of the Soviet leadership during the early-1980s:

The leadership of the Soviet Union, and any successors they may have within the immediately foreseeable future, are cautious and rather fearful men, increasingly worried about their almost insoluble internal problems, increasingly aware of their isolation in a world in which the growth of Marxist socialism does little to enhance their political power, deeply torn between gratification at the problems which beset the capitalist world economy and alarm at the difficulties which those problems are creating within their own empire; above all conscious of the inadequacy of the simplistic doctrines of Marxism-Leninism on which they were nurtured to explain a world far more complex and diverse than either Marx or Lenin ever conceived. Their Staatspolitik, that complex web of interests, perceptions and ideals which Clausewitz believed should determine the use of military power, thus gives them no clearer guidance as to how to use their armed forces than ours gives to us.127

Writing the above in 1981, Howard brings up two related issues. The first is the question of generational change in the Soviet leadership. As it turned out, Brezhnev, Andropov, and Chernenko were the last General Secretaries of the CPSU from the Stalinist era: memories of the Second World War, the heady rise of Soviet power, and the Cold War, clearly shaped their perceptions of Soviet security priorities. The successor generation, typified by Mikhail Gorbachev, may have a significantly different image of the the Soviet Union and international politics --perhaps one shaped more by detente, strategic parity, the collapse of superpower relations in the late-1970s, and the systemic problems of the Soviet economy. Their experience of these events and problems, reinforced by a more sophisticated view of the United States, are more likely to yield Soviet leaders with a very different security policy agenda.128

The most pressing of Moscow's security problems are economic. As Paul Kennedy notes, those worried about the international consequences of American
economic decline can take cold comfort in the fact that Moscow is even worse off. He describes the Soviet problem in a recent article:

The evidence of the past seventy years of Party rule suggests that the real problem is the Leninist system of government and the economy itself... Its philosophy asserts the on-going, dialectical process of change in world affairs is driven by technology and new means of production, and inevitably causes all sorts of political and social transformations, yet it its own autocratic and bureaucratic habits, the privileges that cushion party elites, the restrictions upon free interchange of knowledge, and the lack of personal incentive make it horribly ill-equipped to handle the explosive but subtle "high-tech" future that is already emerging in Japan and the United States. Above all, while Party leaders frequently insist that the USSR will never again accept a position of military inferiority, and even more frequently urge the nation to increase production, the state has clearly found it difficult to reconcile those two aims and, in particular, to check a Russian tradition of devoting too large a share of national resources to the armed forces --with deleterious consequences for the ability of the USSR to compete commercially with other societies.

Gorbachev seems to believe that the tension between defence expenditure and civilian investment can be meliorated by more conciliatory foreign and defence policies. So, contrary to what may conservatives argue, it is far from clear that the current generation of Soviet leaders will choose to respond to internal decline with external bellicosity. Certainly, the precedent of Soviet behaviour during the late-1960s and early-1970s provides a rationale for expecting Moscow to pursue a similar relaxation of tensions.

On the surface, the link between legitimacy, ideology, and expansion in Soviet foreign policy seems troubling. However, as even some conservatives note, Moscow must rely on its reputation as 'leader of the world's socialist states' because the regime has few other sources of legitimacy. Certainly, the entrenched, coercive bureaucracy that stifles innovation, and with it economic performance, is more of a liability than an asset in this regard. However, if the determined efforts that are being made to reform the Soviet system begin to provide some visible improvements in Soviet economic performance, technological progress, or the Soviet citizens quality of life, alternative sources
of political legitimacy may be open to the regime, reducing its reliance on ideology (which does not seem to be all that effective anyway), and military power (which seems to be part of the problem).\textsuperscript{132}

In this regard, the Strategic Defense Initiative is a most intriguing program. In the medium to long-term, the Soviets will have to devote more resources to high-technology industries if their relative national capabilities are to keep pace with those of the United States and its allies. The strategic leverage of American high-technology becomes apparent when one realizes how Washington has shifted the focus of the strategic nuclear competition from an area in which Moscow currently holds the comparative advantage (prompt hard-target-kill potential), to an arena where Western prowess is unrivalled (high-technology). Thus, in the short-term, SDI may be uniquely able to win concessions from the Soviets in those areas of the strategic nuclear competition which US strategists find most disturbing.\textsuperscript{133}

The notion that the Soviets are no longer simply competing with the United States, but also with the economic and technological capabilities of Great Britain, West Germany, and Japan, is an important one. By inviting the allies to participate in the program, the United States has been able to get other Western nations to contribute to the development of the American strategic nuclear posture. Or, to view it in another way, the allies are improving the position of the Western coalition's dominant member, \textit{vis-a-vis} the Soviet Union, by diverting allied technological resources to an American military high-technology program, with the opportunity cost this entails to these countries' civilian high-technology sectors.\textsuperscript{134} Certainly this is a clever approach to the 'burden-sharing' problem, and raises the larger issue of the conservative approach to containment at a more general level.
Conservatives and Containment: No Role for the Allies?

As reviewed earlier, conservative writers have adopted a 'perimeter' approach to containment: Soviet influence must be stopped at any and all points on the globe. What seems to underlie an advocacy of perimeter containment is the premise that the nature of the Soviet-American competition, which conservatives see as a conflict based on ideological as well as power considerations, makes losses or victories in all areas equally significant.

This view seems excessively Manichaean. The range of outcomes in the superpower competition for influence is scarcely restricted to the prospect of either 'capitalist liberal democracy' or Soviet-styled 'totalitarianism.' Neither the American nor the Soviet model has compelling attractiveness for many of the world's nations. For many developing countries, who face urgent, complex problems, the focus of either superpower's ideology may not seem particularly relevant. The deficiencies of ideology as a potent political weapon seems especially applicable to the Soviet Union, which has long ceased to be an attractive model for other nations to emulate.135

This conception of the East-West rivalry has been very costly to Washington in terms of allied support. Conservative impatience with NATO-Europe derives, in no small part, from the reluctance of the Europeans to shoulder more of the Western defence burden. This applies not only to the willingness of some Alliance partners to meet agreed-upon spending goals (the failure of the Long-Term Defence Program of the late-1970s comes to mind), but also to the matter of assisting American operations outside of the NATO area. Conservatives seem to believe that the United States should be willing to pursue the goal of perimeter containment unilaterally if necessary.

David Calleo makes several telling criticisms of the conservative view of the allies:
The real grievance of NATO's right-wing critics is that NATO entangles, whereas the driving force behind their world policy is a heroic denial of American dependence on any other country. In this view, the European connection is a source of weakness, not strength. The NATO allies most certainly do not encourage the sort of anti-Soviet and interventionist foreign policy that a writer like [Melvyn] Krauss apparently prefers. But the real obstacle to unilateral liberty is not that the United States still has allies, but that it needs them more than ever. The United States no longer has the resources to impose its will alone. NATO's function is no longer to organize the dominion over others, nor to replace their strength with American strength, but to mobilize their forces for shared purposes... even the greatest countries are subject to a balance of power and ... national self interest has to be defined and pursued in a cooperative framework.136

Calleo's argument seems well-founded. The failure of American conservatives to recognize the need for genuinely cooperative security relations with the allies is now a major source of 'instability' because it denies the United States the benefits of the Western security coalition. The Europeans and Japanese are no longer of incidental or symbolic value to the United States. They stand to critically augment the ability of the United States to accomplish many of its foreign policy goals, and with the decline of American power (as exemplified by the twin deficits) the revival of a cooperative approach to Western security has now become essential.

There seems to be little question that Western Europe and Japan must begin to contribute more to the management of Western security concerns. The economies of these nations have more than amply recovered from the wartime devastation that gave rise to the Atlantic Alliance. Indeed, they now rank among America's most serious economic competition. There is no reason why they should not increase their role in securing Western interests. If the allied countries have become increasingly critical of recent developments in American military policy, they should also realize that their reluctance to make equitable contributions to Western security is partially responsible for the attractiveness that escalation dominance holds for American policymakers.137
On the other hand, the Europeans and Japanese might be more willing to make an increased contribution to Western security if the American security cooperation arrangements were more genuinely consultative. Europeans feel that, among other things, they have greater experience in dealing with the Soviet bloc and the developing world, and that in these areas of Western concern, that Europe should be consulted.

However, as an instance of just how challenging this might be, one can note that NATO's 'out-of-area' (O/A) problem not only regularly disrupts Alliance relations, but that there seem to be no easy solutions for it. At this point, only the United States has the long-range military power projection capabilities that can consistently provide a response to out-of-area contingencies. But were the Americans to become preoccupied with this mission, scarce resources would be diverted from the broader goal of improving the Alliance's conventional forces in Europe. If the other Alliance partners did not make up the shortfall in conventional strength in Western Europe, caused by any diversion of American manpower, equipment, or budgetary resources to the management of out-of-area contingencies, NATO's dependence on a strategy of nuclear first use would intensify, which would not in any way alleviate the pressures for the American pursuit of escalation dominance, with all of its attendant strategic and budgetary problems.⁴³⁸

This issue can impact upon American defence planning in a number ways. If the American defence effort concentrates on the goal of deterring a European war, its force structure will be considerably different from that which is designed to project power over long distances at regular intervals. The most notable instance of this can be seen in policy debates over the structure of the 600-ship Navy, particularly its reliance on extremely expensive carrier battle groups (CVBGs). Although at various times Navy spokesmen have argued that
these forces would be crucial in a European war, other observers have argued that the real purpose for the procurement of sixteen carrier groups is for intervention in the Third World. Here the case for carrier groups is much stronger, given that they are self-sustaining forces that can rapidly project power into a given troublespot, and given former Secretary of the Navy, John Lehman's increasingly accurate claim that, with the diffusion of sophisticated military technology, 'low-threat' areas no longer exist.\textsuperscript{139}

A more subtle instance of this dynamic, although no less important as the United States enters a period of constricted defence budgets, can be found as a major theme in the 'defence reform' debate: the relationship between versatility, technological sophistication, and cost. If American forces were instead, to reflect the capability to perform a wide variety of demanding missions, the complexity and individual unit cost of such forces would increase. Forces that are expected to operate in a number of different theatres could run into the same problem (in this regard, tanks, transport aircraft, and carrier battle groups come readily to mind). And as the unit cost of these forces increases, the numbers that can be procured will decrease. The increased sophistication of these forces may place greater demands on other factors such as maintenance and the qualifications of the operator. So for only one nation to assume responsibility for NATO's out-of-area missions may have undesirable effects on the conventional posture of the Alliance as a whole.\textsuperscript{140}

And because such out-of-area forces would be solely American, additional tensions would arise when these forces were used in contingencies where the broader Alliance interest were either unclear (such as in the Northwest Pacific), or where there were deep differences of opinion within the Alliance (such as Central America).\textsuperscript{141}

As Calleo argues, then, the future of American security policy would seem to
remain rooted in an alliance framework. For the United States, genial relations with Western Europe and Japan remain a vital interest above all others. The maintenance of such relations is dependent upon the existence of meaningful consultation on security policy questions broadly defined. The NATO allies and Japan may not support perimeter containment in each and every case, but Washington simply cannot afford the political or budgetary price of security perimeter containment unilaterally. In short, these nations remain both vital interests and useful allies.

This is not to suggest that other security guarantees (particularly to congenial nations on the Pacific Rim and the Persian Gulf) should not be continued -- in some cases, a strengthening of these commitments would be desirable. But any attempt to manage these various commitments must be done within a broader, cooperative framework of Western security. This may be a challenging task, but it is also an essential one.

**Soviet Nuclear Doctrine: Issues of Damage-Limitation and Strategic Defence**

As one might come to expect, conservative writers are on more solid ground when they discuss Soviet military policy. Much in the conservative portrayal of Soviet strategic nuclear policy with regard to employment doctrine and arms race stability is useful and plausible. However, as far as determining an appropriate Western response to these developments is concerned, definitive assessments of Soviet strategic doctrine remain elusive.

Most liberal commentary to the effect that Soviet nuclear strategy has dropped its war-fighting conception of deterrence centres on Leonid Brezhnev's 1977 Tula speech, in which he purportedly disavows Soviet aspirations to nuclear superiority, as well as the confident assertions that the Soviet Union would emerge preeminent from even a nuclear war, and the possibility of Soviet
crisis preemption. Furthermore, much of the post-1977 Soviet line on strategic doctrine finds its roots in this speech, including the 1982 declaration of 'no-first-use', and the repeated assertion that Soviet doctrine is 'defensive' in character.142

However, as Benjamin Lambeth notes, one must be careful not to make more of the 'Tula line' than it warrants:

It would oversimplify things to discredit this new Soviet line out of hand, as some in the West have done, as nothing but cynical prevarication for the benefit of gullible outsiders. For one thing, much of the Tula line can be reconciled with the classic principles of Soviet military thought once the fine print on both sides is carefully scrutinized. For example, when Soviet leaders insist that nuclear war would be an unmitigated calamity, they are also careful to avoid adding any intimation that it is no longer a contingency the Soviet Union must continue to plan against... In fact, there is no incompatibility between Moscow's emphasis on warfighting in its defense preparations and its stress on deterrence at the state policy level. The issue has never been whether the Soviet leadership is committed to preventing nuclear war...one need not posit an image of the USSR as a nation bent on war to demonstrate that its forces and employment concepts are configured to take the offensive whenever major war appears foreordained.143

The biggest problem with Robert McNamara's conclusion that the Tula line has now rendered claims of a Soviet proclivity for damage-limitation "badly out of date," are the incongruities between this view and contemporary Soviet defence programs. A persistent interest in strategic defence (even if the results of Moscow's programs in this area are ultimately unimpressive), coupled with offensive forces which continue to give primacy to 'heavy' ICBMs, are strong evidence of strategic concepts that are still largely uncongenial to their Western counterparts.144

For the Soviets, the goal of employment doctrine is very clear: the successful prosecution of war should deterrence fail. Relying on a damage-limiting posture that combines prompt-counterforce strikes with varying measures of strategic defence, so as to destroy the United States as a coherent military power, Soviet nuclear doctrine at the intercontinental level is almost completely informed by
operational considerations. It stands in marked contrast to American strategic nuclear doctrine, which seeks to use concepts like 'intrawar bargaining' and 'restraint' to influence Moscow's behaviour through psychological and political means.

However, it is important to put Soviet nuclear doctrine into its proper context. Employment doctrine is a set of plans, formed in peacetime, which is concerned with how a nation would employ nuclear weapons once deterrence had already failed. As Lambeth notes, focusing only on Soviet doctrinal writings, as has been the conservatives tendency, will not yield an accurate assessment of plausible Soviet behaviour during a superpower crisis, or even the early stages of a Soviet-American war:

Soviet military doctrine is almost certainly an incomplete representation of actual Soviet strategic thinking and planning... there is every reason to believe that the overt record of Soviet military doctrine represents the tip of a very large iceberg, which we should accept only as a partial reflection of the overall Soviet image of nuclear war... Both the logic and the history of Soviet circumspection in past crises give reason to believe that in any actual showdown between the superpowers, considerations of self-interest and respect of the awesome consequences of unrestrained nuclear war might lead the Soviet leadership toward behaviour considerably more measured, at least in the initial phases of fighting than that formally prescribed... Soviet strategy may reflect a legitimate body of last-resort operating principles, but it is in no way universally binding on the Soviet NCA [National Command Authority]... there is a vast difference between prudent investment against the possibility that deterrence might fail and the notion that large-scale nuclear war is a workable policy alternative.

If there is a median position on the issue of what attitude the Kremlin maintains on nuclear weapons, clues might be found in an examination of issues to which the Soviets do not devote a great deal of commentary. In this regard, two stand out: limited nuclear options (LNOs), and nuclear crisis management, both of which are familiar to students of American strategic policy. Their intimate operational relationship suggests that they might provide useful avenues into a more complete consideration of how the Soviets view nuclear
Generally, American strategic concepts like limited nuclear options, escalation control, and flexible response have been derided in the Soviet strategic literature as patently unrealistic. In a way, the Soviets give the impression that the only 'threshold' which they recognize in strategic matters is that between peace and war. Even certain features of the Soviet line on nuclear doctrine since the late-1970s -- the 1982 pledge of 'no-first-use,' and the repeated stress that Soviet doctrine is 'defensive'-- seem to suggest that Moscow is distinctly skeptical about the outcome of any attempts to wage limited nuclear war.

However, there are a number of reasons why Moscow's actual behaviour when confronted with the likelihood of limited war (even in its nuclear variant), might be somewhat different. First, the maturity of Soviet strategic forces now allows Moscow to entertain strategic concepts which were beyond its reach during the 1960s and early-1970s, including a continuum of strategic nuclear operations ranging from theatre strikes to extensive 'countervailing' LNOs against the continental United States. Second, the most probable path to a Soviet-American nuclear exchange is the escalation of a theatre conflict, and even if Soviet and American forces are in direct conflict over a vital interest, both Moscow and Washington have a distinct interest in keeping the scope of violence to the theatre in question.

Some conservatives have argued that Soviet nuclear doctrine is 'defence-oriented', and that Washington should thus be able to persuade Moscow to enter into a nuclear regime of 'defense-dominant' deterrence. Certainly, Soviet interest in varying forms of strategic defence (including ABM research, the upgraded 'Galosh' ABM system, civil defence, a massive air defence system; and training exercises associated with all of these) suggest
strategic concepts which diverge from those of Mutual Assured Vulnerability. Moscow seems to feel that something as essential as the defense of the homeland cannot be allowed to rely solely on the forebearance of one's adversaries. This attitude toward strategic defense, like other aspects of Soviet strategic doctrine, informs Soviet procurement and strives toward a posture that can achieve Soviet operational goals if deterrence fails.

However, as Benjamin Lambeth and Kevin Lewis note, this does not make the case that the Soviet conception of deterrence is 'defense-dominant':

The Soviets do not assign absolute priority to homeland defense. Occasionally one encounters assertions from PVO spokesmen that 'victory and defeat in war has not become dependent upon how much the state is in a position to defend reliably the important objects on its territory.' The bulk of Soviet commentary, however, has long emphasized that the decisive role of protecting the homeland lies in the damage-limiting potential of the Soviet ICBM force. In short, strategic defense is considered an independent form of combat, but not an independent mission. Instead, it is treated as an integral part of broader Soviet "all-arms" philosophy, which insists that no single service or weapon can, by itself, secure victory.150

Again, the Strategic Defense Initiative raises some interesting questions. As noted earlier, Moscow is probably worried about the program's impact in other areas of military high-technology, but this is an issue separate from Moscow's conception of strategic deterrence. The Soviets are probably not worried that SDI will deny them an 'Assured Destruction' capability (that is, the maintenance of a reserve force capable of carrying out high-confidence retaliation against a wide range of urban-industrial targets). In this regard, the Soviets have endorsed or replicated Western technical analyses skeptical of the prospect of a leakproof 'astrodome' defense, and probably consider it a prudent risk to wait and see if the vigorous research effort toward the President's stated goal is slowed by budgetary restrictions or Congressional reluctance.151

However, one must remember that 'Assured Destruction' is not the benchmark for sufficiency in Soviet strategic force planning. The role of the
Soviet nuclear arsenal is likely to deter the invocation, and use, of American nuclear forces, and to protect the homeland, through damage-limitation if strategic deterrence seems doomed. To the extent that the program either enhances American damage-limiting capabilities, thus enhancing extended deterrence, or fields limited BMD for ICBM silos and command facilities, thus further increasing operational uncertainties for Soviet damage-limitation, SDI is a serious issue for Soviet planners. Either outcome could perceptibly reduce the political value of Moscow's nuclear deterrent into which it has invested enormous sums, and which forms the foundation of Soviet status as the superpower equal of the United States.152

Containment and Nuclear Weapons: Superiority and the Threat of Escalation.

In marked contrast to conservative views on the subject, the perception within the mainstream of the American strategic community seems to be that the current strategic condition of Mutual Assured Destruction (MAD) is very robust, and offers little in the way of potential operational advantages which could be politically significant. The pursuit of nuclear superiority would likely stimulate a countervailing build-up on the part of one's adversary. And in the current military environment, where offensive nuclear forces possess such an overwhelming advantage over strategic defences, it remains far easier to maintain the conditions of MAD than to seize unambiguous nuclear superiority.153

The conservative ideal of nuclear crisis management is premised on the ability to tailor nuclear operations to limited objectives in a credible fashion. The premise generates especially demanding operational criteria for the deterring party's nuclear forces because it must be sufficiently clear to both sides that in a central, strategic war, the deterring party could conduct a
successful nuclear campaign while holding its losses to acceptable levels. For one side to be able to convince the other of such disparate outcomes in a nuclear war would require extraordinary operational capabilities, especially in the current military environment where offensive nuclear forces possess such an overwhelming advantage over strategic defences.

