Milestones in Strategic Arms Control, 1945-2000
United States Air Force Roles and Outcomes

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Editors
**Milestones in Strategic Arms Control, 1945-2000: United States Air Force Roles and Outcomes**

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**Abstract:**

Nuclear arms control - United States - History; Nuclear arms control - United States; United States. Air Force - History

**Security Classification:**
- Report: Unclassified
- Abstract: Unclassified
- This Page: Unclassified

**Limitation of Abstract:**
SAR

**Number of Pages:**
318
Air University Library Cataloging Data


p. cm.
Includes bibliographical references.
ISBN 1-58566-110-4
327.1747--dc21

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Foreword

Just over six decades ago, the United States was a nation trying to adhere to a largely isolationist outlook, the potential power of the atom was yet to be fully realized and had certainly not been weaponized, and the defense of our nation was entrusted to a secretary of war and a secretary of Navy. The many changes in the years since World War II have been spectacular and fundamental. There is a fascinating interconnectivity among at least three threads that run through that period. The role of nuclear weapons, the rise of an independent Air Force, and the shaping of national and international security through arms-control agreements have all had their most profound development in this time frame.

The relation between the newly created Air Force in 1947 and the growing reliance by this country on nuclear weapons for deterrence and defense is a well-known story. The impetus that these nuclear devices gave to negotiations on arms control is also well-covered ground; although, of course, arms-control encompasses more than nuclear armaments. How about a third connection? Where has the Air Force been in the arms control arena? Is it a story of interest? I submit that it is an important story and the history of the United States Air Force is fundamentally incomplete without recounting how the junior service has shaped various arms treaties and been shaped by them.

Yet, just over a year ago, while serving on the Air Staff, I was struck by how little is known outside of a very small community regarding the powerful Air Force role in recent years in determining the positions our American negotiators put on the table at arms-control forums around the globe. While our nation’s diplomatic corps provides our lead negotiators, there is a significant interagency team at the negotiating site and another back in Washington that feeds ideas and assesses the proposals of all parties. Though the Air Force did not seize a prominent role in the early days of post-war arms control, it made up for it quickly and forcefully as it gained a fuller appreciation of what was at stake. As chief of the Air Staff division charged with devising and coordinating Air Force positions on arms control (as well as later carrying out many of the
required arms-control responsibilities), I was curious how the role of the Air Force in this crucial element of our national security had been recorded. The answer surprised me: it’s a story that has not been told. Yet, every day and in major ways, the Air Force is tightly bound to the world of arms control.

It is a little after ten o’clock in the morning, January 2002, in North Dakota. Minot Air Force Base is the last US military installation in the world to have permanently based at it both nuclear-capable bombers as well as the core nuclear deterrent in the form of intercontinental ballistic missiles. Several hours ago, Moscow notified the American government that it is sending a team of inspectors to look at some US facilities in accordance with the Strategic Arms Reduction Treaty (START). At the moment, we do not yet know which bases the Russians want to inspect on this visit—we will know tomorrow if Minot is on the list. If so, this base will begin a well-orchestrated ritual that takes place several times a year, just as it does at a handful of other installations in the United States and at some American bases overseas. Importantly, under this and other mutual treaties, it is a ritual that also takes place frequently in Russia as American inspectors exercise the same treaty rights. Reflect for a minute, how did the United States Air Force, the keeper of two legs of this nation’s strategic deterrent force, make its inputs into this treaty as it was being written in the 1980s and 1990s? How did the Air Force make its case relative to the other players in the process, like the US Navy whose submarine-based ballistic missiles (the third leg of the nuclear triad) were also subject to negotiation? And now, with the treaty in effect, how does the Air Force plan for and fulfill its obligations?