While conservative reviews of the first two decades of the postwar era portray them as the halcyon years of US atomic diplomacy, liberal interpretations of this same period are, perhaps predictably, unimpressed with the coercive effect of nuclear weapons in determining the outcome of Cold War crises. However, as Richard Betts argues, a detailed review of American nuclear diplomacy does not lend itself to the sweeping conclusions of either liberals or conservatives:

In crisis decisions, the United States exhibited a proclivity toward nuclear coercion that was not strongly governed by the nuclear balance of power... US nuclear superiority did not instill confidence in political decision-makers, since they did not assume that it could prevent unacceptable damage, but it nevertheless cushioned their anxieties and made it easier to edge toward the brink; escalation dominance and the prospect of unequal damage was an ancillary support to credibility... The arrival of nuclear parity changed the behaviour of leaders less than is often assumed; it fostered anxiety about whether first-use threats remained practical but did not prevent resurrection of the tactic when crises comparable to former cases occurred... Soviet behaviour following US nuclear threats in crises through the 1960s appeared more consistent with a risk-minimizing attitude and sensitivity to the imbalance of nuclear striking power... In the early 1970s Moscow assumed that the arrival of parity compelled change in American behaviour, making it more accommodating. Events of the decade did not confirm American reticence, but neither did they imply that the Soviets were as impressed by US nuclear leverage as they had been in previous decades.

American extended deterrence commitments encourage a greater willingness to contemplate limited nuclear use. At a theoretical level, the continuing quest for more precise guidelines is driven by the need to tailor an enormous destructive capability to commitments where US interests are (most clearly) limited. Flexible response is the ambiguous suggestion that a conflict over an
American vital interest abroad might come to involve the use of US strategic forces. In terms of alliance diplomacy, a valuable feature of flexible response might lie in its very ambiguity, but ultimately, it does reflect a step back from the view that American strategic forces derive their sole utility from deterring Soviet strikes on American territory. Coupling the American nuclear arsenal to the preservation of Washington's selected political interests abroad is the threat of escalation: in order not to suffer the credibility problems of threatening to commit the United States and the Soviet Union to mutual suicide, American strategic doctrine must incorporate concepts that stress the prospect of limited, deliberate use.156

Conservatives seem to be on solid ground when they argue for the development of more discriminating nuclear weapons and a measure of SIOP flexibility. Planners should do what they can in attempting to limit a potential nuclear exchange to 'mere catastrophe' instead of unlimited holocaust. Similarly, it is difficult to argue with the notion that maintaining some measure of control over escalation will be more likely if defence planning reflects this priority in peacetime.

As Desmond Ball argues, it is impossible to prove that escalation is either precisely manipulable or inherently uncontrollable. What underlies conservative pronouncements about escalation is the belief that the development of credible escalatory options is as good a use of resources as any other alternative.157 However, there are several considerations which should temper one's enthusiasm for a national security strategy which relies on the threat of nuclear escalation.

Peacetime theorizing about escalation control and intrawar bargaining and the actual maintenance of control under wartime conditions are likely to be two very different things. The physical effects of nuclear weapons impose limiting
conditions on the prospects for controlled warfare, as Robert McNamara notes:

A group of experts were assembled recently by the UN Secretary General to study nuclear war. They simulated a conflict in which 1500 nuclear artillery shells and 200 nuclear bombs were used by the two sides against each other's military targets. The experts concluded that as a result of such a conflict there would be a minimum of five to six million civilian casualties and 400,000 military casualties, and that at least an additional 1.1 million civilians would suffer from radiation disease... Is it realistic to expect that a nuclear war could be limited to the detonation of tens or even hundreds of nuclear weapons, even though each side would have tens of thousands of weapons remaining available for use? The answer is clearly no. Such an expectation requires the assumption that even though the initial strikes would have inflicted large-scale casualties and damage to both sides, one or the other --feeling disadvantaged-- would give in. But under such circumstances, leaders on both sides would be under unimaginable pressure to avenge their losses and secure the interests being challenged. And each would fear that the opponent might launch a larger attack at any moment. Moreover, they would be operating with only partial information because of the disruption on the battlefield... Under such conditions, it is highly likely that rather than surrender, each side would launch a larger attack, hoping that this step would bring the action to a halt by causing the opponent to capitulate.158

The operational aspects of military planning may conflict with other aspects of escalation control in crisis and war. Ostensibly, American strategy may aim to maintain a strategic posture which is robust and capable enough to 'win' crises before they turn into wars. But in practice, military operations at crisis levels of alert might inexorably stimulate a spiral of reciprocally intensifying alerts, the military imperatives of which would run counter to the goal of containing a crisis.159

This problem manifests itself most clearly in the trade-offs which have been made in designing an effective command and control system. On one hand, the political leadership wishes to retain positive control over the arsenal in times of crisis, so as to prevent inadvertent escalation. On the other hand, the prudent desire to retain positive control must not impose a paralysis on the deterring nation's military forces that would erode deterrence, and -- should deterrence fail-- jeopardize the military performance of those forces.160 As John Steinbruner notes, these organizational imperatives form part of a larger
problem for rational deterrence:

Even in the absence of detailed information there are strong reasons to believe (or fear) that strategic nuclear forces operate with significant ambiguity of authority, that their command channels are dramatically more vulnerable than the basic force elements, that coherent strategic operations can only be conducted on the basis of preprogrammed plans, that realistic flexibility --the availability under combat conditions of more than a single plan-- is sharply limited by the vulnerability of command channels, and that the dangers of losing central command over strategic operations shortly after the initiation of even moderate levels of warfare are very great indeed... To the extent that political decision makers recognize the realities of the command situation and to the extent that their reasoned actions determine events, they will be deterred from undertaking attacks with nuclear weapons... It is quite apparent, however, that the preservation of a strong deterrent effect and the actual prevention of war are not the same thing. Indeed the most serious threat of war under current circumstances probably lies in the possibility that organizationally and technically complex military operations might override coherent policy decisions and produce a war that was not intended.161

Rational deterrence, with its secondary themes of escalation and strategic bargaining is a formidable rational construct. Unfortunately the outcomes of strategic policy often show the influence of non-rational processes and outcomes. A well-developed awareness of these pitfalls should temper the ambitions of deterrence theorists and strategic planners.162

Escalation Dominance: Impossible and Unnecessary?

In addition to deterring attacks on the United States, American nuclear forces extend deterrence to selected interests abroad. Conservatives argue that for extended deterrence to retain its coherence and credibility in the face of Soviet conventional superiority, American nuclear forces must be able to dominate the process of escalation in a Soviet-American nuclear conflict.

In the conservative strategic literature, one encounters the call for escalation dominance in a variety of forms, but two are currently in vogue. The first calls for the United States to be able to conduct damage-limiting strikes against the entire range of Soviet nuclear forces. The putative scenario would seem to
envision a gradual, controlled escalation of a Soviet-American conflict past the theatre level. The use of American strategic forces for damage-limitation would essentially involve a pre-emptive strike at Soviet intercontinental nuclear assets, combined with follow-on attacks and some measures of strategic defence.\textsuperscript{163}

The second variety envisages a more gradual 'drawing down' of Soviet strategic nuclear capabilities. The United States should have the capability to impose a 'widening gap' in residual counterforce capabilities on the Soviet Union; this manifest disparity in capability would serve as leverage for favourable war-termination. The Navy has argued along similar lines in defence of its 'counterforce coercion' anti-SSBN campaign in the Maritime Strategy. So whether through irrevocably shifting the nuclear balance, or gradually degrading Soviet nuclear assets over time to produce such a shift, the United States would regain a marked nuclear superiority enabling it to threaten nuclear use in order to reverse Soviet conventional gains.\textsuperscript{164}

When taken in the context of the overall strategic environment, (including the likely American counterforce deployments of sister services, and likely Soviet reactions), the second variant, although imaginative in its formulation, seems to call for the more conventional form of damage-limitation espoused by advocates of the first variant. Taken by itself, the logic of objective counterforce, and the Navy's 'counterforce coercion' mission, seems incoherent. In response to critics of the Maritime Strategy, who claim that counterforce coercion is destabilizing because it threatens the Soviet Union's strategic reserve in the form of its SSBN force, Navy spokesmen have argued that the composition of the Soviet nuclear deterrent (particularly its concentration on ICBMs, against which there is no current American threat) has not granted any special significance to the SSBN fleet (particularly since it is largely home-ported).
However, at the same time, the Navy argues that the counter-SSBN campaign would alter the 'nuclear correlation of forces' to the extent that the Soviet Union would capitulate and negotiate war-termination on terms favourable to the US and its allies.

It seems possible to argue one of these points, but not both. Conservatives contend that the existence of a credible, assured Soviet retaliatory capability poses vexing problems for extended deterrence, because it counter-deters American nuclear options short of countervalue warfare. If the objective is not to endanger the existence of a viable Soviet deterrent (or, counter-deterrent, as the case may be), then it is hard to see what leverage putative American nuclear 'superiority' will have in reversing the advances made by Soviet conventional forces.

It might be argued that the counter-SSBN mission might force the Soviets to allocate more of their ICBM force to a reserve role, reducing their advantage in prompt hard-target-kill warheads which might otherwise be available for other, more extensive, counterforce missions. But it does not seem that this argument would get around the problem either. A Soviet retaliatory capability based on ICBMs creates the same problems for the theory of objective counterforce as any other basing mode for residual Soviet capabilities. If anything, it is more troublesome: a reserve made up only of ICBM warheads which could be discriminately targeted creates more potential nuclear options for the Soviet planner than were he forced to rely on the relative inaccuracy of Soviet SLBMs, or the uncertain penetration rates of the bomber force.

There does seem to be a tacit admission of these problems in the objective counterforce literature. Builder notes that objective, retaliatory counterforce capabilities are really the best strategic option for the Soviets. Optimal American strategy would seem to be what Builder refers to as 'splendid'
counterforce, or, a first-strike capability. Supporters of the Maritime Strategy deny that it represents the Navy's way to win a Soviet-American conflict by itself, although this has certainly been the Navy's style of arguing for appropriations in the postwar period. Instead, it is argued that the prosecution of conflict at any level must be carried out in conjunction with 'sister services and allies.'

What these admissions suggest is that objective counterforce and more conventional forms of damage-limitation essentially amount to the same thing, however differently they have been formulated within the strategic debate. Certainly prospective Soviet planners will not view elements of the American posture in isolation: their assessment of the Maritime Strategy will emerge after placing it within the context of American strategic capabilities as a whole. Nor does it seem that the American military will be interested in wartime strategic operations that are 'micromanaged' so as to conform to abstract notions of 'intrawar bargaining,' if greater capabilities would lend greater feasibility to clearer, more maximalist goals. And such capabilities would clearly be the import of conservative recommendations for strategic defence, as well as modernization programs for other elements of the strategic forces, including ICBMs, SLBMs, air-breathing forces, and the command system. So the essential conservative prescription for the strategic forces remains the development of a damage-limiting posture.

An American damage-limiting capability will be predicated upon: 1) American forces being able to launch a high-confidence disarming strike against the Soviet ICBM force, bombers caught on the ground, and the command system; 2) residual American forces capable of striking targets of opportunity, such as Soviet nuclear forces left intact and enemy conventional forces; 3) a very effective strategic ASW campaign; and, 4) strategic defence systems capable of
defending against surviving Soviet air-breathing forces, as well as ballistic missiles launched either on warning or while under attack. Additionally, these capabilities need to be cost-effective against plausible Soviet countermeasures. A closer examination of the goals suggests ample reason to doubt that, from an operational standpoint, these objectives can be attained with a high level of confidence.

Preempting the Soviet ICBM Force, Bomber Fleet, and Command System

The Soviet ICBM force currently accounts for some seventy-five percent of the destructive power of that nation's nuclear arsenal. The bulk of the 1398 ballistic missile launchers are in hardened silos that are widely dispersed to 18 missile fields in the western and central Soviet Union\textsuperscript{168}; as the Soviets begin to add mobile missiles to their arsenal, such as the single-warhead SS-25 and the multi-warhead SS-24, the force will be afforded even greater dispersion. Additionally, and in marked contrast to the American ICBM fields in Montana, Wyoming and the Dakotas, Soviet missile fields are in some cases co-located with urban centres.

Currently, there is no comprehensive American threat to the Soviet ICBM force. American counterforce-capable warheads remain restricted to approximately 1050 Mk 12 and Mk 12A warheads on some 550 Minuteman III ICBMs, and an additional 230 Mk 12A warheads on 23 MX missiles in Minuteman silos.\textsuperscript{169} As two of these warheads would be allocated to each Soviet hardened silo, existing American prompt counterforce capabilities could only destroy, at maximum, 670 of a putative list of 1400 Soviet hard targets.

The American air-launched cruise missile (ALCM) can destroy hard targets, but its slow flight times, as well as uncertain rates of penetration and reliability, make it less suited to a mission of covering time-urgent targets.\textsuperscript{170} There are
some 450 Minuteman II ICBMs, but these are armed with single, relatively large-yield warheads, which are not sufficient for a discriminate attack. Many more American warheads are based on the Poseidon and Trident I SLBMs, but their relative inaccuracy would necessitate the complicated timing arrangements endemic to three-on-one attacks. (This is particularly the case with the Poseidon warheads, the yield of which is only 40 kt.) Thus we can conclude that there is no realistic American threat to the Soviet ICBM force.

The Strategic Modernization Program of 1981 sought to change this situation, particularly in view of what conservatives perceived to be a robust Soviet capability for disarming strikes against the American ICBM force. The Administration aimed to buy 100 MX missiles, 100 B-1B strategic bombers (each of which can carry 28 ALCMs), and envisioned the purchase of between 20 and 25 Ohio-class submarines, each of which would receive 24 Trident II missiles armed with eight counterforce-capable warheads. Presumably, the American counterforce capabilities would improve:

<table>
<thead>
<tr>
<th>Launcher</th>
<th>Number of Warheads per Launcher</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 MX ICBM</td>
<td>10 (335 kt)</td>
<td>1000</td>
</tr>
<tr>
<td>550 Minuteman III</td>
<td>3 (335 kt)</td>
<td>1050</td>
</tr>
<tr>
<td>480 Trident II SLBM</td>
<td>8 (475 kt)</td>
<td>3840</td>
</tr>
<tr>
<td><strong>Total warheads:</strong></td>
<td></td>
<td><strong>5890</strong></td>
</tr>
<tr>
<td><strong>Total warheads expended in a two-on-one attack:</strong></td>
<td></td>
<td><strong>2945</strong></td>
</tr>
</tbody>
</table>

Notably, American strategic forces would be capable of launching a disarming strike against all 1400 Soviet ICBMs with Minuteman III and MX missiles only. The Minuteman II, the ALCM-armed B-1B (and possibly the B-2
ATB), and the entire force of Trident C-4 and D-5 missiles could be held in reserve.

But there are a number of reasons why such a capability could only remain theoretical in nature. A disarming strike against the Soviet ICBM force would be a military venture of awesome operational uncertainties. Ironically, public familiarity with these uncertainties was the product of the debate over whether or not the Minuteman ICBM force was vulnerable to Soviet attack.

The first set of operational obstacles to a damage-limiting strike involve reliability concerns: it is not assured that American ICBMs would all work as expected. Beyond simple mechanical or electrical problems that might plague a complex system like an ICBM, there is the simple fact the ICBM force has never been subjected to realistic operational testing. More importantly, where limited operational testing has taken place, the results have been more embarrassing than encouraging.\(^{173}\) Indeed, one of the fundamental problems in projecting the actual performance of the ICBM is that the missiles have never been fired in a North-South trajectory. American testing involves firing the missiles on an East-West trajectory from Vandenberg Air Force Base in California, to Kwajalein Atoll in the western Pacific Ocean, thus precluding an assessment of the performance effects of the Northern Magnetic Pole. Furthermore, in the course of a ballistic missile's 10,000-kilometre flight, the propulsion and guidance systems could be upset by any number of unforeseen shocks or disturbances.\(^{174}\)

The targeting side of this equation does not inspire confidence. A common misconception is that the most frequently seen expression of warhead accuracy, Circular Error Probable (CEP), represents the radius from the target within which the warhead will fall. Actually, CEP is the radius from the target within which fifty percent of the warheads will fall. Thus, CEP is much less a measure
of accuracy as it is an estimate: inevitably, some warheads will fall outside the radius of the circle, which should crucially reduce the confidence of a decision-maker contemplating such a strike. Furthermore, should wartime operations reveal systematic deviations from the CEP to which planners have assumed in peacetime, these effects will substantially attenuate the damage expectancies from a given attack. Finally, it should be noted that CEP estimates are projections based on the telemetric data from Soviet and American missile tests. However, the actual data and calculations are never publicly released, and there is good reason to suspect that various estimates of CEP are, to some extent, altered to serve political purposes.

These points are compounded by other factors. For instance, while the location of fixed-site ICBM launchers can be determined with relatively high confidence through airborne and satellite national technical means of verification, the relevant meteorological conditions that will obtain over the target area can not be known so precisely. This seems especially relevant to cruise missiles, whose guidance systems may be confused by mundane phenomena such as snow. Nor can the hardness of each silo be known without extraordinarily precise intelligence about the structural configuration of each silo door, which is reinforced with steel and concrete.

Additionally, there are a set of problems caused by the effects of thousands of exploding nuclear weapons themselves, collectively referred to as 'fratricide.' In order to ensure a sufficiently high probability that a given silo will be destroyed, countersilo missions are assumed to assign two warheads for each silo. However, while the intense heat, radiation, and winds associated with a nuclear detonation are assumed to diminish within a few minutes, the millions of particles caught up in the 'mushroom cloud' take much longer to precipitate out of the atmosphere. Matthew Bunn and Kosta Tsipis describe the problem
posed by these particles:

The significance of the dust and other debris raised by the explosion arises from the fact that reentry vehicles traverse the atmosphere at extremely high speed... Therefore, if the RV collided with a particle weighing several grams, it would probably be destroyed outright... The smaller particles and dust in the cloud could have catastrophically abrasive effects on an RV: the effect of such high-speed passage through a dust cloud would be equivalent to exposure to an extraordinarily powerful sandblaster. The resulting ablation of the RV's nose cone would severely degrade its accuracy... Obviously the problem of fratricide would have to be carefully considered in planning the timing of any attack calling for more than one RV targeted on each silo... Even if the attacker allowed several tens of minutes between the two waves, the second wave would still face the dust blanket and the severe atmospheric disturbances created by the explosion or explosions of the first wave.  

All of these obstacles to a disarming strike would obtain if the Soviet ICBM force were on a routine day-to-day alert. Of course, since preventive war against the Soviet Union can not be plausibly entertained as American policy, the prospect of Soviet forces not being on generated alert is extremely unlikely. This only makes the task of a disarming strike even more difficult.

Certainly the Soviets could adopt a policy of launching their ICBMs upon receipt of tactical warning of an American attack. Richard Ned Lebow suggests why this might be a particularly plausible Soviet response:

Quick launch is Soviet forte. The Soviets have always sought to deploy missile systems that are capable of quick or even automatic launch. They have gone to great lengths to develop the hardware and command structures that are essential to launch on warning (LOW) and launch under attack (LUA). Their Strategic Rocket Forces periodically rehearse these scenarios, making it likely that both do in fact reflect realistic Soviet options...American strategists, academic and official, give every indication of taking seriously the Soviet Union's putative capability to launch on warning... Most high-ranking US military officials I have spoken to dismiss preemption as a suicidal option once the Soviets have brought their forces up to full wartime readiness.  

The prospect of mobile Soviet ICBMs raises a different type of problem. Alert procedures for the Strategic Rocket Forces would also probably include the dispersal of mobile ICBMs to remote sites, the exact location of which would not be known to an American planner. It is this sort of threat that has been one of
the primary justifications for the Northrop B-2 Advanced Technology Bomber (ATB); ostensibly, the fleet of B-2s would roam over Soviet territory, destroying Soviet mobile missiles and other targets of opportunity remaining intact after the initial American strike.¹⁸⁰

The notion of using a relatively flexible asset like manned strategic aircraft for follow-on strikes has been made to sound like a simpler task than it would likely turn out to be. The Soviet air defence network is massive, and penetrating bombers will likely rely upon a limited number of corridors, opened up by ballistic missile strikes, through which to penetrate. If the location of possible restrike targets is known beforehand, (as it is in the case of fixed-site Soviet ICBMs), this is a manageable sort of problem, providing that the American C³I can identify which silos need to be restruck. Mobile missiles complicate this situation by raising the prospect of dispersion beyond the reach of predetermined bomber flight paths. With the case of the B-2, the effect of its purported elusiveness has been reduced somewhat in this role by its somewhat limited range.¹⁸¹

Of course, Soviet forces on generated alert would include bomber forces as well. The Strategic Rocket Forces (SRF) have enjoyed a certain primacy in the development of the Soviet nuclear forces, and the bomber force is small and antiquated by comparison to both the SRF and the American strategic bomber force.¹⁸² However, there are signs that this may be changing. Since the early 1980s, the Soviets have deployed two new strategic bombers: the ‘Bear-H’, an updated version of the venerable Tu-95, and most recently, the ‘Blackjack’, a variable-geometry bomber of intercontinental range, some 20% larger than the American B-1B. Long Range Aviation also assumes command of about half of the annual production of ‘Backfire’ bombers, which could serve, if circumstances warranted, in an intercontinental role. Between 1980 and 1985, the proportion
of the Soviet nuclear arsenal (in EMT) carried by the bomber force has grown from five to almost twelve percent.\textsuperscript{183} Under conditions of generated alert, which might include placing a higher proportion of the force on runway, or even airborne, alert, the improved force will represent a substantial threat diminishing prospects for a successful damage-limiting attack.

In the long term, the Soviets could take a number of cost-effective countermeasures against an emerging American counterforce preemption capability. The plethora of basing alternatives that have been examined during the tortured history of the MX missile are suggestive. The Soviets could superharden, dense pack, or provide limited defence for their ICBM silos. Mobile missiles might become even more attractive. Or the Soviets could alter the configuration of their deterrent so as to assign greater emphasis more survivable forces: bombers, cruise missiles, and SLBMs.

Certain aspects of preemption seem likely to engender Soviet responses that run counter to larger American objectives. One such aspect concerns the matter of counter-command strikes. Where the likelihood of executing a 'surgical' strike against the Soviet ICBM and bomber forces might come off as implausible, 'decapitation' attacks may hold out somewhat better prospects for success.\textsuperscript{184} Certainly, strikes against an adversary's command system will leave him less capable of a coordinated response, perhaps even of responding altogether; if absolute victory is not at hand after a decapitating, preemptive strike, at least it may be possible to limit the damage to the aggressor.

However, both sides may hedge against being the prospective victim of such a strike by designing their preplanned responses with just such an event in mind. As Paul Bracken notes, the implications of this most destabilizing dynamic run counter to the pursuit of a posture capable of threatening an adversary with the prospect of controlled, albeit purposeful, nuclear use:
The nation attacked may have to undertake extensive calculations and assessments about what has happened to it, how the enemy target system has changed, and who has survived. The longer this takes, the more opportunity the first striker will have to reattack, disrupting again the reaactions of the victim. The implications for targeting are thus very different from those suggested in the bargaining approach... a retaliatory response would be more likely to aim at the enemy's command and control system... the nation struck first would be threatened by follow-on attacks by an enemy who has an undamaged assessment and information processing system that could be used to exploit the disruption of the first strike. Thus, an attacked state would have a strong incentive to disrupt, mangle, and confuse the attacker's ability to engage in carefully planned restrikes... Furthermore, such a retaliatory attack would have to be launched very soon after the first strike, or in the case of launch under attack, even during it.185

Additionally, as Bracken notes, each side's command system can be likened to a safety catch: it functions so as to prevent unauthorized nuclear operations. Ironically, extensive counter-command strikes could result in the attacker suffering increased rather than decreased levels of damage, as severing control could result in uncoordinated 'spasm' attacks from any or all surviving strategic forces.186 At very least, such strikes would impair American tactical objectives (if targeted on American military forces or command installations); at worst, they hold out the prospect of catastrophic damage (if targeted on urban-industrial areas).

Consideration of other relevant command issues can be equally vexing to the American planner contemplating the pursuit of damage-limitation. Conservative policy recommendations are meant to rationalize the contribution made by the American nuclear deterrent to Western security. The case for being able to dominate the process of nuclear escalation is that such capabilities will provide a substantial deterrent effect in the face of superior Soviet conventional capabilities and, failing this, can impose a military outcome that will provide the West with substantial leverage when negotiating war-termination. However, extensive damage to the Soviet command system (to say nothing of targeting its political leadership) may frustrate the process of
war-termination. Essentially, the West may have no authoritative Soviet leadership with whom to negotiate the cessation of hostilities.187

The very fragility of each side's command system suggests other obstacles to an American damage-limiting capability. If the Soviet leadership felt its deterrent capabilities to be under substantial threat, measures to degrade the capabilities of American C3I, at the outset of a war or even during an intensifying Soviet-American crisis, might become an urgent priority. Although even some of the ground-based elements of C3I are vulnerable to conventional munitions, the most likely targets for such attacks would be the space-based elements of the American command system. Much of the benefit of the greater American nuclear capabilities sought by the Strategic Modernization Program is predicated on the survival of sophisticated assessment and information processing systems based in space; consequently these valuable 'force multipliers' become lucrative targets for Soviet planners.188

The prospect of protracted nuclear operations raises command and control problems of its own. Ensuring proper targeting and delivery under wartime conditions would require a command system of very demanding specification. Not only would the capability to carry out a preemptive strike require a most sophisticated targeting and assessment apparatus, but in an environment of protracted and extensive nuclear use, this apparatus would also have to be very survivable, since the capability to identify and coordinate restrike priorities would be essential to the objective of damage-limitation.189

Within the limited budget set aside for improving command and control, these priorities would compete with one another; the vexing truth of the matter may be that satisfactory command and control performance can never be assured. What does seem to emerge is that it is easier to develop and maintain survivability than sophistication. Sufficiency in C3I is related to the nature of
the missions one assigns to one's forces. If those missions are ambitious and extensive, as they are in the conservative program, command system performance is more likely to be lacking. Some performance standards may be simply unattainable. A command system more capable of carrying out its assigned tasks may be within reach if its strategic mission is more proscribed.\(^\text{190}\)

An Effective Strategic ASW Campaign

Essentially, this is the aim of the Maritime Strategy's substrategy of 'counterforce coercion.' As one of the Navy's rationales for the procurement of 100 nuclear-powered attack submarines (SSNs), it envisages prompt, wartime operations against the four 'bastions' (in reality, the zones adjacent to Soviet 'homeports') in which the Soviet Union deploys the bulk (45-50) of its 62 SSBNs.\(^\text{191}\) The objective would be to destroy the Soviet SSBN fleet so as to change the nuclear correlation of forces, a matter said to be of great importance to the Soviets. Accomplishing this mission, it is argued, would facilitate favourable war-termination. As argued earlier, realistically (and for the strategy to retain its internal coherence) the pursuit of this capability must be placed within the broader context of conservative desires for an American damage-limiting capability. However, there are some serious political, operational, and budgetary problems with the pursuit of counterforce coercion.

The operational problems are a function of just how demanding a mission the Navy has set for a fleet of even 100 SSNs. This putative fleet of 100 SSNs would be roughly split in half, with about 50 SSNs in the each of the two (Atlantic and Pacific) theatres. This is not only because there are large Soviet naval (including SSBN) deployments in each of these theatres, but also because the Navy is committed to a strategy of rapid 'horizontal escalation' in the event
of a Soviet-American conflict, so as to preclude Soviet reinforcement from other theatres. As Ross Babbage notes in his analysis of the prospects for counterforce coercion in the Pacific theatre, if one assumed that, of the total American Pacific SSN deployment, 35 of these would be available for combat on short notice, 15-20 would be assigned to protect other American naval assets (such as the carrier groups and American SSBNs). This would leave a maximum of some 20 SSNs available for counter-SSBN operations, where it is probable that this force would face some 80 Soviet submarines of all types (SSBN, SSB, SSN, and SS) retained in the northern bastions. For the American SSN force to be successful in a counterforce coercion role would thus assume an exchange ratio of 4:1. However, the physical characteristics of Soviet deployment areas do not lend support for this confident assumption:

The Sea of Okhotsk is a poor environment for the type of passive sonar operations in which the Western allies excel because of the shallow water, especially towards the north, and the ice cover that is present for much of the year... The West's low frequency long range passive sonar edge is most usable in deep-water open-ocean anti-submarine warfare operations. The Soviets seem to have deliberately chosen SSBN deployment areas not characterised by these conditions but rather which contain comparatively shallow water, much of which carries a sheet of ice for a substantial proportion of the year. In waters such as the Sea of Okhotsk, passive sonar propagation is constrained severely. Surrounded on three sides by Soviet territory these shallow waters are also ideal for the Soviet emplacement of a range of non-acoustic anti-submarine detection and tracking systems.  

Again, the Soviets could take a number of other countermeasures to frustrate the counterforce coercion strategy, including greater blue-water SSBN deployments, extensively mining potential access routes of American SSNs, or dispersing the SSBN fleet under the Arctic ice pack at the outset of a deep crisis. Babbage argues that under such conditions, attempts at rapid counterforce coercion would likely yield inconclusive results:

In this type of environment submarine encounters could quickly degenerate into melees in which neither side could anticipate a marked advantage. An important tentative conclusion is that although the United
States has the capability to attrit the Soviet SSBN fleet in the Pacific, this would almost certainly be costly and slow even if allied seizure of air superiority permitted Western long range maritime patrol (LRMP) aircraft and surface vessels to operate in support.  

Furthermore, as argued earlier, the benefits of even successful maritime counterforce coercion are unclear. If the development of a secure strategic reserve is important to the Soviets, and the security of the sea-based portion of the Soviet deterrent appears to be in danger, some of the reserve role could be transferred to ICBM or improved bomber forces. In this case, counterforce coercion could only be effective if coupled with strikes against these elements of the Soviet deterrent as well. But, as argued earlier, the massive operational uncertainties inherent in such a venture make it extremely unlikely that an American decision-maker would carry it out for the sake of threatened extended deterrence interests.

The operational requirements of the maritime counterforce coercion mission also seem to conflict with other American policy objectives. Most notably, the rapid transition to war, and the prompt insertion of available American SSNs into Soviet SSBN deployment areas conflicts with Washington’s desire to preserving stability in crisis, and control in war. John Mearsheimer notes:

It is not likely that the US national command authority would allow the Navy to surge submarines into the Barents Sea during a crisis with the Soviet Union, simply because American policymakers would almost surely try to dampen, not exacerbate, the crisis. The point is not lost on the Navy, which is well aware that counterforce coercion is a “strategy not without risk.” ...Not allowing the Navy to move north in a crisis would cripple the strategy since, to use again the words of Admiral Watkins, it “depends on early reaction to crisis.” ...American policymakers, who would surely go to great lengths to keep a conventional war from escalating to the nuclear level, would certainly have serious reservations about launching a submarine offensive that is laden with escalatory potential.

Nor could the Navy count on the unequivocal support and assistance of American allies for aggressive forward operations. If anything, the proclivity of both the Europeans and the Japanese (as well as, presumably, Australians and
New Zealanders) to minimize any possible intensification of an East-West crisis might well deprive the Navy of crucial cooperation at the outset of a crisis, or even in the initial transition to war.

The Maritime Strategy and its associated 600-ship Navy are likely to encounter further opposition due to their cost. A nuclear-powered aircraft carrier alone currently costs over $3.5 billion -- this is without its complement of nearly 100 aircraft, 15 escort and support vessels, 5000 crew, associated basing facilities, or routine operating costs. The cost of running the American fleet of 15 carrier battle groups is over $25 billion per year.\textsuperscript{195} Integral to the counterforce coercion strategy, and thus dear to the heart of the advocates of maritime strategy is the SSN-21 'Seawolf', the Navy's new attack submarine, a follow-on to the Los-Angeles class (SSN-688) attack submarine. It is claimed to be quieter, faster, and deeper-diving than the Los-Angeles vessels, but it is also reported to cost over $1 billion per copy.\textsuperscript{196}

Ironically, one of the most penetrating assessments of the Maritime Strategy, somewhat critical of its strategic rationale (although faintly admiring of the program as the key to the Navy's success in the appropriations battles of the Reagan Presidency) comes from Carl Builder. Describing the contemporary US Navy as an institution dominated by advocates of carrier-based aviation and SSNs, Builder suggests that the Maritime Strategy sought to legitimate an expansion of these two preferred aspects of force structure:

\textbf{It is apparent that the maritime strategy is intended to apply to all possible levels of conflict, war aims, force types, and uses of naval power. What is less clear is whether the war aims are in consonance with national aims for the use of military force, and, if so, whether the proposed uses of naval power are central, relevant, or productive to those aims... The maritime strategy is not a concept for relating means and ends: it is an explanation of how all existing means can be related to all ends...an analysis of the content of the maritime strategy suggests that it is a carefully woven fabric of sub-strategies that more clearly serves the Navy's institutional interests in rationalizing its existing force mix than it does the US national strategy or security interests.}\textsuperscript{197}
Now that the American budget deficit has reached politically alarming proportions, debates over the propriety of the Navy’s costly maritime strategy will intensify. Certainly the ‘Seawolf’ program will be a prime candidate to be ‘stretched out’ (that is, developed and procured at a slower pace) as a way to reduce naval expenditures, but a likely consequence of such a move will be substantially higher overall program costs. Additionally, there is the very real danger that some of the Navy’s purported capabilities will exist ‘on paper’ only. Certain ‘building blocks’ of force structure will have been programmed and paid for, but the operational quality of the force may be below standard for lack of training, spare parts, munitions, and other aspects of readiness. To some extent, this may be the likely outcome of any response to a decrease in budget authority, but it seems especially likely with the Navy, which has clung to particular standards for assessing its own sufficiency -- 15 carrier groups, a 600-ship fleet, and 100 SSNs -- as if the defense budgeting assumptions of the early 1980s were still in effect.  

Strategic Defence

One of the most striking ways in which the conservative program departs from the mainstream of the American nuclear weapons policy debate is in its call for the revival of strategic defence. The subsequent debate has been a heated one; strategic defence seems to have become a ‘litmus test’ for attitudes towards national defence in American politics. Richard Betts notes that debates over strategic defence have come to reflect the unfortunate tendency toward polarization in the American debate:

Like most of nuclear strategy, disputes about the Strategic Defence Initiative (SDI) are usually highly charged and often ethereal. At their best, arguments are based far more on theoretical principles and
extrapolation than on empirical data; at their worst, they degenerate into dogma. The boundaries between idealism, fatalism, and realism in this debate are seldom clear. There is danger in the extremes of thinking on the question (the most ardent advocates of SDI are as naively insensitive to the constraints of political reality as are the most reckless unilateral disarmers), but there is often difficulty in distinguishing conclusions of analysis from premises of faith.

The way in which liberal and centrist commentators have utilized critiques of putative strategic defence systems on technical and budgetary grounds has been most impressive. This section reviews these arguments, the overall import of which is to call into question the pursuit of strategic defence as advocated in the conservative program.

The technical arguments against the deployment of extensive ballistic missile defence can be divided into four aspects: 1) the scale of a putative BMD system's task; 2) Soviet opportunities for defence-suppression of an American BMD system; 3) Soviet opportunities for saturating the system; and, 4) Soviet opportunities for evading the system.

1) The sheer magnitude of the enterprise. Deploying an extensive ballistic missile defence system would be an undertaking of enormous proportions. Barry Blechman and Victor Utgoff have estimated the total cost of a comprehensive defence against ICBMs and SLBMs to be approximately $630 billion ($FY87). Joshua Epstein, current author of the Brookings Institution's annual critique of the defence budget feels that these estimates are probably conservative. The Union of Concerned Scientists suggests that "the outlay for the necessary power supply alone would probably exceed $100 billion."200

The physical and engineering aspects of such a project are daunting in and of themselves. Most of the technologies needed for a comprehensive defence (chemical/pulcimer lasers, particle beam weapons, X-ray lasers, electromagnetic rail guns) are nowhere near the stage of development that would be needed to deploy a high-confidence defence. The task before the SDI's battle management
systems is staggering. Indeed, the complex software could never be tested under realistic conditions and would have to work perfectly the first (and every) time.\(^\text{201}\)

Unlike air defences against conventional bombers, strategic defences against nuclear-armed ballistic missiles must be able to impose extremely high rates of attrition. This seems especially obvious if urban-industrial defence is taken to be the goal of ballistic missile defence program: even cumulative attrition rates of 90% against a general attack (which would be an extraordinary performance) would still allow enough attacking warheads through to render damage-limitation tragically meaningless. Attrition rates do not need to be as high for point defences of military targets, but it is more difficult to square this mission with an overall strategy of damage-limitation.\(^\text{202}\)

2) Potential Soviet Countermeasures: Suppression. It has become axiomatic to note that the components of a spaced-based BMD system are far more vulnerable to degradation and destruction than the missiles the system is attempting to destroy. The easiest way for the Soviets to overcome a BMD system would be to destroy its spaced-based components with either anti-satellite weapons (ASATs), or space mines. In either case, the task of destroying the system (given the latter's predetermined location and relative fragility) would be far easier and more cost-effective than any measures taken to defend the system's components. Satellites with defensive capabilities would likely add to the system's cost substantially.\(^\text{203}\)

Holding off the ASAT threat is complicated by the fact that most rudimentary BMD technologies have ASAT uses, as Richard Ned Lebow notes:

There is a close link, technologically and strategically, between space-based BMD systems and anti-satellite weapons. ASATs are the most obvious countermeasure against space-based BMD systems or components. Technologically, weapons designed for the two systems overlap substantially... Even crude BMD systems might be effective
anti-satellite weapons. Emerging BMD technologies for terminal and midcourse interception would have considerable capability against satellites in low earth orbits, while directed energy weapons designed to attack missiles in boost phase could threaten early warning and communications satellites in geosynchronous orbits.204

3) Potential Soviet Countermeasures: Saturation. Of the potential Soviet countermeasures, this is probably the simplest and least expensive. Here the Soviet advantage in throwweight comes into play: Lebow and the Union of Concerned Scientists both note that the SS-18, currently constrained to 10 re-entry vehicles (RVs) could carry as many as 30.205 In addition, the Central Intelligence Agency has estimated that the Soviets are in a very good position increase their overall warhead total to over 20,000, given how rapidly they could emplace additional RVs on their ballistic missile forces.206

Soviet saturation options are not constrained to the proliferation of ICBM and SLBM warheads. An ICBM can deploy, in addition to its weapons payload, up to 100 decoys, so as to confuse American attempts at mid-course interception. These decoys might take the form of balloons, chaff, infrared aerosols, or dummy warheads. As Lebow notes:

By midcourse, one thousand missiles could present the defense with more than 100,000 potential targets, all of them concealed within clouds of debris. As space is a near vacuum, these objects, regardless of their size or shape, would proceed along ballistic missile trajectories making it impossible with even the most precise tracking to discriminate warheads from decoys and chaff.207

The Union of Concerned Scientists concludes that tracking this many objects during the midcourse phase "might be beyond the supercomputers expected a decade from now."208 The problem of decoys is not present in the terminal stage of a ballistic missile's trajectory, but terminal defences cannot be used in the defence of urban areas. Whether or not the deployment of limited, terminal-phase BMD to provide point defence of selected military targets is a sound policy option is taken up later.
4) **Potential Soviet Countermeasures: Evasion.** In evading an American BMD system, the Soviets could pursue a number of different options. Because 'MIRVed' missiles represent especially lucrative targets during the boost phase of their flight path, reducing the time that Soviet ICBMs spend in this phase through the development of 'fast-burn' boosters could make the task of a BMD system much more difficult. The boost phase for an SS-18 lasts 300 seconds, at which point it has reached a height of 400 kilometres; current trends in booster technology could reduce the length of this period to as little as 100 seconds.\(^{209}\)

A greater Soviet reliance on SLBMs would confront a BMD system with a different type of problem. Where the possible trajectories of Soviet ICBMs can be relatively well-predicted (although this will be less so should the Soviets begin to deploy mobile ICBMs in large numbers), the potential trajectories of Soviet SLBMs can not be so precisely known.\(^{210}\) It could be argued that the deployment of Soviet SSBNs in only four bastions ameliorates this problem, but it seems equally plausible to argue that greater dispersal of the Soviet SSBN force (possibly under the large expanses of Soviet polar ice) would be the likely Soviet response to the potential negation of the Soviet ICBM force. Space-based BMD could do relatively little to attenuate the threat posed by offshore, depressed-trajectory SLBMs strikes assigned to time-urgent targets such as the American command system.\(^{211}\)

Air-breathing forces (bombers and cruise missiles) offer Soviet planners another means for evading an American BMD system. The Bear-H and Blackjack will carry the new Soviet ALCM, the AS-15, which is reported to have a range of 3000 km. The Soviets have also begun to deploy a sea-launched cruise missile, the SS-N-21, which is roughly comparable to the American Tomahawk SLCM and can also be launched from an attack submarine's standard torpedo tube. Increased deployments of Soviet SLCMs are particularly troublesome for
American planners, given the number of important American military targets that are located along the nation's coastlines. The Soviet SS and SSN fleet is very large, and although it is deployed very close to Soviet shores, this could change if an American BMD system mandated an increase in SLCM launch platforms.