Move to the Pentagon on the morning of 11 September 2001. We are aware that the terrorist-hijacked aircraft that smashed into the building that day decimated offices and killed dozens of military and civilian workers. Of course, most of the Pentagon remained untouched, but there were additional substantial parts that were heavily damaged. The Headquarters Air Force National Security Policy Division (AF/XONP) was one such office. XONP is the Air Staff office responsible for devising arms-control policy and implementing arms-control treaties for
the Air Force. It is a vibrant office with a long-standing reputation within the arms-control community for solid work, creative ideas, and oversight of strict compliance with Air Force-related arms-control responsibilities at bases around the world. The office does not buy, field, fly, or fix major weapons systems nor does it plan for the employment of airpower in war. Indeed, it is also an office that is not widely known throughout the Air Force. Yet, it has had a tremendous impact over the last several decades on the design of the Air Force, on the weapons that could be bought or kept (and at what numbers and in what locations), and how those weapons could or could not be used. From the designing and negotiating positions in the strategic arms talks in the 1980s and 1990s, to setting numerical limits on aircraft in designing regimes limiting conventional arms in Europe, to discussions on banning “blinding lasers,” the Air Force focal point has been XONP in its various bureaucratic labels over the years. On the day of the terrorist attacks, all members of that office successfully escaped through the smoke and debris, but valuable archives barely escaped damage. Some files were irretrievably lost.

There is a story that still needs to be told about the Air Force contribution to—and shaping by—arms control. This book was in the writing stage before the September attacks, but the events of that day provided yet another impetus to getting the story recorded and published.

Move one last time, now to the Crawford, Texas, presidential ranch in November 2001. The US president engaged in discussions there with his Russian counterpart on the future shape of the two country’s nuclear arsenals and delivery systems. Stepping away from traditional, drawn-out, negotiations and into faster-paced efforts to reduce weapons, the two leaders left Crawford with commitments to explore more aggressive reduction schedules and lower final stockpiles. As this book is being written, those explorations are in progress both in Washington and in Moscow. The impact on the Air Force promises, again, to be substantial. The size, shape, and basing of the nuclear deterrent will be examined. Such weapons systems as the B-52 that have not only a nuclear role but also a conventional role could be affected. Should the countries
agree to deeper reductions, the rate and method of drawing down can only be set when the Air Force, and other agencies, determine the resources needed as well as any limiting factors to the drawdown schedule. Arms reductions are not free and do not happen overnight. The methods and costs associated with corresponding verification-and-compliance regimes have to be calculated. The arms-control experts on the Air Staff—AF/XONP—in concert with their counterparts in the field commands will examine and report to senior Air Force and national leaders the military, fiscal, and personnel costs and benefits derived from these arms-control efforts.

The ability to make these assessments did not blossom overnight. This book captures the story of a young Air Force’s initial (and limited) impact on arms-control negotiations and outcomes. It goes on to document a growing awareness by the service that it was better to help craft the US position than to be only a recipient of the outcome. The book highlights the lesson it belatedly learned in the early days of arms control: the Air Force has to plan and budget for treaty implementation as aggressively as it works to protect its equities during treaty negotiations. When a treaty goes into effect, the Air Force has needed to be ready to execute its responsibilities to ensure complete and timely treaty compliance. This it has done consistently and well over the years.

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Introduction

This book is about arms control, so it is most appropriate to begin with a discussion of arms control as a construct within US national security policy during the Cold War and in its immediate aftermath. The classic description of arms control as a strategic policy construct remains that of Thomas Schelling and Morton Halperin in their seminal 1961 work, *Strategy and Arms Control*.

We believe that arms control is a promising . . . enlargement of the scope of our military strategy. It rests essentially on the recognition that our military relation with potential enemies is not one of pure conflict and opposition, but involves strong elements of mutual interest in the avoidance of a war that neither side wants, in minimizing the costs and risks of the arms competition, and in curtailing the scope and violence of war in the event it occurs.¹

The key elements of this definition of arms control are, first, that it firmly establishes arms control within the overall context of national security strategy. As a strategic instrument, arms control is an integral element of national efforts to enhance security, in this case as both a complement to and a substitute for more confrontational strategy elements. Second, and related, it establishes that security strategy involves both conflict and cooperation, side-by-side and often simultaneous, as overlapping stages of a single continuum. In such a deliberately ambivalent world, primary national security organizations can find themselves caught in the middle of these seemingly incompatible policy threads, and this was often the fate of the United States Air Force (USAF) across the Cold War and through to today.