As noted earlier, there is little in Soviet doctrine to support the notion that Moscow would be 'naturally' drawn to a defence-dominant environment. Indeed, the role that strategic defence plays in Soviet defence planning -- as an adjunct to offensive prowess, combined with what Lebow refers to as "a cognitive barrier of mistrust that dominates superpower perceptions of each other," suggests that Moscow is unlikely to read benign motivations into an American pursuit of BMD. SDI is likely to be seen as part of an American attempt to secure a damage-limiting capability against the Soviet Union; the likely outcome of this perception will be a determined Soviet effort to frustrate or overwhelm the effectiveness of such a system.

Certainly an expansion of offensive forces could be expected; as noted earlier the Soviets are in a good position to rapidly expand their total force of RVs. The collapse of the ABM Treaty would remove any incentive, moral or tactical, for Moscow to continue to observe existing strategic arms control agreements.

While the Reagan administration claims that SDI and START are not incompatible, the Administration's negotiating posture on each seems to contradict the other. The pursuit of strategic defence is deemed absolute and non-negotiable. At the same time, the Administration seeks to reduce the number of Soviet 'heavy' ICBMs. Given a vigorous American effort in BMD, Moscow is most likely to cling to its SS-18s, as its best hedge against unilateral American BMD deployments. This same sort of dynamic poses serious
problems for superpower cooperation towards a 'defensive transition.' In the
measured tones of the Office of Technology Assessment (OTA):

OTA was unable to find anyone who could propose a plausible agreement
for offensive arms reductions and a cooperative transition that could be
reached before both the Soviets and the United States learn more about
the likely effectiveness and costs of advanced BMD technologies. Indeed,
such a transition could hardly be planned until engineering development
was well advanced on the actual defensive systems to be deployed...
Without such agreement on the nature and timing of a buildup of
defensive forces, it would be a radical departure from previous policies
for either side to make massive reductions in its offensive forces in the
face of the risk that the other side's defenses might become highly
effective against the reduced offenses before one's own defenses were
ready. 215

SDI and Defence Management

Opportunity Costs and Cost-Effectiveness. Blechman and Utgoff note that
while various configurations of strategic defence could be funded within an
American defence effort that was, by historical accounts, 'normal', other military
programs would suffer. 216 Betts makes this significant point about whether or
not a large-scale BMD program reflects a cost-effective use of scarce American
defence dollars:

As with any military system, the questions "do we want it" or "can we
afford it" are meaningless in themselves; the meaningful question is,
compared to what? ... Except for the long-shot eventuality of near-perfect
defense of the United States combined with sustained Soviet vulnerability
to US nuclear attack, nuclear forces of all sorts are likely to remain far
less strategic (in the proper Clausewitzian sense) than is conventional
military power...The critical question is whether a marginal increase in
the credibility of extended deterrence [as a result of a BMD deployment]
would be purchased by a decrease in conventional deterrence as the
strategic defense spends dollars otherwise available for tanks, artillery,
tactical aircraft, and military manpower. 217

In this regard, extensive ballistic missile defence programs are hard to
justify on the grounds of cost-effective military expenditure. After years of
effort, Soviet strategic defence programs (most notably in air defence) have not
made a great deal of difference to the overall strategic nuclear balance, largely
because it would take extraordinary defensive capabilities to significantly alter the current condition of MAD, and because the cost-exchange ratios continue to favour the offense. The same situation seems to exist with regard to an American drive for BMD, an ineffective, costly hedge against an event which has a low probability of occurring. By contrast, expenditures in other areas might offer greater marginal returns for each dollar spent.

In many ways, deploying an extensive multi-layered ballistic missile defence might be compared to the massive Soviet investment in air defence. After years of large-scale Soviet procurement of expensive missiles, anti-aircraft guns, and associated radar and fire-control systems, American B-52H and B-1B aircraft continue to enjoy high expected rates of penetration. This is almost certainly the case if the performance of Soviet air defences during the Vietnam War and the 1982 Israeli invasion of Lebanon is any indication. Lambeth and Lewis argue that one hundred percent effectiveness against the American strategic bomber force has never been the sole animating principle of the Soviet air defence effort. But cost-effectiveness is a criteria for American defence programs, and the Administration has adopted it as a way to critically assess promising BMD technologies. As has been amply demonstrated in the preceding technical critique, cost-exchange ratios in the area of BMD seem destined to favour the offense for some time to come.

Conservatives argue that strategic defence is an essential facet of an American strategic posture that can 'win' crises before they turn into wars. However, certain aspects of a comprehensive BMD system might actually frustrate this aim. Paramount among these is the vulnerability of the space-based elements of the system. In an emerging crisis, the Soviets might find it prudent to destroy key space-based elements of the American strategic
defence architecture so as to deny an American damage-limiting capability. As noted earlier, defensive capabilities for American BMD satellites would only further add to the complexity of the system, and would probably not be cost-effective, while the threat of countervailing American ASAT strikes would do little to restore American preeminence.

As will be argued later, an inevitable risk of pursuing maximalist initiatives like those which animate the entire conservative program is that individual aspects of the overarching effort rapidly develop their own dynamics (and political constituencies) which may not be compatible with those of other programs. Elements of the American military space program, most notably those involving space-based BMD and ASATs, show these symptoms of disconnected planning. American reluctance to more forcefully engage the Soviet Union in negotiations banning (or at least severely restricting) anti-satellite weapons is baffling, given not only how much of an American BMD system would utilize deployments in space, but how much satellites have come to play a key role in American strategic operations in general.

Other instances of this problem can be found. As noted earlier, not all conservatives support SDI as a means to the President's dream. Some are far more interested in partial defences to defend selected military targets for the purpose of either reducing the vulnerability of the ICBM force and the command system. Others may be interested in purchasing a comprehensive defence against a ragged, intermittent Soviet second-strike. However, the consequences of joint limited BMD deployments may not be entirely in American interests, particularly as far as extended deterrence is concerned. A limited Soviet BMD system would not only pose serious problems for French, British, and Chinese nuclear forces (and would thus engender the strongest opposition in those countries) but it may also make impossible the capability of
the United States to be able to conduct limited nuclear operations (LNOs), a development which would do further harm to further harm to NATO's doctrine of flexible response. Ballistic missiles remain the weapon of choice for limited attacks because air-breathing forces are of uncertain effectiveness against formidable, layered Soviet air defences.223

It is also worth noting that while conservatives stress the Soviet advantage in prompt countersilo capabilities, limited BMD of ICBM silos could play to this advantage rather than ameliorate it. Richard Betts notes:

In fact, for counterforce exchanges site defense would benefit the Soviets disproportionately because a much larger portion of their offensive force comprises ICBMs. This contradicts the view of the window of vulnerability that became conventional wisdom at the end of the 1970s, but without defenses preferential targeting of Minuteman II and MX missiles on Soviet heavy ICBMs would put a larger proportion of Soviet warheads and megatonnage under threat than the Soviets could threaten on the American side by their ability to destroy almost all US ICBMs (which carry less than a quarter of US warheads and megatonnage). In an ICBM duel in which defenses on both sides shifted the ratio of penetrating warheads to launchers, US missiles would be exhausted before the Soviets... Moreover, without Soviet defenses the deployment of D-5 SLBMs in the next decade would give the United States an invulnerable capability against Soviet hard targets and a major advantage in relative counterforce; confronting Soviet defenses, D-5s would be an expensive modernization with scant purpose.224

Certain types of arms control agreements and unilateral actions would do a far better job of attenuating ICBM and command system vulnerability. The threat posed to American ICBMs by Soviet offensive forces could be best constrained by a ceiling on certain categories of warheads that each superpower fears the most; an objective which could be advanced by adopting a force concentration rule stipulating that no more than a certain percentage of each country's forces could be based on a single type of delivery system.225

Lambeth and Lewis note that SDI "has placed the United States in perhaps a stronger bargaining position relative to the Soviet Union than at any time since the Kennedy-McNamara buildup of the early 1960s" and that "the United States
can hardly go wrong by continuing to play its SDI card closely, pending a more confident determination of just how much the Soviets might be willing to pay in the coin of offensive arms reduction to head it off." However, the Administration is deeply split on this issue, as Arnold Horelick notes, between 'squeezers' and 'dealers'. 'Squeezers' believe that SDI should be used to ‘resolve’ the Soviet-American competition, by either restoring American nuclear superiority, or bringing about the collapse of the Soviet economy, while 'dealers' believe that SDI should be carefully coordinated with American arms control diplomacy so as to bring about major Soviet force reductions in areas which Washington finds especially disturbing. The latter of these two is clearly the most feasible. To pursue this effectively, the Administration should be of one mind about what it desires from the program.

Technology Management. SDI can be seen as an instance of a conservative approach to technology which is not entirely disciplined. Conservatives are clearly 'technology optimists': where diplomatic measures can be frustrating, and allies unreliable, American technological prowess can always be relied upon to deliver the necessary means to secure American interests. The problem with the conservative view of technological advance is in its uncritical enthusiasm for the development of all technologies.

It is difficult to argue with the conservative view that technology, like power, can be used for good or for ill, and that inherently, it is neither. The essential point is that whether or not a given technology is stabilizing cannot be assessed independently of its strategic context. The political and operational concepts which govern the employment of particular technologies are crucial in determining the impact on the strategic relationship.

However, the development of particular technologies which have provided
more headaches than benefits --notably, the development of Multiple Independently-targeted Re-entry Vehicles (MIRVs)-- suggests that some attempt should be made to manage technology, instead of simply letting it run its course. Even the development of technologies that seem unambiguously stabilizing, such as those which promise more secure, discriminating command and control, must incorporate a political dimension if their overall import is to be beneficial. John Steinbruner notes:

An effective program for marginal improvements to the US command structure must include a diplomatic dimension... As seen from current Soviet perspective, an extensive US program to prepare the command structure to support a nuclear campaign will be understood as a sign of increased willingness to initiate war... If that situation occurs, it can outweigh the marginal benefit to deterrence of less vulnerable command and control systems and can severely damage overall US security.

The evolution of SDI has not shown a very well-developed diplomatic dimension. The Administration has been most ambiguous about how the program relates to the Allies and the ABM Treaty. This risks the estrangement of the Allies and heightened suspicions in Moscow. In the long-term, the latter could return to haunt Washington: if the Soviets initiate countervailing BMD programs, or expand their warhead inventory as a hedge against the open-ended potential of the current ill-defined SDI, American security could be far worse off if SDI does not prove to be politically durable.

The program’s lack of definition poses another problem: it does not direct research and development resources into promising technologies; instead, it directs them into all BMD technologies. This might be politically expedient, on the grounds that it is difficult to gain public support for limited BMD, and because developing all technologies makes the program’s potential constituency as broad as possible, but the approach runs the risk of being another very expensive ‘technology program.’

As Glenn Kent, a long-serving Pentagon official (now retired) notes, the
problem with many American technology development programs is that they do not convert promising technologies into deployable weapons in a cost-effective and timely fashion. The problem, he notes, is that potential technologies are often developed without operational considerations in mind:

The poor track record stems primarily from a continued focus on pursuing technology as distinct from attaining operational capability. We continue to conduct technology projects that lead only to other technology projects, when we should be undertaking development programs that lead to operational capability... Technology projects have the goal of studying navigation, 'sensors,' 'tracking,' 'classification,' or some other function, technique, or phenomenology. Development programs, in contrast, focus on providing weaponry for the operational inventory -- i.e., equipping some existing force element with some type of weapon to accomplish stated operational acts according to a well-defined operational concept.

SDI seems to be particularly susceptible to these typical shortcomings, only on a much larger scale. The guiding operational concept of SDI should be Assured Survival. Only technologies that can demonstrably validate such a concept should be developed; the aims of more limited BMD can be accomplished more efficiently and effectively through other means.

The clear implication of this line of argument is a sharply reduced budget for BMD. To spend $26 billion over five years merely to explore potential BMD technologies, many of which are in only their formative stages, is an unwise commitment of scarce defence resources. As it is currently configured, the returns from SDI are very uncertain, and it would appear that these funds would be far better used to address other deficiencies in the American strategic posture.

The inefficiencies that plague a program like SDI are part of a larger problem which has been endemic to American postwar military planning. As Kent notes, 'Programs to provide weapons and munitions are generally advocated somewhat independently of a broader operational context; these programs are
left to stand by themselves. The necessary connective tissue between the programs and requirements of the combatant commanders for particular operational capabilities is lacking.\textsuperscript{232}

The lack of precise operational guidelines for the development and procurement of American military forces is, in large measure, a political problem. Because the political leadership is leery to delineate the political objectives to be served by American military power, operational requirements for the forces are impossible to derive with certainty. Consequently, service interests and the risk-averse character of military assessment, will combine to yield demands for omnipotent capabilities, such as the annual Joint Chiefs of Staff (JCS) Joint Strategic Planning Document, the 'all-purpose' character of maritime strategy, and the tendency to develop 'gold-plated' (very sophisticated but extremely expensive) weapons.\textsuperscript{233}

This dynamic is especially perverse in nuclear policy matters. Without better definition of how American nuclear weapons are related to American political interests, it is impossible to arrive at a concept of sufficiency. This fuels the temptation to 'hedge against everything' which generates huge demands for extraordinarily capable forces. At the same time, explicit discussion of matters like employment doctrine is suppressed because it is politically divisive, and thus, operational matters are never addressed from a coherent, top-down perspective. Consequently, American strategic planners find themselves in the curious position of having strategic forces which are excessive (for only central deterrence) and incomplete (for protracted nuclear warfighting). There is a large inventory of warheads (motivated by the Navy and Air Force desire for a strategic nuclear role), but relatively underdeveloped and precarious authoritative command and control.\textsuperscript{234}

Greater precision on the part of the American political leadership about the
scope and magnitude of American extended deterrence commitments is essential if this problem is to be avoided. A more concrete idea of the most likely circumstances which would compel the use of American strategic forces, and what American wartime objectives would be, would allow for much more rigid criteria by which to allocate that part of the defence budget which goes into strategic nuclear force programs more efficiently.

Power: Domestic and International Aspects

The conservative brand of foreign policy realism very nearly equates power with force, and it is for this that many commentators find it crudely insufficient. As Richard Ullman notes, while the military aspect of foreign policy has great salience, ultimately, questions of power and security are of a highly variegated nature:

Defining national security merely (or even primarily) ...in terms of military threats arising from beyond the borders of one's own country...is doubly misleading. It draws attention away from the non-military threats that promise to undermine the stability of many nations during the years ahead. And it presupposes that threats arising from outside a state are somehow more dangerous to its security than threats that arise from within it.235

In assessing how America is situated in the world balance of power, conservatives has placed particular emphasis on the external challenge of hostile foreign military power. Thus, the most urgent American security priority, in the mind of the conservative writer, is the generation and projection of countervailing American military power.

However, the calculus of American security policy is surely a more complex matter than this: most notably, the conservative approach seems to neglect the domestic aspects of foreign policy. The most penetrating critiques of conservative perspective on national security matters have come from those who question the economic, political, technical, and organizational capacities of
the United States to meet the demanding performance standards of the conservative program.

The argument that an exclusive focus on the military dimensions of power comes at a significant cost to other aspects of national capability has been made by a number of authors. Princeton theorist of international economy Robert Gilpin and recently, Yale historian Paul Kennedy suggest that great powers bring about their own decline as the military requirements of empire erode the nation's economic base. Kennedy notes in a recent article:

Past experience shows that even as the relative economic strength of number-one countries has ebbed, the growing foreign challenges to their position have compelled them to allocate more and more of their resources to the military sector, which in turn has squeezed out productive investment, and, over time, led to a downward spiral of slow growth, heavier taxes, deepening domestic splits over spending priorities, and a weakening capacity to bear the burdens of defense... An American polity that responds to external challenges by increasing defense expenditures, and reacts to the budgetary crisis by cutting existing social expenditures, runs the risk of provoking an eventual political backlash. There are no easy answers in dealing with the constant three-way tension between defense, consumption, and investment as national priorities.

As Kennedy warns, what are deemed to be 'military imperatives' can raise domestic political problems. Credible and effective national security policy requires some measure of domestic consensus over the ends and means of strategy. This is not only because broad conceptual agreement is essential to ensuring some measure of fiscal stability in defense planning, but also because such agreement lends security policy an aspect of legitimacy that is deeply impressive to both benign and hostile foreign observers. Thus, the security planner must be able to deter prospective foreign adversaries, while reassuring domestic publics that one's preferred national security program is not unduly raising the risks of war.

This is, at very least, a challenging task, and debates over military expenditures can be especially acute. To the broader public, the most
compelling military-strategic arguments for particular appropriations are either unfamiliar and arcane, or shrouded in secrecy. The often opaque dynamics of national security policymaking hinders the maintenance of public support for defence spending, thus placing a grand strategy which emphasizes a high degree of military preparedness on uncertain foundations.

Closely related to this point, liberal critics of conservative realism suggest that international public opinion and moral suasion constitute important sources of power which cannot be maintained if a nation continually relies on force as the primary instrument of policy. This is especially important in the case of the United States, a nation whose foreign policy tradition aims for some measure of synchronization between domestic and foreign policy values. Thus, adherence to international norms, and especially to the pursuit of peaceful, negotiated settlement of disputes, remain important features of American foreign policy culture, and an enduring constraint to national security policy that relies predominantly on the threat or use of force.  

These general remarks on the multifaceted nature of power are of particular relevance to the Reagan Administration. Kennnedy, Gilpin and others argue that the relative position of the United States in the world balance of power is declining. This decline is not solely a function of the growth of Soviet power, but also a product of the recovery of Western Europe and Japan, the rise of the Newly-Industrialized Countries of the Pacific Rim, and the growth of the financial power of the Arab oil-producing countries. As Phil Williams argues, the Reagan Administration seems to have an underdeveloped view of the emerging situation:

President Reagan arrived in the White House in 1981 with a simplistic set of assumptions about the world and America's place in it. Reagan's foreign and defence policies were designed to restore American power and pre-eminence in the international system. They were based on nostalgia...[and] represented an attempt to overcome the limits of
American power largely by ignoring them...

Like the Nixon administration, the Carter administration was innovative and imaginative in its efforts to maintain American leadership in the international system. Both attempts to compensate for the loss of American primacy after 1968, — co-option and changing the world political agenda — failed. In both cases, the failure stemmed partly from the inability of each president to mobilize domestic support and give their new policies legitimacy. The policies were sophisticated, and neither was easy to explain. But the problem went much deeper than that. Many people in the United States were simply unwilling to accept that American foreign policy had to operate in an age of limits. The fundamental difficulty for both Nixon and Carter was that they had accepted these limits as their starting point and tried to work around them. The Reagan administration, in contrast, rejected the idea that there were limits to American power.

Indeed, the simplistic assumptions of the Reagan administration about the nature of power (that is, that power is primarily a matter of conventional or nuclear military superiority), combined with a refusal to consider seriously the limits to American power, has only exacerbated the decline of the American power base. Robert Gilpin notes:

Despite its superficial success, the Reagan administration has failed to reverse the relative decline of the American economy. On the contrary, the long-term problem of relative economic decline has been greatly compounded by its policies. The administration's theory of supply-side economics, its military buildup, and its massive tax cut were geared to restore American power and prestige (after the humiliations of the Carter years) by rebuilding American military power and renovating the American economy, while simultaneously achieving domestic prosperity. The policies of the administration have masked the underlying problem of the weakening economic foundations of American power. In the short term, this transformation of the American economic position has profound implications for America's relations with its allies, especially the Japanese. In the long term, it will force the United States to make drastic changes in its economic and foreign policies.

Is America Ill-suited For the Conservative Program?

It seems obvious that strategic force spending ought to be tailored after a defined strategic concept, and conservatives have argued that the development of American nuclear capabilities should aim to secure escalation dominance over the Soviet Union. However, as pursued by the Reagan administration, escalation
dominance has proven to be a poor guide to strategic planning. During the years of the Reagan buildup, record increases in the American defence budget, including substantial investment in the strategic forces, have not yielded any perceptible increase in capability relative to the Soviet Union.\textsuperscript{242} Certainly the operational obstacles to a meaningful damage-limitation capability will mean that increases in the strategic forces budget will not necessarily yield qualitative changes in American strategic nuclear capabilities. It also seems plausible to argue that waste and duplication have had their role in diluting the impact of the Reagan defence program. However, the failure of the conservative program to even come near its own objectives suggests that roots of the problem lie somewhat deeper.

The development and legacy of the Reagan budget (and trade) deficits suggests that the conservative agenda overestimated American economic capacities to field the desired level of military capability. This error in judgement has an important political dimension. After a point, the Administration’s preoccupation with military power was not shared by all other political actors in general, and not by Congress in particular. Although legislators were willing to approve substantial increases in military spending during the early years of the Reagan presidency, these increases levelled off after Reagan’s re-election in 1984, and key programs, such as SDI and the 600-ship Navy, suffered further reverses as the budget deficit became a political issue. Furthermore, the cost of some programs, such as the MX, the B-1B, and the B-2 Advanced Technology Bomber, were politically controversial from the outset, defying the President’s claim that defence was “not a budget issue.”

The Administration’s single-minded pursuit of investment in American military capabilities came to strain relations between the White House and all
but the most conservative legislators on Capitol Hill. Polarization of this kind was initially overcome by the hard-sell tactics of Weinberger and Perle, but the Administration's insensitivity to the concerns of other political actors corroded support for defence spending, and one can expect Congress to be quite strident in cutting defence programs in attempting to balance the budget. In many ways, the Reagan rearmament program of the early-1980s started something that could not be finished. A policy failure of this kind could have been avoided, given a better reading of the capabilities and predilections of the United States in the post-Vietnam period.

American Strategic Culture

As noted earlier, conservative dissatisfaction with American strategic policy derives from their critique of American strategic culture. Conservatives lament that the character of American policymaking is more 'managerial' (that is, concerned with budgets and cost-effectiveness) than 'martial' (that is, concerned with the operational effectiveness performance of the armed forces in war). To some extent, this is a valid criticism: the American defence policymaking process is not guided solely by operational considerations. However, this seems unlikely to change, and as will be argued later, does not preclude reasonably sound military policy.

The most fundamental feature of American strategic culture is that it considers international conflict and war as an aberration. Colin Gray depicts the environment of American strategic policymaking:

What uniquely American attitudes have contributed to the cumulative relative decline in American deployed strategic power over the past twenty years?...there has been an optimism that...the two superpowers can stabilize their strategic relationship...The optimism which has underpinned the thought of many American arms controllers may be traced to a combination of idealism, classical liberalism, and rationalism. In this American view, war is an aberration in the natural order. Man
can pursue his productive pursuits, and maximize his values only in the absence of war. Since war cannot serve the best interests of any community, the possibility of war must reflect some malfunction in relations...Deep in the psyche of the American policy elite of the 1970s...was the belief that all people are fundamentally reasonable. Force, latent or applied is anathema to this sub-culture...The admirable, and historically accurate (for the United States), American belief that peace is a normal state of affairs, married to the associated optimistic cultural conviction that progress can be, and is being, achieved in the quality of inter-state relations, means that the United States has inordinate difficulty in sustaining an adequate domestic political constituency for a high level of peacetime defense expenditure. To assert that the United States should, prospectively forever, maintain a preponderance of military power over the Soviet Union, is to attract the counterassertion that one has fallen victim to "an ideology of conflict" or is in the pay of the warfare state." For reason of her history and geography, it is not perceived as normal for the United States to remain semi-mobilized for war...major social costs are associated in the United States with a high level of defense preparation.243

These premises lead to a political environment in which the defence budget must not grow beyond certain limits. In many ways, the managerial approach to military affairs is a reflection of the same political pluralism and system inertia that gives rise to marginalist dominance in American politics as a whole. Because national security is only one of a number of budgetary priorities, allocations for defence will not grow beyond a particular point. Within a finite defence budget, there are further constraints, and additional choices must be made.

American defence spending has remained within a fairly constant range since the end of the Korean War.244 One of the effects of a defence budget of a consistent size is that defence planning becomes a matter of efficiently allocating resources. The managerial approach to defence policy stems from the need, at a general level, to derive the greatest value from a given level of defence expenditure. The choices and tradeoffs made toward this end will, by necessity, adversely affect the progress of particular programs. Furthermore, no method for making these choices will be immune from criticism. The choice of criteria will be arbitrary, focussing on some concerns while ignoring others.
Nonetheless, budget allocations must be made, and some criteria for sufficiency must be used so that long-range planning can take place within the context of realistic, finite defence budgets. It is in this light that one should view the managerial approach to defence: military imperatives are important, but they are not all-important.

In the area of strategic nuclear forces, the impact of this sort of scarcity has been most striking in the development of the Assured Destruction paradigm. Assured Destruction is the topic of more misconceptions and caricatures than perhaps any other concept in the American strategic debate. Both liberals and conservatives suggest that Assured Destruction was a model of deterrence adopted by American planners between 1963 and 1974. Liberals argue that doctrinal developments since 1974 represent a departure from mutual deterrence based on the threat of retaliation against urban-industrial targets, while conservatives, as reviewed earlier, complain that American policymakers remain unduly influenced by this concept.

In reality, neither of these views is accurate. Assured Destruction was a planning device, McNamara's budgetary rationale for placing a ceiling on strategic force spending. Kevin Lewis delineates this link between budgetary management and strategic posture:

As numbers of relevant Soviet targets began to grow in the mid-1960s, McNamara was pressured to increase the size of the U.S. posture. He attempted to resist these pressures, maintaining that conventional force enhancements should have first call on the defense budget. But when there is no logical way to knit up forces and plans with budgets and strategies, posture decisions may largely be made independent of straightforward military requirements. Unfortunately, the only consistently successful route to harnessing fractured elements of strategic planning has been to impose relatively arbitrary restrictions. In this case, it was a force ceiling. Thus, the key purpose of McNamara's device for instituting such a constraint, the declaratory strategy of "Assured Destruction," was to obviate the need for entirely new programs while attempting to meet the evolving threat by, among other things, a policy of
incremental force structure updating.
In this way, technical improvements mainly to MINUTEMAN ultimately provided for improved accuracy, coverage, controllability, and some other features called for under flexible employment, without an expansion of the overall U.S. force structure in terms of numbers of launchers.\textsuperscript{245}

In explaining the notion of Assured Destruction, McNamara defined sufficiency for American strategic forces in terms of the amount of damage these forces could inflict upon the Soviet Union's population and industrial capacity, in retaliation for a generously-configured Soviet first-strike. Unacceptable damage, (the prospect of which the Soviets would find absolutely deterring), was defined as the destruction of one-third of the Soviet Union's population, and one-half of its industrial capacity.\textsuperscript{246}

This standard is interesting in the way that it was formulated: additional investment in strategic forces could not be justified, as the opportunity cost of the additional increments of destructive power would be too high. Assured Destruction, then, was justified on the grounds that nuclear weapons sufficiency was subject to a principle of diminishing marginal returns. Faced with an expanding Soviet target set (one that was becoming increasingly difficult to target reliably), disturbed by the prospect of arms race instability, and convinced that conventional forces should have first call on the defence budget, McNamara devised Assured Destruction so as to 'demonstrate' that further procurement of strategic launchers would be neither necessary nor cost-effective.

Of course, Assured Destruction was never American employment doctrine: that is, at no point since the late-1950s did American nuclear targeting reflect a primary emphasis on counter-city strikes of the sort suggested by McNamara's definition of 'unacceptable damage' in urban-industrial terms. Indeed, during McNamara's tenure as Secretary of Defense, the SIOP evolved in the opposite direction, emphasizing greater flexibility and discrimination. From its inception,
the SIOP has consistently allocated approximately ten percent of the American
warhead total to counter-urban/industrial missions.\textsuperscript{247} The vast majority of
warheads have been assigned to striking at the more immediate, less latent,
types of military power: missile silos, airfields, submarine facilities,
conventional forces, and the command system. At the same time, however,
while the SIOP after 1963 was composed of large-scale strikes, and did reflect a
strong counterforce theme, it was clearly not a damage-limiting posture.
Assured Destruction and a development program that was, at most,
incrementalist, precluded the development of such a capability.\textsuperscript{248}

\textbf{Marginalist Tendencies in American Security Policymaking}

The American national security policymaking community -- an amalgam of
legislators, bureaucrats, the armed services, private think tanks, and
academics-- is largely marginalist in outlook. There would seem to be a number
of factors that contribute to marginalist dominance in American strategic
nuclear weapons policy.

The central reason for marginalist dominance is that the American arms
debate encompasses a spectrum of views on nuclear weapons policy. As Levine
and others have argued, the existence of different schools of thought on military
policy stem from different actors holding varying configurations of value on
issues relating to nuclear weapons, international politics, threats to American
security, and containment. These disputes over doctrinal matters often
manifest themselves in debates over defence expenditure, weapons
procurement, and arms control policy. Successful policy initiatives will be those
which can appeal to a sufficiently broad coalition of various actors. In order to
maintain this 'winning' or 'minimum' coalition, subsequent initiatives cannot
deviate in large measure from the values of this consensus.\textsuperscript{249}
'Grand' initiatives that seek to maximize one value, or particular outlook, are difficult to sustain. Such initiatives may seem more analytically satisfying, but they raise public anxieties in the short-term (in the case of the US, this could be extended to include the anxieties of Alliance publics), and they cannot retain the requisite legislative and bureaucratic support in the long-term. Within the American strategic nuclear policymaking process, these basic 'public policy' difficulties are compounded by two additional factors. First, for an initiative to stand good prospects for success, it must be able to be completed within the constraints of a four-year term, which would seem to place limits on the scope and magnitude of successful policy proposals. Second, American policy (and especially that relating to arms control diplomacy) must be sensitive to the expectations of allied governments and the Soviet Union. Large-scale departures from the existing agenda of Alliance and superpower relations can end in failure, as did President Carter's March 1977 proposals for strategic arms control.

The multiple political dimensions of this particular policymaking environment can be seen in the problems encountered by recent attempts to break away from the framework of nuclear deterrence and strategic nuclear parity. The pursuit of offensive nuclear superiority would require a level of defence expenditure that would be politically unrealistic because various sectors of American opinion would consider it futile or dangerous. The Soviet Union would lend further support to these views with a vigorous diplomatic campaign and a weapons buildup of its own. Canadians, Japanese, and Europeans, who value periods of superpower civility, would find such developments deeply disturbing.

Much the same can be said for the reaction to President Reagan's purported endorsement of a world without nuclear weapons at the 1986 Reykjavik
Summit. It seems certain that conservative and centrist opinion would consider such a move to be a policy disaster. It seems highly unlikely that either the Soviet or American military establishments could be convinced to go along. And allied governments might raise among the most strenuous protests of all, given their geostrategic vulnerability to Soviet conventional forces which is offset by the threat of the American nuclear arsenal.\(^{252}\)

Even areas like arms control policy, which would seem better attuned to more singular approaches, must take into account the full spectrum of opinion in the American debate. A prospective arms control proposal must, in its formative phases, secure the approval of the Executive branch, the Departments of State, Defense, and Energy, and the relevant branches of the armed services. Should negotiations with the Soviets prove successful, the prior approval of these actors can prove to be very valuable in securing the necessary Senate majority for ratification.\(^{253}\)

Richard Betts explains why, in the parallel cases of strategic nuclear doctrine and arms control policy, American objectives have remained restricted to general themes such as 'essential equivalence':

If superiority matters, why seek equivalence? Most simply, parity is the only criterion on which political agreement --both internal and external-- can be built. Equivalence (as long as it does not give both sides a first-strike capability) is a second best acceptable goal to most contenders. For doves it is wasteful but unobjectionable; for hawks it is less than ideal but preferable to inferiority. Between the superpowers, equivalence is the only logical basis for negotiating a mutually acceptable balance of forces...The vague value of parity cushions the implications of scholastic differences over the logic of deterrence, broadening a consensus between governments and within elites on sufficiency and stability.\(^{254}\)

Marginal policy initiatives are also more likely to be attuned to managerial considerations of American defence policymaking. Because systemic initiatives affect many different areas of policy, a number of problems can arise. First, conceiving of an appropriate response to a given problem in terms of
sweeping initiatives comes at the expense of what might be called 'nuts-and-bolts considerations', such as technical aspects, and legal or administrative precedent. Second, systemic initiatives are less likely to be designed with an eye to political and economic developments like budgetary fluctuations. And because they concentrate on small problems within the given framework, marginal initiatives encourage greater attention to cost-effectiveness and the value choices inherent in resource allocation.²⁵⁴

An instance of this might be seen in the relative durability of Soviet and American force structure. While, at times, it might seem obvious that aspects of each side's force structure ought to be changed so as to conform more closely to some desirable strategic objective, a drastic restructuring remains impossible. Either a substantial buildup or modernization would take time, and might engender divisive political debates about the ends and means of the program. Similarly, an arms control agreement would be long in the making: political differences between the superpowers would have to be bridged, and the obstacle of reaching agreement on verification procedures --a demanding technical task-- would have to be overcome.

Systemic initiatives run a far greater risk of the internal incoherence that comes from disconnected planning. The overarching character of such initiatives notwithstanding, individual programs rapidly develop their own dynamics (and political constituencies) which may not be compatible with those of other associated programs. Often the progress and impact of a particular program is assessed in isolation from broader objectives. Because systemic initiatives are more likely to emphasize singular objectives, they are more likely to neglect or ignore other equally important goals; policy incoherence is the result.²⁵⁵

This criticism was made earlier with reference to American military space
policy and maritime strategy, but the most striking manifestation of this problem in the conservative program comes at a more general level. In short, damage-limitation conflicts with other American foreign policy imperatives, including a minimally cooperative state of US-Soviet relations, fiscal responsibility, and arms control (which seems to have survived the initial conservative onslaught to reemerge as a legitimate, essential enterprise). 256

The consequence of such obstacles is that strategic and arms control policy changes in a marginal fashion, and this realization should temper the impulse to adopt more sweeping proposals. Systemic change might result in policy which is more analytically satisfying and embodies greater precision, but in so doing it would vitiate the value consensus so essential to every administration, and indeed, to the proper functioning of a plural democracy.

Conservatives have sought to use the logic of conventional weapons to guide strategic nuclear planning. However, the conventional force planning model, which, in its ideal form, postulates tightly defined relationships between national objectives, national strategy, operational concepts, and procurement is inappropriate to nuclear force planning. It is inappropriate because, nuclear strategy cannot reliably guarantee activist national objectives such as security and well-being, beyond deterrence based on the threat of societal destruction. 257 In the area of declaratory policy, the Reagan Administration engaged in a major departure from the ambiguity and incremental refinement that has characterized marginalist statements. The Administration did so, in large measure because it sought to delineate precisely the relationship between nuclear weapons and national well-being, as can be done in the area of conventional forces. But where Weinberger's statements outlining the circumstances under which the United States would commit its conventional
forces were well-received as prudent, and even stringent, his application of similar standards to American strategic forces were seen as illusory and reckless. To the Administration's misfortune, the process did little more than engender divisive debate, fear, and greater support for the nuclear freeze movement. The attempt to advance more singular objectives in strategic nuclear policy (in this case, the military prowess of American strategic forces), ultimately proved to be politically corrosive to the Administration's overall security objectives.

The Administration's contention that all American military forces were in a state of crisis might have been a useful electoral device, but it created problems of its own later. In order to show its commitment to a stronger defence effort, the Administration adopted what William Weida and Frank Gertcher call a "theological approach to defense spending."

The Reagan administration's view of defense spending is closer to a theology than it is to a decision process based on an efficient allocation of resources. The theological approach to defense spending can be illustrated by investigating the attitude of an individual who supports a church. When asked what he or she expects in return when giving to such an organization, most would say "Nothing --I give to show commitment." This approach differs from that of an economist who seeks an efficient allocation of resources. The efficient allocator is primarily concerned with how much each dollar buys relative to potential purchases elsewhere, while a person who spends to show commitment is only concerned with the amount spent.

Part of the Administration's demonstration of commitment to a stronger defence took the form the Strategic Modernization Program. By attempting to modernize all American strategic capabilities, the Administration created a large 'bow wave' of spending, on the presumption that strategic force expenditures would not have to be sensitive to budgetary realities. As concern about superpower tensions and American budget deficits began to grow, all of the modernization programs began to encounter strong political resistance. Ultimately, it does not appear that the MX and Trident programs will be
completed in their intended forms, the agenda for the Strategic Defense Initiative and the B-2 ATB are, at best, uncertain, while the Navy's claim to a 600-ship Navy (and 100 SSNs) will be a hollow one. Had the Administration pursued a more incremental modernization program, it might have been able to claim measurable gains in American strategic capability. As it is, the near-term configuration of the American deterrent will have come at a high price, and is unable to carry out strategic operations beyond countervalue retaliation, and perhaps the most limited of nuclear options.

It seems feeble to account for the Administration's approach by noting that conservatives probably felt the need for a general increase in American capabilities in order to carry out any acceptable strategy. The conservative perspective operates within the context of limited defence budgets that are a function of American strategic culture, so setting well-defined priorities is an essential feature of a sound defence strategy. To ignore these domestic political imperatives is to pursue objectives which are doomed to failure.

And yet, such seems to have been the odyssey of the conservative perspective during the Reagan years. The American budget deficit promises to impose substantial restrictions on defence spending, and either current American commitments, programs, or readiness will suffer. The conservative viewpoint contributes valuable insights to the contemporary security debate. Certainly it is impossible and unwise to design and implement American security policy without regard for conservative concerns. But by misreading, or attempting to ignore, the character of American strategic culture, it adopted an approach that would become its own undoing.

More than anything else, the failure of the conservative program in the past decade is a lesson about enduring marginalist dominance in American security policy. To be successful over the long-term, strategic nuclear weapons policy
must seek to balance the conflicting views that animate the American policymaking process. Policy proposals that 'optimize' the varying concerns of different schools of thought will not produce policy of a 'heroic' character, but it remains impossible to run the system from the margins of the political debate. Consequently, neither the aggressive pursuit of nuclear superiority, nor the continual neglect of American strategic forces, will be able to survive in the contemporary political environment. With this vital consideration in mind, the next chapter concludes this essay with a summary of the preceding sections, and some recommendations for American policy as it enters the next decade.
IV. Summary and Recommendations

This chapter will begin by summing up the major points of the conservative perspective on American strategic nuclear weapons policy, followed by a summary of the critique of the conservative perspective. It will conclude by offering a number of recommendations for American policy in the post-Reagan period.

Summing Up the Conservative View

The following points highlight the conservative perspective on American nuclear weapons policy:

- International politics continues to be highly influenced by the balance of military power. Nuclear weapons have not transformed this completely: the competition for marginal advantages in the nuclear balance can yield significant operational -- and thus political -- benefits.
- The Soviet Union represents the primary American national security problem. The Soviet leadership harbours expansionist aims, and Soviet military power continues to grow at an alarming rate. Other sectors of the American policy debate may entertain the prospect of stable, even amicable, relations with Moscow, but conservatives feel that only a robust American military effort can make any claims to guarantee American security vis-à-vis its chief rival.
- American nuclear capabilities are essential to the preservation of American interests abroad. Because of Moscow's overwhelming advantage in conventional forces (on the Eurasian landmass, at any rate), the United States must be able to make credible threats to escalate a conventional war to the nuclear level. The integrity of such threats is contingent upon the existence of American nuclear capabilities which can dominate the process of nuclear escalation at all levels.
Soviet nuclear strategy is of a war-fighting, war-winning variety. A distinct strategic culture has produced an outlook on nuclear weapons policy that is deeply at variance with its American counterpart. Soviet writings on counterforce preemption and strategic defence inform Soviet procurement.

The Assured Destruction paradigm (along with its derivatives, stability theory and arms control) is inadequate, and reflects a strategic tendencies within American strategic culture. Assured Destruction divorces nuclear weapons from political and operational considerations, and is thus not sufficient to deter a culturally distinctive adversary like the Soviet Union from pressing its geostrategic advantages in areas vital to the security of the United States.

During the decade of the 1970s, the United States did not compete adequately with the pace of Soviet strategic nuclear programs. However this may have been rationalized under the aegis of arms control and detente, by the end of the decade the American nuclear deterrent suffered from a serious 'commitments-capabilities gap.' This situation is urgent and requires immediate remedies.

In securing escalation dominance, the United States needs to invest in prompt counterforce capabilities (MX, Trident II and ASATs), strategic ASW (such as envisaged by the USN's Maritime Strategy), and strategic defence (SDI and ADI), restrike assets (air-breathing systems), and sophisticated, sustainable command and control.

**Summing Up the Critiques of the Conservative View**

This essay has used a variety of liberal, neo-liberal and centrist arguments in critiquing the conservative perspective. Briefly, they are:

- The breadth and balance of the conservative viewpoint leaves much to be desired. The conservative perception of threats to American security is
monolithic: only Soviet military power is mentioned, other problems (such as the need for foreign and domestic reassurance, coping with third-country threats, and environmental issues) are ignored. Similarly, the appropriate response is deemed to be the generation of countervailing American military power (which ignores other containment assets such as the allies, diplomacy, and economic power).

- The Soviet Union and the United States share certain security interests. Paramount among these is the avoidance of large-scale nuclear war involving the homelands of both countries. The competition for global influence between the two nations may not be able to be 'resolved', but the presence of continuing competition should not rule out the possibility for security arrangements which are mutually beneficial. Furthermore, because the Soviet Union ranks as the only legitimate military threat to the United States, the maintenance of some minimal level of superpower communication must remain an essential objective in American foreign policy.

- Soviet nuclear strategy may not be as threatening as selective interpretations of Soviet military doctrine would have one believe. While Soviet doctrine does seem to inform Soviet procurement, the risk-averse character of Soviet diplomacy in the postwar period seems to suggest that Soviet behaviour in a nuclear confrontation might be quite a bit more measured than is indicated by Soviet declaratory doctrine. This is not to suggest that the Soviet view of nuclear weapons conforms to the Assured Destruction paradigm, only that the 'war-fighting, war-winning' image of Soviet doctrine commonly invoked by conservatives is most likely an incomplete picture of actual Soviet thinking on nuclear weapons.

- In the emerging history of the postwar era, it appears that American nuclear superiority was more apparent than real. However much one might speculate
that it stiffened the resolve of American leaders in a crisis, and induced concessionary respect from the Soviet Union, other nuclear crises (such as the 1973 Yom Kippur war) suggest that the exact import of nuclear superiority is unclear.

- The quest for nuclear Escalation Dominance is a fundamentally flawed approach to policy. The severe operational shortcomings of existing nuclear arsenals suggest that the strategic condition of MAD is extremely robust and cannot be changed by any level of defence expenditure that is politically tolerable. Moreover, some aspects of a damage-limiting posture, such as the task of boost-phase interception in a BMD system or extensive strategic ASW in Arctic regions, face daunting physical challenges. Other requirements, such as the development of sufficiently high-confidence software for BMD computers, may be analytically impossible.

In contrast to Assured Destruction, the quest for Escalation Dominance makes sound defence management extremely difficult. Attempts to break out of MAD will not impose a rigorous discipline and efficiency on defence expenditure. Instead, scarce American defence dollars will be squandered in the pursuit of ephemeral advantages in the strategic nuclear competition.

The pursuit of Escalation Dominance poisons US-Soviet relations, and makes arms control negotiations almost impossible. Indeed, the history of the nuclear era does not indicate that nuclear superiority is necessary to the preservation of American interests abroad. If anything, American attempts to regain nuclear superiority have alienated Allied opinion. Finally, Escalation Dominance fails in one particularly key respect: it does not command the support of a sufficiently wide spectrum of views within the American political debate. Public discussion of escalation dominance has been, in the end, very corrosive of support for defence programs in the United States.
American Strategic Nuclear Policy in the Post-Reagan Period

Samuel P. Huntington characterizes the predicament of the contemporary American policymaker in much the same way as Gilpin, Kennedy, and Williams, when he notes:

"Foreign policy," wrote Walter Lippman in 1943 in an oft-quoted phrase, "consists in bringing into balance, with a comfortable surplus of power in reserve, the nation's commitments and the nation's power." If this balance exists, the foreign policy will command domestic support. If commitments exceed power, insolvency results which generates deep political dissension... [In the 1960s] the relative decline in American power generated a wide range of analyses and many proposals for moderating if not reversing that decline. What is significant, however, is not the decline vis-a-vis other countries but rather the problem posed by Lippman of the relation between American power and American commitments. Unlike the decline in relative power, the imbalance in policy can be corrected. The Lippman gap has been and is real, but it is not unyielding. Statesmen can attack it in a variety of ways.262

Huntington goes on to suggest that the US can either increase the level of resources it devotes to security concerns, secure enhanced contributions from allies, redefine its interests, devise more cost-efficient strategies, or reduce the level of threat through diplomacy. The Reagan administration seems to have pursued only the first alternative seriously.263 However, attaining the objectives of American security policy in an era when American power is distinctly limited will require an approach different from that seen in the past eight years. Far greater attention will have to paid to the pertinent limitations and constraints that confront the United States and its allies, if a new approach is to have a realistic chance for success. Thus, the remainder of this essay will concentrate on the relevance of the last three of Huntington's suggestions to strategic nuclear policy in particular.
American international security objectives must remain rooted in an Alliance framework, but the Allies must assume greater responsibility for their own security.

This has particular relevance for Western Europe and Japan. Although the capability of these countries to provide for a greater portion of their own security has existed for over a decade, the current American 'twin' deficits have now made greater Allied contributions to Western security imperative.

From an American perspective, the quality of deterrence in Europe can not (and likely does not) rely solely on the operational prowess of the American nuclear arsenal. Ideally, substantial progress in the MBFR negotiations would enhance security in Europe in the post-INF period, but, failing this, it is clear that the European members of NATO will have to assume greater responsibility for the maintenance of satisfactory deterrence in Europe. These nations could increase their conventional forces, so as to secure a more favourable balance with the Warsaw Pact. Greater cooperation and coordination with French conventional forces, even at an informal level, would be very desirable. Indeed, increased European defence cooperation as a whole, including joint defence production agreements, typified by the more recent agreement between Britain and France to co-produce a long-range cruise missile, and joint operations, exemplified by the embryonic jointly-staffed Franco-German brigade, would do much to restore a sense of community in European security matters.

Finally, the modernized nuclear deterrents of Great Britain and France should play a larger role in European regional deterrence. Developments in French nuclear doctrine since the 1970s have been especially encouraging in this regard. Where the use of French nuclear forces was once quite explicitly restricted to the defence of metropolitan France, the recent evolution of French declaratory policy now incorporates a concept of extending deterrence to West
Germany. Declaratory policy for British nuclear forces remains vague, but the essential value of the modernized deterrents in both countries is to increase the risk, in the minds of Soviet planners, that a conflict in Europe would come to involve the use of nuclear weapons.\textsuperscript{264}

The American nuclear guarantee to Europe should continue. Not only does this create additional uncertainty in the mind of the Soviet planner contemplating a conflict in the European theatre\textsuperscript{265} but the capacity to launch limited, deliberate strikes will likely remain solely an American capability for some time. Quite obviously, the American conventional commitment to Europe should remain: to pull back a significant portion of the 300,000 American troops currently stationed in Europe would not enhance American security. Indeed, it would foster a greater reliance on the early first-use of nuclear weapons, at least in the near-term, and perhaps far more permanently.

As argued earlier, SDI, when viewed through an Alliance perspective, has had benefits as well as costs. The program's objectives of providing strategic defence for the American homeland have raised some fears of 'decoupling' in Europe, although it can be argued that strategic defence enhances the credibility of extended deterrence because it reduces American vulnerability and thus makes Washington more willing (or certainly at least as willing) to contemplate the use of American nuclear weapons in the defence of Europe.\textsuperscript{266} From a European perspective, SDI has had other negative effects, such as the problems which it has caused for East-West relations. At the same time, however, European and Japanese participation in the program has probably played a key role in making Moscow more willing to compromise in other arms control negotiations. Not only has greater Soviet flexibility restored a civility and optimism to US-Soviet relations which the allies value, but in the case of the INF Treaty, it has led to tangible security benefits for the Europeans and Japanese.
As argued earlier, however, abandoning the ABM Treaty regime would, on balance, not be in the interests of the Alliance as long as it retains a strategy of flexible response. An intriguing way of preserving the technological benefits and leverage of SDI, while preserving the ABM Treaty was suggested by the US Senate conference on SDI funding in 1987, when the senators urged that, in order to ensure that the allies received the fullest technological benefits of the current American drive for high-technology defence, the Alliance should launch a Conventional Defence Initiative (CDI).\textsuperscript{267} Not only would such a program have the cooperative benefits (and thus, diplomatic leverage) of SDI, but the nature of its task --exploring advanced technology applications for pressing conventional missions-- would make it easier to discipline its direction by authorizing intensive funding only for concepts that promised the development of a particular operationally-useful capability.

The Alliance needs to promote greater cooperation on the thorny matter of Out-of-Area (O/A) operations. Even a symbolic commitment of some European forces to relevant O/A tasks would be a useful step in combatting American resentment over having to take primary responsibility for thankless operations which, often enough, promote security concerns that are more European than American --such as ensuring the free passage of oil through the Persian Gulf. Alternatively, the Alliance could address the O/A problem through greater, coordinated, security assistance programs to client states.\textsuperscript{268} This sort of solution might have special relevance for Japan, whose potential role in O/A operations, or even in a more explicit role merely as a regional security guarantor, is constrained by constitutional stipulations on the deployment of forces abroad, buttressed by a deeply-held cultural reluctance to take on a more prominent role in international security matters.

O/A difficulties can be seen as part of a larger problem: in order to secure its
interests abroad, the United States requires the cooperation and assistance of its European and Asian allies. However, in order for such cooperation to be forthcoming, the allies must feel that the United States is genuinely responsive to the allies' particular views and proclivities on security issues, and that genuine consultation and compromise is taking place. The allies, for their part, must recognize that continued American participation in multilateral defence arrangements is not assured, and that if the allies do not participate vigorously in these arrangements, the varied calls for American isolationism will receive increased support. The Reagan years have witnessed an unholy alliance between more ardent liberals and conservatives in the American debate on the question of American retrenchment; apathy on the part of the allied nations could make the isolationist temptation irresistible for American policymakers. There is nothing particularly new about this danger. What is new about this problem is the fact that the recent decline of American power has made genuine consultation something which can no longer be put off.\footnote{269}

- **The United States should adopt a nuclear doctrine that emphasizes the capability to carry out 'Limited Nuclear Options' (LNOs).**

  Such a doctrine would be similar in scope and intent to the Schlesinger Doctrine, first articulated in 1974. Although such a policy might be an imperfect, ambiguous blend of different concerns within the policy debate, it would also seem to be the only option capable of sustaining a viable coalition on nuclear weapons policy, so that American nuclear planning can take place in a more consistent, efficient manner than has been the case during the past decade.

  The emerging history of American nuclear planning in the 1960s suggests that Assured Destruction was far more a force sizing metric than a targeting
doctrine. Maintaining the clarity of this management/targeting distinction can help correct the illusion that Assured Destruction and extended deterrence are inherently incompatible. The problem with this view, whether it is put forth by conservatives demanding the pursuit of a damage-limitation posture or liberals urging disengagement, is that a force-sizing metric like Assured Destruction and a strategic mission like extended deterrence bring up considerations that are not antithetical, merely different. Regardless of whether or not the United States desires flexibility and discrimination in its nuclear posture, the capability to threaten a Soviet urban-industrial target set with extensive devastation will remain a necessary condition for satisfactory deterrence. One can argue that the Soviet leadership would only consider such a capability to pose a penultimate threat, (with the destruction of the Soviet leadership itself representing the ultimate threat), but even so, the potential spectre of extensive countercity warfare provides the unique, essential foundation of both central and extended deterrence.

At the same time, to adopt a posture that relied only, or even primarily, on the threat of countervalue strikes would seem unwise. Extended deterrence requires the development of weapons and targeting doctrines that hold out the prospect of favourable war-termination prior to the initiation of extensive intercontinental urban-industrial strikes. Although the notion of escalation control is most often associated with the conservative view, there is nothing especially illiberal about this. Warplans can be thought of as schedules for the employment of the nuclear arsenal; employment policy should seek to make these schedules as measured, deliberate and flexible as possible. In short, the capacity to impose unacceptable societal damage may be seen as the foundation of central deterrence, while extended deterrence requires additional capabilities such as flexibility and discrimination. In developing the
American nuclear deterrent, these additional capabilities ought to be carefully scrutinized to ensure that they are not superfluous to a reasonable conception of American security interests. American nuclear policy ought to be guided by a concept of operations that specifically includes a consideration of the circumstances under which American nuclear weapons are likely to be used. Certainly, the prospect of using small-scale attacks in response to an emerging theatre catastrophe is a more plausible scenario --and thus much more deserving of the attention and resources of nuclear planners-- than the prospect of 'extensive but purposeful' retaliation in response to a comprehensive Soviet strike against land-based American nuclear assets.

A theatre-oriented strategic doctrine of limited nuclear options should thus guide American policy in the areas of strategic nuclear force modernization and arms control diplomacy. Although the character of such options would be improvisational (contingent upon the military and diplomatic features of the situation), a deterrent posture capable of sustaining an LNO strategy would, by definition, emphasize such characteristics as flexibility, and discrimination. Hopefully, it would also possess the managerial attributes of cost- effectiveness, and a sensitivity to budgetary limitations. Managerial considerations are an essential part of any American national security strategy. A defence program that is sensitive to the oscillations of the defence budget, and incorporates new technologies in a timely, deliberate fashion is far better attuned to the strengths and weaknesses of American strategic culture than one which seeks a rapid increase in all areas of American nuclear capability as if the political will and economic resources available for such an enterprise were unlimited.  

Critics of an LNO strategy might raise two objections. First, while such a strategy might function well within the context of the American arms debate, Allied reactions might be considerably less favourable, for the strategy seems to
suggest a willingness, on the part of American policymakers, to consider fighting a nuclear war that is limited to the European theatre. This perception would not be entirely inaccurate. The dominant operational concept that determined the appropriate level of capability for American strategic forces would be the prospect of counterforce war at a theatre level only. By contrast, taking on the prospect of extensive intercontinental counterforce exchanges can only stimulate demands for enormous capabilities while promising returns which are uncertain, at best.

On the other hand, declaratory policy for an LNO strategy could take the form of statements characterized by a level of ambiguity that could also be used to create considerable uncertainties for the Soviet warplanner, and thus assuage European fears of 'decoupling.' One of the major features of an LNO strategy is what Richard Betts calls "semantic finesse" in managing situations, (such as flexible response within the context of Soviet-American strategic parity), that involve the pursuit of conflicting objectives:

If a dilemma must be managed rather than resolved, the trick is to have a policy that means all things to all men. This requires military suboptimization, doctrinal compromise, and a reassurance of opposed constituencies... Declarations can help bridge the gaps by orchestrating emphasis. To pursue a stable nuclear balance without alarming Western doves or Soviet negotiators, the rationale for equal counterforce capabilities should be larded with the emphasis on the impossibility of disarming either side's countervalue reserve forces...To preserve alliance cohesion, while minimizing Soviet propaganda gains, Washington should mount a counteroffensive based on a conditional no-first-use pledge-- a semantic nuance obvious to specialists but not to mass opinion.273

The second objection that might be raised to an LNO strategy is that the Soviets might not show similar restraint. Indeed, what we know of Soviet strategic doctrine suggests that Moscow has very little respect for American conceptions of limited, controlled nuclear use. Limited strikes might only precipitate a much larger exchange: the Soviets might launch a damage-limiting strike in order seize the upper hand.
Ultimately, it is impossible to know what the Soviets would do under conditions of limited nuclear war, but it seems possible to argue that Soviet behaviour under wartime conditions might be considerably more restrained than their doctrine might lead one to believe. If the United States launched theatre nuclear strikes that were clearly limited in scope and number, but also advanced Western military aims, the Soviets might be more willing to negotiate an end to hostilities and absorb a political defeat, than to escalate further and risk a holocaust. What underpins this view is the premise that the calculus of strategic deterrence is far closer to being the 'balance of resolve' between two potential adversaries (their relative political and psychological commitment to the status quo) than a process of decision informed only by military considerations. For a putative Soviet invasion to 'fail' in this manner would be politically damaging to Moscow, but to escalate the conflict to the level of extensive intercontinental exchanges would risk societal devastation on a scale that grossly outweighed any potential theatre gains.

A strategy that emphasizes the capability to execute limited nuclear options --and here I think we are discussing employment packages that are well within a ceiling of 100-150 detonations (most would be much lower)-- would have the following policy implications for strategic modernization programs and arms control diplomacy.

**Policy Implications: Strategic Modernization.** There is a most pressing need to develop more sophisticated and survivable command and control. The evolution of command and control arrangements for nuclear weapons has fallen prey to uneasy trade-offs between maintaining positive and negative control over the nuclear forces. In many ways these tradeoffs are the result of the fear that military commanders will not receive the authorization to use nuclear weapons when circumstances warrant. Command and control systems that do a
better job of ensuring that authorization, once it is given by the political leadership, will reach the field commanders will do away with dangerous practices such as predelegating authority to field commanders in times of crisis.

In this way, much of the Reagan command system modernization programs have been useful initiatives. The problem with the Reagan approach has been in the standards it has set for command system performance. The uncomfortable reality is that in the environment of an extensive, protracted nuclear exchange, the command system is very likely to suffer damage on a scale that will severely impair its ability to coordinate purposeful strategic operations. At the same time, both sides have a strong interest not to escalate the conflict to these levels, in large measure, because of the fragility of each side's command system. Although beyond a certain level of performance, additional investment in command system performance may not be useful, such a point has not been reached.

Under the aegis of an LNO strategy, much of the current American nuclear deterrent is not in dire need of improvement. The land-based ICBM force is perfectly adequate: mobile deployments of neither the MX nor the Midgetman SICBM are needed. As it is, both systems are in deep political trouble: the MX because of the alleged threat it can pose to Soviet hard targets, and the Midgetman because it promises to be a vastly expensive program, fielding an ICBM of only questionable survivability.\textsuperscript{275}

Provided that more secure and sophisticated communications can be had with the SSBN fleet, the Trident program seems sound. Although liberal arms controllers may balk at the Trident II SLBM, it can be argued that the maintenance of secure counterforce reserves (as long as they are not deployed in numbers which seem to threaten the Soviet ICBM force) is in American interests. There have been calls for the Trident SLBM to be deployed in a
smaller SSBN hull: it is argued that the current Ohio-Class SSBN, with its 24 launchers, each with a potential of eight warheads, 'puts too many eggs in one basket.' However, the Navy has made a strong case that the current hull is the optimal blend of quietness, speed, offensive and defensive capabilities. Furthermore, designing a new hull would be an expensive venture that might further delay the maintenance of a robust SSBN fleet as the Navy encounters the block retirement of Poseidon hulls in the early 1990s. Given that the current Trident hull, when deployed in the open ocean, does not seem to be endangered by current or projected Soviet strategic ASW capabilities, it would seem prudent to retain the Trident program in its current form.

Air-breathing forces are a more complex matter. The bomber force has certain features which make it uniquely desirable. Equipped with 'stealth' technologies, advanced avionics, electronic countermeasures (ECM), and short-range attack missiles (SRAMs), bombers will continue to enjoy high expected rates of penetration against Soviet air defences; Soviet attempts to defend against the bomber force will continue be cost-ineffective, especially if the aircraft are armed with cruise missiles. Furthermore, the existing fleet of B-52G/H aircraft are ancient and will suffer from increasingly serious structural problems when pressed into flying low-altitude penetration missions. So the procurement of the B-1B seems to have been sound; the quality-control problems with its avionics are a very serious matter, but it is assumed that these will be resolved.

However, given that the B-1B is a large, conventional aircraft with a great deal of room for further upgrading, it is much harder to make the case for the B-2 Advanced Technology Bomber (ATB). Although detailed costings of the ATB program remain classified, it is widely regarded as an extremely expensive program. Furthermore, as the aircraft nears deployment there are some doubts
about its range and effectiveness. The B-2 program shows the dangers of developing an aircraft that is replete with so many state-of-the-art technologies that it is uncertain just how well it will perform. It is not that these technologies will not prove to valuable: some of them certainly will justify their investment. But it would have been far more prudent to introduce these technologies incrementally, instead of incorporating them on to one high-risk platform.\textsuperscript{279} With this in mind, the planned procurement of 132 B-2 ATBs should be contingent upon very high standards of performance indeed. If crucial aspects of the B-2's performance fall short of its specification, cancellation of the program should be considered, and some of the relevant technologies should be incorporated into a further upgraded version of the B-1, and other air-breathing platforms.

To this point air-launched cruise missile (ALCM) programs have generally followed a prudent course. Both the ALCM and the ACM (from what one can tell about this latter version) are essentially stabilizing weapons, and, with improvements in accuracy, may hold out the promise of being armed with conventional warheads. Such weapons could deliver highly effective conventional ordinance over long distances, which could alleviate the need to use nuclear weapons in some theatre contingencies.\textsuperscript{280}

The case for the further development of sea-launched cruise missiles is less clear. As with the air-launched version, these could prove to be very useful in conventional theatre roles. The vast majority (in fact, nearly eighty percent) of the Navy's purchase of some 3,300 cruise missiles are conventionally armed. Sea-launched cruise missiles pose vexing arms control verification problems, however. Where the air-launched version can be 'counted' through national technical means of verification, the use of 'functionally-related observable differences' (such as those which denote a B-52 or Bear-H armed with cruise
missiles) are unlikely to be accepted by the US Navy, given its policy of neither confirming nor denying that a given vessel may have nuclear weapons on board. With the submarine-launched variant, verification seems impossible once the missiles have been deployed.

Furthermore, some authors have wondered if the development of submarine-launched cruise missiles favours the Soviet Union more than the United States, given the number of important military targets on the coastlines of the US. Two caveats might temper this judgement. First, Soviet deployment rate of submarines abroad is quite low; most of the Soviet fleet defends the four bastions, and those that do venture beyond Soviet waters are noisy enough to be tracked by American ASW assets with relative ease. Second, aside from the two Trident bases and Washington DC, very few of the American coastal military targets are of crucial importance, or cannot be moved (this has particular relevance for the Over-the-Horizon radar sites, and the SAC bases). Additionally the Soviets have a substantial incentive not to hit any target on the American homeland in general if their interest is to keep any theatre war conventional, and even more substantial reason not to hit Washington DC in particular, for fear of precipitating the disintegration of the command system.

Ultimately, prudent policy options on nuclear-armed sea-launched cruise missiles are not forthcoming. Were a stringent SLCM verification regime in the offing, an agreement severely restricting SLCMs might be a good idea. In the absence of such a regime, perhaps it would be better to simply let things be, given that the Navy seems less interested in the nuclear-armed SLCM than its conventionally-armed variant.

Policy Implications: Arms Control Diplomacy. Ironically, the initial hostility of the Administration to formal arms control negotiations gave way to the realization that a minimal state of superpower communication is a first principle
of broader American foreign policy culture. Formal arms control can be a useful way of constraining particular programs that each superpower finds especially threatening. Moreover, arms control agreements can be engineered to 'lock out' scenarios and deployments which both superpowers find unattractive.282 At the same time, however, in order for arms control to work, it must be reintegrated with the politico-military realities of the superpower competition. Arms control can not seek to decouple nuclear weapons from political purpose. Indeed, it was never meant to do this. Instead, arms control is an instrument of national security policy and some proposals to reduce the level of armament will be congenial to Western security interests, while other will not, and thus are not worthy of support.283

An LNO strategy can function within the framework of Soviet-American strategic nuclear parity, and can also function within an arms control regime that implements the type of 'deep cuts' that are currently being discussed at Geneva. Should the negotiations produce an agreement that lowers the force ceilings of both sides to 6,000 warheads, with a force-concentration rule forbidding each side from concentrating more than 60% of its forces on one type of delivery system, prospects for an LNO strategy will actually be enhanced. The prospect of large-scale counterforce strikes will be attenuated, while the United States will still retain limited nuclear options.

Under an LNO strategy, it would be in American interests to preserve the ABM Treaty. Barring the development of a comprehensive BMD system, the American effort in strategic defence is difficult to understand. Even limited BMD could pose serious problems for American and allied strategic planners who seek to be able to launch limited ballistic missile attacks in response to an emerging unfavourable theatre military outcomes.284 Furthermore, a strong ABM Treaty regime remains an effective way in which to constrain the Soviet
effort in ballistic missile defence. And, as noted earlier, the Administration's reluctance to enter into serious negotiations with the Soviet Union on the control of anti-satellite weapons is baffling. An ASAT ban might be impossible, but an unrestricted competition in ASATs would not be in American interests, given the extent to which American military operations of all kinds depend upon satellite communications.  

Substantial progress in the START talks and the health of the ABM Treaty are linked. It is arguable that SDI has placed the United States in a very strong position vis-a-vis the Soviet Union in the strategic nuclear competition. The Administration should continue to withhold agreement on strategic defences until it becomes apparent that Moscow is willing to compromise on aspects of the strategic balance that Washington finds the most disturbing.

It may be the case that formal negotiations can only go so far in restricting or changing the character of superpower strategic arsenals which are deeply rooted in national preferences and differing security needs. If this is so, then perhaps confidence-building measures are a more promising avenue for superpower arms control. The appeal of these type of agreements is that some of them are very specific, and cover aspects of the strategic balance that both superpowers find unattractive, which should allow for speedy negotiation and ratification. An instance of this might be a ban on the testing of submarine-launched ballistic missiles in depressed-trajectory mode, or 'keep-out' zones for each side's SSBNs and SSNs.

It should be noted that, in some respects, the way to increased confidence in peacetime, crisis, and war might be through unilateral measures. It would be preferable if the Soviet advantage in ballistic missile throwweight could be attenuated through a formal arms control agreement, but if this is not possible, all is not lost. In some respects, the issue of Soviet heavy ICBMs and American
ICBM vulnerability is a security 'problem' of Washington's own making. In the context of a Soviet damage-limiting strike against American strategic forces, the theoretical vulnerability of the Minuteman silos is not an issue because of the substantial survivability of the American strategic deterrent as a whole. A strike against the Minuteman force alone in the service of a type of coercive diplomacy is extremely unlikely, and if the American policymakers feel the need to hedge against such a threat in any case, the development of counterforce reserves such as the Trident II and the ALCM-armed bomber force is a far more promising and sanguine option than baroquely complex and vastly expensive solutions like mobile missiles, or point BMD which promise to jeopardize the expected benefits of American initiatives in other areas like strategic arms control negotiations.

The President, the Office of the Secretary of Defense, and the Chairman of the Joint Chiefs of Staff (at least after the 1986 reorganization act) all need to provide vigorous political leadership so that service interests and budgetary inertia do not predominate over a coherent sense of national strategy. It has been argued that the weakness of President Reagan's 'management style' did not allow for such leadership, leading to a defence buildup that lacked a sense of strategic purpose. However, as has been argued here, the roots of the failure are situated at a more fundamental level. The conservative program for strategic nuclear policy overestimated the American political and economic capacity to support a quantum leap in American nuclear capabilities that would yield escalation dominance over the Soviet Union. Conservative policy prescriptions emphasized this unattainable objective over all others, but in the end, escalation dominance, like other systemic policy initiatives, was ill-suited to the environment of American strategic nuclear policy.
Both the current budget deficit and the possible START agreement will, by necessity, impose much greater certain discipline on American strategic nuclear programs. Fundamental choices will have to be made on a variety of nuclear weapons programs. American strategic nuclear policy objectives will be easier to attain if the burden placed on the nuclear arsenal is reduced --American strategic nuclear forces should not be deemed to be at the core of a successful, activist American foreign policy-- is better constrained. Less demanding strategic missions will yield a more marginal policy agenda that can retain a greater degree of long-term political support for vital strategic nuclear programs, allowing for a more measured, reasoned approach to strategic nuclear planning --and perhaps a much safer world.
NOTE FOR CHAPTER ONE


11) Freedman, Pg. 446; emphasis in the original.


13) D. Douglas Dagleish and Larry Schweikart, *Trident*, (Carbondale, Ill.: Southern Illinois University: 1984) Pp. 1-16, 38-120, 278-308. This study is an excellent chronicle of the Trident FBM submarine program from its earliest beginnings; it is also essentially the only substantial work that has been done on this most important weapons system. See also Joel Wit, "American SLBM: Counterforce Options and Strategic Implications" in *Survival* Vol. 24, No. 4 (July-August, 1982) Pp. 168-170.

15) In the newer Rand monograph, Levine argues that the school of thought espousing systemic anti-communism no longer is of any real influence. However, anti-war systemism received a new lease on life during the Reagan Administration. See Jonathan Schell, *The Fate of the Earth* (New York: Knopf Books: 1982) for an instance of work in this vein.


17) A general overview of detente is available in John Lewis Gaddis, "The Rise, Fall, and Future of Detente" in *Foreign Affairs* Vol. 62, No. 2 (Winter 1983/84). The watershed year for the new period of hostility was 1979 when the Shah fell, the Somoza regime collapsed, SALT II was tabled, NATO embarked on its two-track decision, the Soviets placed a brigade in Cuba, and the Red Army invaded Afghanistan.

18) Of course, there are many dimensions and indices one can use to arrive at a net assessment of the strategic nuclear balance, any one of which is, in some measure, arbitrary. In this regard, see "Measuring the Strategic Balance" in *The Military Balance: 1976-1977* (London: International Institute of Strategic Studies: 1977), Pp. 106-108. The relative number of strategic launchers is, perhaps, the most frequently used standard of comparison in public discussions of the issue, and so it is used in Table Two.

19) See in this regard, Richard K. Betts, "A Nuclear Golden Age? The Balance Before Parity" in *International Security* Vol. 11, No. 3. This material also appears in his book *Nuclear Blackmail and the Nuclear Balance*. John Steinbruner makes the following comments about the whether or not the character of American nuclear superiority would have readily lent itself to a disarming strike during the Cuban missile crisis of 1962: "United States strategic forces, despite their numerical superiority, were still under development, and their actual capabilities inherently constrained any serious temptation for pre-emptive war against the Soviet Union. The early missile systems had a number of technical imperfections and the more developed bomber force was still constrained by the imperfectly developed organization of strategic attack capability. A decisive, disarming strike against all Soviet strategic forces could not be undertaken with the confidence a rational decision-maker would require." See John D. Steinbruner, "An Assessment of Nuclear Crises" in Franklyn Griffiths and John C. Polanyi (eds.), *The Dangers of Nuclear War* (Toronto: University of Toronto Press: 1979), pg. 37.


22) See Carl Builder, *The Army in the Strategic Planning Process: Who Shall Bell the Cat?* R-3513. (Santa Monica, CA: Rand Corporation; November 1986), Pp. 68-69. This is a most valuable monograph, which portrays the three services as engaged in bureaucratic strategies, clothed as national strategy, in order to secure particular types of appropriations.


24) Freedman’s remarks are part of his review of Gray’s *Nuclear Strategy and National Style*; the review appeared in *International Affairs* Vol. 63, No. 4 Pp. 637-638.


**NOTES FOR CHAPTER TWO**

27) This can be a confusing matter: clearly, the conservative image of the international system --anarchical in character, and with a greater orientation toward security rather than welfare issues-- bears the hallmarks of realist analyses. Those realist writers that have addressed the topic of nuclear weapons in greater detail, such as Ken Waltz (*The Spread of Nuclear Weapons: More May Be Better*, which appears as Adelphi Paper No. 154) seem to have a deterrence-purist approach to the problem; the issue of warfighting is either rejected or ignored. I suspect a deeper problem exists, and that is that the nature of international relations theory does lend itself to a thorough discussion of the more intricate questions that animate the strategic debate; concepts like counterforce, sufficiency, and even escalation have remained largely beyond the purview of international relations theory.

28) See Colin S. Gray, “Foreign Policy --There Is No Choice” in *Foreign Policy* No. 24 (Fall 1976), Pp. 120-123. This striking, even bitter article, is Gray’s reply to an article in an earlier issue by Thomas L. Hughes calling for a American foreign policy that reflects ‘liberal-populist’ values. Gray correctly feels that Hughes’ position is premised by the notion that given the high moral quality of American domestic politics (a “Lockeian” nation), the US must also be a uniquely principled actor in international politics. Gray clearly feels that even if the US could be rightly characterized as a ‘Lockeian’ nation (something
which he feels is highly questionable in the first place), the nasty realities of international politics preclude any separate, more palatable, code of behaviour for any state with the power and responsibilities of the United States.


31) The question of a growing doctrinal convergence between American conservatives and their erstwhile Soviet adversaries is an interesting matter which will be taken up later. See Pp. 51-52.


33) See Paul H. Nitze, "Assuring Strategic Stability in an Era of Detente" in Foreign Affairs Vol. 54, No. 2 (January 1976), Pg. 207 See also his "Deterring Our Deterrent" in Foreign Policy No. 25 (Winter 1976-77). These are two very important articles, articulating some central conservative concerns through this period --and written by a vastly experienced spokesman widely recognized for his ability.

34) Alan Tonelson, "Nitze's World" in Foreign Policy No. 35 (Summer 1979) Pg. 80. Tonelson wrote this critical assessment of Nitze's views on the eve of the SALT II ratification debates.

35) See Tonelson, Pg. 81.


37) Tonelson cites an unpublished paper in which Nitze says of the Berlin crises: "our theater position was clearly unfavourable: we relied entirely on our position of strategic nuclear inferiority to face down Kruschev's ultimatum. In Cuba, the Soviet Union faced a position of both theater inferiority and strategic inferiority; they withdrew the missiles they were deploying." The paper, Consequences of an Agreement, is dated November 1, 1977 and is cited on Page 81 of Tonelson's article.
38) See Keith Payne, *Nuclear Deterrence in US-Soviet Relations* (Boulder, Co.: Westview Press: 1982), Pp. 70-71. This particular volume, written by the then-director of national security studies at the National Institute for Public Policy, is a comprehensive expression of conservative dissatisfaction with the mutual deterrence and strategic parity.


40) Especially critical in this regard is Edward Luttwak who writes, "In the absence of strategy, it is substrategical impulses that govern what we do. Thus the weapons we design, develop, and eventually build reflect the technical ambitions of the engineers as well as the ideal forms of our bureaucrats in uniform...Without the discipline of strategy and its tactical needs, the luxuriant technicity yielded machines of legendary technical attainments and of unattainable cost...Technicity is a wonderful servant and a disastrous master." See Edward Luttwak, "On the Meaning of Strategy...For the United States in the 1980s" in his volume, *On the Meaning of Victory: Essays on Strategy* (New York: Simon and Schuster: 1986), Pg. 247. This matter, as a feature of conservative assessments of American strategic culture, will be reviewed later.


42) A qualification here might apply to conservative concerns for secure access to strategic resources.

43) In this regard see Levine, *The Arms Debate*, Pg. 30. The harsh ideological tone of conservative analysis will be more thoroughly assessed in the section of this chapter that examines conservative images of the Soviet Union.


47) The Carter Administration may have had more 'universalist' tendencies in terms of pressuring its client regimes about their respective human rights policies, but in its delineation of the American security perimeter, it remained fairly cautious, and the Carter Doctrine, which declared the Persian Gulf to be a vital interest, was seen as a notable signal to Moscow on the part of the Administration.


49) See Christopher Layne, "The Real Conservative Agenda" in Foreign Policy No. 61 (Winter 1985-86), Pp. 73, 76-77. Layne postulates a split between 'real conservatives' and 'neoconservatives' with the latter supporting the style of perimeter containment described here.

50) Nitze, "Assuring Strategic Stability in an Era of Detente", Pg. 211.


52) See Colin S. Gray, Nuclear Weapons and National Style, Pp. 72-76, 82-83. This chapter in Gray's volume, on Soviet style in strategy, is an excellent synthesis of the conservative view.


54) Gray, Nuclear Weapons and National Style, Pgs. 74, 78; and Keith Payne, Nuclear Deterrence in US-Soviet Relations, Pg. 143.


56) Gray, Nuclear Strategy and National Style, Pg. 88.


Payne, "Deterrence, Arms Control, and U.S. Strategic Doctrine" in *Orbis* Vol. 25, No. 3 (Fall 1981), Pg. 753. See also, Robert Carlin, *A 400-Megaton Misunderstanding* (Washington, DC: GPO: 1973)


77) See Ch. 6 of Gray, *Nuclear Strategy and National Style* Pp. 149-150. This extremely interesting essay originally appeared as "Strategic Stability Reconsidered" in *Daedalus* Vol. 109, No. 4 (Fall 1980)


89) See Gray, "Moscow is Cheating" in *Foreign Policy* No. 56 (Fall 1984)


92) For an excellent article on the limits of formal arms control negotiations from an author, cited by conservatives, who is not necessarily opposed to the SALT/START framework per se, see Richard Burt, "The Relevance of Arms Control in the 1980s" in *Daedalus* Vol. 110, No. 1 (Winter 1981).


96) See Carl Builder, *Why Not First-Strike Counterforce Capabilities?* P-6132. (Santa Monica: Rand Corporation: 1979), Pg. 5


99) In this regard, see Carl Builder, *Why Not First-Strike Counterforce*

100) Gray reviews these different conservative positions in The MX ICBM and National Security Pp. v, and 26; see also Jastrow, "Why Strategic Superiority Matters", Pp. 31-32.

101) Conservative criticism of the Reagan Administration can be quite sharp in this regard. For a cogent --if glibly-stated-- view, see Colin Gray, "Dangerous To Your Health: The Debate Over Nuclear Strategy and War" in Orbis Vol. 26, No. 2 (Summer 1982). Gray is clearly more on the side of the Administration than its liberal critics, but his early remarks about the Strategic Modernization Program having very little strategic rationale are interesting. For more obviously sober conservative criticisms of the MX deployment, see Stephen J. Cimbala, "The Reagan Strategic Offensive Modernization Program" in Stephen J. Cimbala (ed.), The Reagan Defense Program: An Interim Assessment (Wilmington, DC: Scholarly Resources: 1986), Pp. 194. For the lukewarm reception given to the Midgetman SICBM, see Barry Schneider, Keith Payne and Colin Gray (eds.), Missiles For The Nineties: ICBMs and Strategic Policy (Boulder, CO: Westview Press: 1984). Of the options open for ICBM modernization (including MX-MPS, the superhardening of Minuteman silos, and the SICBM), the Midgetman was reviewed least favourably, primarily because of its limited fractionation potential, and its vulnerability to barrage attacks.

102) See Joel Wit, "American SLBM: Counterforce Options and Strategic Implications" Pp. 163-170; and Elmo Zumalt, "The Reagan Strategic Program and Foreign Policy" Pg. 508.

103) Compared to the Polaris/Poseidon hulls (which take just over 15 minutes to fire their 16 missiles), this is a truly extraordinary capability. See D. Douglas Dagleish and Larry Schweikart, Trident (Carbondale, Ill.: Southern Illinois University:1984), Pp. 28-29.

(MARVs) --in this case the Trident SLBM Mk-500 'Evader' program, see D. Douglas Dagleish and Larry Schweikart, *Trident* (Carbondale, Ill.: Southern Illinois University: 1984), Ch. 3, See Joel Wit, "American SLBM: Counterforce Options and Strategic Implications" Pp. 163-166, and Elmo Zumalt, "The Reagan Strategic Program and Foreign Policy" Pg. 508. Stephen J. Cimbala suggests that the Reagan Administration would not have pushed so hard on the MX if the INF forces would have assuredly led to theatre dominance; see "The Reagan Strategic Offensive Modernization Program", Pp. 192-194.


110) The key problem here is that to use SSN torpedo tubes as a launch platform for the Tomahawk SLCM is to dedicate those tubes to the SLCM role only. If a fleet of 100 American SSNs are to counter Soviet SSBNs, SSGNs and SSNs completely and efficiently, as stipulated in the Maritime Strategy, then torpedo tubes dedicated to ASW will be at a premium indeed.


119) See Keith Payne, *Strategic Defense: Star Wars in Perspective* (Boston, MA: Hamilton Press: 1986), Pp. 33-34. One gets the impression, however that Payne is less than entirely impressed with the Carter Administration's commitment to reducing the vulnerability of American populations.


122) See Gray in *Nuclear Strategy and National Style* Pp. 286-296, where he selects a preferred American nuclear posture that would combine BMD and counterforce prowess in the pursuit of more 'traditional damage-limitation goals.'


**NOTES FOR CHAPTER THREE.**


128) For a fascinating analysis structured around this theme, see Seweryn Bialer and Joan Afferica, "The Genesis of Gorbachev's World" in *Foreign Affairs* Vol. 64, No. 3 (America and the World 1985).

129) See Paul Kennedy, "The (Relative) Decline of America", Pg. 36.


132) For an interesting discussion in this regard, see Seweryn Bialer, "Gorbachev and the Dilemmas of Foreign Policy", Pp. 335-336.


135) See George F. Kennan, "Containment Then and Now" in *Foreign Affairs* Vol. 65, No. 4 (Spring 1987) for a sense that by fusing ideological and power considerations, containment has gotten off track.

136) See David Calleo, "NATO's Middle Course" in *Foreign Policy* No. 69 (Winter 1987-88), Pg. 144.


142) See Benjamin Lambeth, "Has Soviet Nuclear Strategy Changed?", Pg. 5.

143) Ibid., Pp. 7-8. See also Pp. 5-14 for an excellent, measured discussion of the Tula line.


145) One might be reminded of James R. Schlesinger's remarks to the Senate Foreign Relations Committee during the 1974 'controversy' over Limited Nuclear Options, where he said, "doctrines control the minds of men only in periods of non-emergency. In the moment of truth, when the possibility of major devastation occurs, one is likely to discover sudden changes in doctrine." Quoted in Colin S. Gray, "Targeting Problems for Central War" in Desmond Ball and Jeffrey Richelson (eds.), *Strategic Nuclear Targeting* (Ithaca, NY: Cornell University Press: 1986), Pg. 179.


153) For a sense that MAD is indeed robust see Spurgeon Keeny and Wolfgang Panofsky "MAD Versus NUTS" in *Foreign Affairs* Vol. 60, No. 2 (Winter 1981-82); and Stephen J. Cimbala, "Forever MAD: Essences and Attributes" in *Armed Forces and Society* Vol. 12 No. 1 (Fall 1985).


164) See Carl Builder, *Why Not First-Strike Counterforce Capabilities?* Pp. 3-6, for a menu of potential counterforce postures.

165) James Tritten argues that the Soviet ICBM force could well be the Soviet strategic reserve since no American counterforce threat currently exists against it. See 'Scenarios of Escalation Dominance and Vulnerability' (presented at the Conference on Maritime Security and Arms Control in the Pacific Region, University of British Columbia, May 19-21 1988); Pp. 5-6.

167) This phrase has been used consistently throughout the official presentation of the Maritime Strategy. See Watkins, "The Maritime Strategy" esp. Pp. 10-16. For opposing views, see Builder citation in fn. 197.


172) The force loading of the D-5 warhead lingered between eight and fourteen for some time before the Reagan administration opted for the former number of 475 kt RVs in late-1987, placing the silo-killing capabilities of the D-5 deployment beyond all doubt. See Richard Halloran, "Submarines Now Dominate Nuclear Forces" in the *New York Times,* November 27, 1987, Pg. 32.


176) On the notion of CEP figures being manicured for political purposes, see Bernard T. Feld and Kosta Tsipis "Land-Based ICBMs" in *Scientific American* Vol. 241, No. 5 (November 1979), Pp. 54-55.

177) See Bunn and Tsipis, "The Uncertainties of Preemptive Attack", Pg. 112.

179) Richard Ned Lebow, *Nuclear Crisis Management: A Dangerous Illusion* (Ithaca, NY: Cornell University Press: 1987), Pp. 48-49. This volume can only be appraised as extremely valuable: it is a concise, well-argued summary of the more solid arguments against the conservative ideal of nuclear crisis management.


189) See Lebow, *Nuclear Crisis Management: A Dangerous Illusion* pp. 36-37; and Jonathan B. Tucker, "C³I: Vulnerabilities and Remedies" in *Orbis* Vol. 26 No. 4 (Winter 1983), p. 943. This latter article, one of the earlier ones on command and control vulnerability, is a good primer for the issue.


193) See Babbage, p. 15.


196) Ibid, p. 30-31. The same situation is threatening to obtain with the Burke-class destroyer.


likley "conservative." Hans Bethe, Richard Garwin, Kurt Gottfried, and Henry Kendall (for the Union of Concerned Scientists) suggest that the SDI's electric power bill could run as high as $100 billion. See Hans Bethe et. al. "Space-Based Missile Defense" in Arms Control and the Arms Race (New York: W.H. Freeman: 1985), Pg. 134; the article originally appeared in the October 1984 copy of Scientific American.


202) See McGeorge Bundy, George Kennan, Robert McNamara, and Gerard Smith, "The President's Choice: Star Wars or Arms Control" in Foreign Affairs Vol. 63, No. 2 (Winter 1984-85), Pg. 266. Betts makes the argument that point BMD is inappropriate for Assured Survival in "Heavenly Gains or Earthly Losses?", Pg. 237; see also Lebow, "Assured Strategic Stupidity", Pg. 68.

203) See Betts, "Heavenly Gains or Earthly Losses?", Pg. 239; Lebow, "Assured Strategic Stupidity", Pp. 65-66.

204) Lebow, "Assured Strategic Stupidity", Pg. 73.

205) Ibid., 69; and Bethe et. al., Pg. 138.


207) Lebow, "Assured Strategic Stupidity", Pg. 60.

208) Bethe et. al., Pg. 133

209) Ibid., Pp. 133-134.


211) Lebow, "Assured Strategic Stupidity", Pg. 66; Bethe et. al., Pg 133.

212) A useful article on Soviet programs in this area is Joel Wit "Soviet Cruise Missiles" in Survival Vol. 25, No. 6 (November-December 1983).

213) Lebow, "Assured Strategic Stupidity", Pg. 68; certainly, as Lambeth and Lewis argue, the Soviets perceive SDI's objective as restoring some measure of American nuclear advantage, regardless of what they think of its prospects.


215) See the Office of Technology Assessment, Strategic Defenses: Ballistic
Missile Defense Technologies, Anti-Satellite Weapons, Countermeasures, and Arms Control, Pg. 33.


217) See Betts, "Heavenly Gains or Earthly Losses?" Pg. 244; emphasis in the original.

218) Ibid., Pg. 239.

219) For an interesting discussion of the Air Force's strategy of gradual B-52 upgrading, see Kevin N. Lewis, The Bomber Force Sizing Controversy: P-7152. (Santa Monica: Rand Corporation: September 1985); Betts suggests that SDI could become the American equivalent of PVO Strany in "Heavenly Gains or Earthly Lossess?", Pg. 242.


223) For a review of the role to be played by expanding British and French nuclear forces, see Joel Wit, John Prados, and Michael Zaguerek, "The Nuclear Forces of Britain and France" in Scientific American Vol. 255, No. 2 (August 1986), and Richard Betts, "Compound Deterrence Vs. No-First-Use: What's Wrong is What's Right" in Orbis Vol. 28 No. 4 (Winter 1985) For the negative effect limited BMD could have on flexible response, see Kevin N. Lewis, ICBM Modernization, Limited BMD, and Small Strategic Attacks: Out of the Frying Pan? P-6902. (Santa Monica, CA: Rand Corporation: March 1983); that ICBMs would remain the weapon of choice in such attacks, see Benjamin Lambeth, Selective Nuclear Options in American and Soviet Policy, Pp. 31-32.

224) See Betts, "Heavenly Gains or Earthly Losses?", Pg. 243.


231) For this view of SDI from the perspective of properly managing technology, see Glenn Kent, An Agenda for the Strategic Defense Initiative. P-7404. (Santa Monica, CA: Rand Corporation: January 1988)

232) See Kent, Exploiting Technology, Pg. 8.

233) On the Joint Strategic Planning Document, which Lewis reports, is colloquially referred to as the "Pearl Harbour file" (that which the JCS will fall back upon to excuse themselves if the United States despite a defense program to the contrary, suffers another Pearl Harbour), see Kevin Lewis, What if the Reagan Buildup is Over? Pg. 10; and William Kaufmann, The 1985 Defense Budget, Pp. 2-4. See also Lewis, Technology and the Military Reform Debate, Pp. 8-15.


238) British historian Sir Michael Howard has developed this most useful concept of 'reassurance' in strategic policy. See his "Reassurance and Deterrence" in Foreign Affairs Vol. 61, No. 2 (Winter 1982-83); see also Harold Brown, "Domestic Consensus and Nuclear Deterrence" in

239) See Thomas L. Hughes, "Liberals, Populists and Foreign Policy" in *Foreign Policy* No. 20 (Fall 1975), and his rejoinder (to Colin Gray's article cited in fn. 35), "Unreal-Politik" in *Foreign Policy* No. 24 (Fall 1976).


241) See Robert Gilpin, "American Foreign Policy in the Post-Reagan Era" in *Daedalus* Vol 166, No. 3 (Autumn 1987), Pp. 43-44. This article is an excellent, concise overview of the 'twin deficits' problem.

242) This point is argued by Richard Stubbing, "The Defense Program: Buildup or Binge" in *Foreign Affairs* Vol. 63, No. 4 (Spring 1985), Pp. 857-859. It might be worth noting the the lack of strategic nuclear forces 'quick fixes' was also lamented by the Committee on the Present Danger, "Is the Reagan Defense Program Adequate?" (March 17, 1982) in Charles Tyroler II (ed.), *Alerting America*.

243) Colin Gray, "National Style in Strategy: The American Example" in *International Security*, Vol. 6, No.2 (Fall, 1981) Pgs. 39, 43. One does not have to agree with Gray's policy prescriptions to appreciate the quality of the work that he has done on strategic culture. This essay, a chapter in his much larger work *Nuclear Strategy and National Style* (Lanham, MD: Hamilton Press [Cambridge, MA: Abt Books]: 1986) is a fine example.

244) A table which conveniently summarizes American national security expenditures can be found in John Lewis Gaddis, Strategies of Containment (New York: Oxford University Press:1982), Pg. 359. It shows that from 1955 to 1980, American expenditure as a fraction of GNP shows a declining trend, but stays within a range of 9.6 percent (1956) and 5.0 percent (1978).

245) See Kevin Lewis, US Strategic Force Planning: Restoring the Links Between Strategy and Capabilities. Rand Paper P-6742 (January 1982). (Santa Monica, Calif.: Rand Corporation: 1982), Pg. 10. This is an excellent paper on force structure design: readable, concise, and with a number of sound recommendations for long-range force planning.

246) See Alain C. Enthoven and K. Wayne Smith, *How Much Is Enough: Shaping the Defense Program, 1961-1969.* (New York: Harper and Row: 1971), Pp. 172-178. Enthoven and Smith, both officials in the McNamara Pentagon, note that the question of sufficiency in strategic forces 'cannot be answered precisely. Nor can it be answered solely by analysis; a judgement must be made...this judgement [that the ability to destroy, in retaliation, 25 percent of the Soviet population and 50 percent of its industrial base] was influenced by the fact of strongly diminishing marginal returns at levels beyond these." (Pg. 175).


250) See Steven Miller, "Politics Over Promise: The Domestic Impediments to Arms Control" in International Security Vol. 8, No. 4 (Spring 1984), Pp. 84-86.


253) See Miller, "Politics Over Promise", Pp. 80-84.


257) Robert Tucker argues that it was actually the Reagan Administration's harshly anti-Soviet line that worried Americans in the dark days of 1981-83. See Robert Tucker, The Nuclear Debate (New York: The Lehrman Institute: 1985), Pp. 5-6, 72-77.

258) See Kevin Lewis, American Defense Planning: The Significance of Strategic Nuclear Disconnect. P-7195.


262) Samuel P. Huntington, "Coping With the Lippman Gap" in Foreign Affairs Vol. 66/ No. 3, American and the World 1987/88, Pp. 453, 455-

264) For developments in French nuclear doctrine, see R.S. Rudney, "Mitterand's New Atlanticism" in Orbis Vol. 25, No. 3 (September 1984); as well as Joel Wit, John Prados, and Michael Zaguerek, "The Nuclear Forces of Britain and France" in Scientific American Vol. 255, No. 2 (August 1986); Richard Betts, "Compound Deterrence Vs. No-First-Use: What's Wrong is What's Right" in Orbis Vol. 28 No. 4 (Winter 1985), and David Calleo, "NATO's Middle Course" Pp. 145-146.

265) See Betts, Nuclear Blackmail and and Nuclear Balance Pp. 228-232; Calleo, "NATO's Middle Course" Pp. 142-144.

266) Betts, "Heavenly Gains or Earthly Losses?", Pg. 246.


268) Huntington, "Coping With the Lippman Gap", Pg. 469.

269) Calleo, "NATO's Middle Course", Pg. 140.


271) See, for example, George Questor "Assured and Responsible Retaliation" in George Questor, The Future of Nuclear Deterrence (Toronto: Lexington Books: 1986); Leon Wieseltier, "When Deterrence Fails" in Foreign Affairs Vol. 63, No. 4 (Spring 1985); and Kevin N. Lewis, American Defense Planning: The Significance of Strategic Nuclear Disconnect, Pgs. 18, 23.


275) As argued earlier, the purported threat of the MX (or any other counterforce-capable system, is predicated on the assumption that the United States is willing to take operational risks of the kind unprecedented in warfare) For arguments against the additional procurement of either MX or Midgetman, see Joshua Epstein, The 1986 Defense Budget Pp. 27-32.

276) See Richard Halloran, "Submarines Now Dominate Nuclear Forces" in


281) The potential threat posed by Soviet SLCMs has been the recent concern of a number of different writers. See See R. James Woolsey, Brent Scowcroft, and John Deutsch, "A Way Out of Reykjavik" in *The New York Times Magazine* January 25, 1987, Pg. 55.


283) Examples might include the critique of 'No-First-Use' contained in Betts, "Compound Deterrence Vs. No-First-Use"; see also *Nuclear Blackmail and Nuclear Balance* Pp. 228-232. Kevin Lewis critiques Nuclear Freeze proposals in *Could a Nuclear Freeze Be Negotiated?* P-6817. (Santa Monica, CA: Rand Corporation: October 1982. For a sense that arms control must play a more subordinate role than that envisaged by some liberal arms controllers, see Thomas Schelling, "What Went Wrong With Arms Control?" in *Foreign Affairs*, Vol. 64, No. 2 (Winter 1985/86); and Steven E. Miller, "Politics Over Promise: The Domestic Impediments to Arms Control" in *International Security* Vol. 8, No. 4 (Spring 1984).


BIBLIOGRAPHY

Government Documents


Books

Graham Allison et. al., Hawks, Doves, and Owls: An Agenda For Avoiding Nuclear War (New York: W.W. Norton: 1985)


Bruce Blair, Strategic Command and Control: Redefining the Nuclear Threat (Washington, DC: Brookings Institution: 1985)


Albert Carnesdale et. al., Living With Nuclear Weapons (Toronto: Bantam Books: 1983)


Michael Mandelbaum, *The Nuclear Revolution: International Politics Before and


The Military Balance (London: International Institute of Strategic Studies) Various years.


-----------------, Strategic Defenses: Star Wars in Perspective (Boston, MA: Hamilton Press: 1986)


Bruce Russett and Fred Chernoff, Arms Control and the Arms Race (New York: WH Freeman: 1985)

Bruce Russett and Bruce Blair, Progress in Arms Control? (New York: WH Freeman: 1979)


Charles Tyrolier II (Ed.), Alerting America: The Papers of the Committee on the Present Danger (Toronto: Pergamon-Brassey's: 1984)


Chapters in Books


Little, Brown: 1982)


**Journal Articles**


Richard Betts, "Compound Deterrence Vs. No-First-Use: What's Wrong is What's Right" in *Orbis* Vol. 28 No. 4 (Winter 1985)


Seweryn Bialer and Joan Afferica, "The Genesis of Gorbachev's World" in *Foreign Affairs* Vol. 64, No. 3 (America and the World 1985)


McGeorge Bundy, George Kennan, Robert McNamara, and Gerard Smith, "The President's Choice: Star Wars or Arms Control" in *Foreign Affairs* Vol. 63, No. 2 (Winter 1984-85)


David Calleo, "NATO's Middle Course" in *Foreign Policy* No. 69 (Winter 1987-88)


Stephen J. Cimbala, "Forever MAD: Essences and Attributes" in *Armed Forces and Society* Vol. 12 No. 1 (Fall 1985)

Lynn Etheridge Davis and Warner F. Schilling "All You Ever Wanted To Know About ICBM Calculations But Were Not Cleared To Ask" in *The Journal of Conflict Resolution* Vol. 17, No. 2 (June 1973)


Bernard T. Feld and Kosta Tsipis "Land-Based ICBMs" in *Scientific American* Vol. 241, No. 5 (November 1979)


Richard Garwin, Kurt Gottfried, and Peter Clausen, "Anti-Satellite Weapons" in *Scientific American* Vol. 210 No. 6 (June 1984)

Robert Gilpin, "American Foreign Policy in the Post-Reagan Era" in *Daedalus* Vol 166, No. 3 (Autumn 1987)

Colin Gray, "Foreign Policy --There Is No Choice" in *Foreign Policy* No. 24 (Fall 1976)


-------------, "Dangerous to Your Health: The Current Debate on Strategy and War" in *Orbis* Vol. 26, No. 2 (Summer 1982)

-------------, "Moscow is Cheating" in *Foreign Policy* No. 56 (Fall 1984)


-------------, "Reassurance and Deterrence" in *Foreign Affairs* Vol. 61, No. 2 (Winter 1982-83)

Thomas L. Hughes, "Liberals, Populists and Foreign Policy" in *Foreign Policy* No.
20 (Fall 1975)

---------------, "Unreal-Politik" in Foreign Policy No. 24 (Fall 1976)

Samuel P. Huntington, "Coping With the Lippman Gap" in Foreign Affairs Vol. 66/ No. 3, (American and the World 1987/88)

Robert Jastrow, "Why Strategic Superiority Matters" in Commentary Vol. 75, No. 3 (March 1983)

Spurgeon Keeny and Wolfgang Panofsky "MAD Versus NUTS" in Foreign Affairs Vol. 60, No. 2 ( Winter 1981-82)

George F. Kennan, "Containment Then and Now" in Foreign Affairs Vol. 65, No. 4 (Spring 1987)

Paul Kennedy, "What Gorbachev Is Up Against" in Atlantic Monthly Vol. 259, No. 6 (June 1987)


Christopher Layne, "The Real Conservative Agenda" in Foreign Policy No. 61 (Winter 1985-86)


Robert S. McNamara, "The Military Role of Nuclear Weapons" in Foreign Affairs Vol. 62, No. 1 (Fall 1983)


Steven Miller, "Politics Over Promise: The Domestic Impediments to Arms Control" in International Security Vol. 8, No. 4 (Spring 1984)

Paul H. Nitze, "Assuring Strategic Stability in an Era of Detente" in Foreign Affairs Vol. 54, No. 2 (January 1976)

---------------, "Deterring Our Deterrent" in Foreign Policy No. 25 (Winter 1976-77)


---------------, "Deterrence, Arms Control, and U.S. Strategic Doctrine" in Orbis Vol. 25, No. 3 (Fall 1981)

Keith Payne and Colin Gray, "Nuclear Policy and the Defensive Transition" in Foreign Affairs Vol. 62, No.4 (Spring 1984)

Richard Pipes, "Why The Soviet Union Believes That It Could Fight and Win a Nuclear War" in Commentary Vol. 64, No. 1 (July 1977)
“Soviet Strategic Doctrine: Another View” in *Strategic Review* Vol. 10, No. 4 (Fall 1981)


Thomas Schelling, "What Went Wrong With Arms Control?" in *Foreign Affairs*, Vol. 64, No. 2 (Winter 1985/86)


---------------------, "National Security and the Concept of Strategic Stability" in *The Journal of Conflict Resolution* Vol. 22, No. 3 (September 1978)

---------------------, "Nuclear Decapitation" in *Foreign Policy*, No. 45 (Winter 1981-82)


Richard Stubbing, "The Defense Program: Buildup or Binge" in *Foreign Affairs* Vol. 63, No. 4 (Spring 1985)

Alan Tonelson, "Nitze's World" in *Foreign Policy* No. 35 (Summer 1979)


Caspar Weinberger, "US Defense Strategy" in *Foreign Affairs* Vol. 64, No. 4 (Spring 1986)

Leon Wieseltier, "When Deterrence Fails" in *Foreign Affairs* Vol. 63, No. 4 (Spring 1985)

Joel Wit, "American SLBM: Counterforce Options and Strategic Implications" in *Survival* Vol. 24, No. 4 (July-August 1982)

"Soviet Cruise Missiles" in *Survival* Vol. 25, No. 6 (November-December 1983)


Adm. Elmo Zumalt (USN-Ret.), "The Reagan Strategic Program and Foreign Policy" in *Orbis* Vol. 25, No. 3 (Fall 1981)

**Occasional Papers and Reports**


*We Have Met the Enemy—And He is Us.* P-7397. (Santa Monica, CA: Rand Corporation: November 1987)


*Exploiting Technology.* P-7403. (Santa Monica, CA: Rand Corporation: January 1988)

*An Agenda for the Strategic Defense Initiative.* P-7404. (Santa Monica, CA: Rand Corporation: January 1988)

Glenn Kent and Randall Devalk, *The Political and Military Potential of Conventionally-Armed Heavy Bombers.* R-3508. (Santa Monica, CA: Rand


---------------, *Has Soviet Nuclear Strategy Changed?* P-7181. (Santa Monica, CA: Rand Corporation: December 1985)


---------------, *Could A Nuclear Freeze Be Negotiated?* P-6817. (Santa Monica, CA: Rand Corporation: October 1982)


---------------, *Managing the Current Transition in Nuclear Affairs*. P-7096. (Santa Monica, CA: Rand Corporation: March 1985)


---------------, *What if the Reagan Defense Buildup is Over?* P-7347. (Santa Monica, CA: Rand Corporation: April 1987)


James Tritten (USN), *Scenarios of Escalation Dominance and Vulnerability*. Presented at the Conference on Maritime Security and Arms Control in the
Pacific Region; University of British Columbia, May 19-21, 1988.


**Magazine and Newspaper Articles**