So an examination of arms control and its implications for the USAF entails establishing the policy context of national security strategy and national military strategy—particularly nuclear strategy—and USAF development to support that strategy. The story of US national security policy across the Cold War and into its immediate aftermath is very much the story of the continuous framework of containment. And the central dimension of containment was the US-Soviet strategic relationship. Thus, implementation of US national security
policy focused on evolving nuclear strategy and, as the Cold War matured, on the accompanying process of arms control. This strategic dimension of policy and practice was also the central force shaping much of the development of the organization charged with employing most of the US nuclear capability and with creating the infrastructure of nuclear force management, the USAF.

While a great deal of ink has been applied to documenting the containment framework as well as its implementing nuclear strategy and arms-control details, and much has also been written on the operational aspects of USAF nuclear employment, the story of USAF involvement in and impact from the arms-control process has not been fully captured. This book represents a step toward documenting significant USAF arms-control inputs and implications. As the nuclear-experienced USAF retires and as the blue-suit arms-control insiders move on to other careers, it is important to capture their story as legacy to the much smaller follow-on generation that constitutes the contemporary strategic USAF. And it is critical to explain both the intended and unintended consequences of national arms-control decisions to current and future decision makers who themselves are novice to strategic systems and to the nuclear dimension of US force posture. This overview section sets the national context within which USAF arms-control practice occurred and then overviews the approach of the sections and authors that detail the four periods of arms control and USAF practice across the period 1945–2000.


It was stated earlier that the story of United States national security policy across the Cold War and even into its immediate aftermath is very much the story of the continuous framework of containment and its central dimension, the US-Soviet/Russian strategic relationship. But it is also very much the story of varied and changed approaches to the implementation of containment. Implementation has swung back and forth between
more cooperative and more confrontational emphases in the US-Soviet/Russian strategic relationship, often with the USAF caught squarely in the middle with one foot on each side of that balance. Beyond and beneath the specific implementing national security strategy of the day, two primary elements of implementation of containment have been nuclear strategy—an expressly confrontational element—and arms control—a generally more cooperative element. The USAF has been the primary institution responsible for implementing United States nuclear strategy, with a “push” effect toward weapons, programs, and capabilities to deepen active deterrence and enhance strategic posture. The USAF has also been, by extension, the primary institution targeted and limited by arms-control strictures, with a “pull” effect to ensure strategic stability and constrain subject systems. Within that context, the following discussion presents a broad overview of the period of the Cold War and its immediate aftermath. For each of the specified periods, the discussion addresses the US national security strategy or strategies selected to implement containment of the Soviet Union/Russian strategic power across that period, the implementing nuclear strategy/strategies and the contemporary developments in arms control of the era, and the net effects on USAF development resulting from the combined pushes and pulls of the time.

1945–68, Military Containment

The period 1945–68, or from the close of World War II to the height of American involvement in Vietnam, became the era of military confrontation and implementation of containment via military means. It was also the high point of US nuclear-centered strategy and the era of growth and dominance of the Strategic Air Command (SAC).

National security strategy and nuclear strategy combined for a significant push effect on the USAF via SAC, and arms control as a nascent policy adjunct still awaited the evolution of confidence and technology that would propel it to the forefront of US-Soviet relations. This was the necessary and important foundational period for the arms-control focus and activity that was to follow.
**National Security Strategy.** The concept of containment at the heart of US national security strategy actually predates the Cold War. The Soviet Union was our "ally of necessity" in World War II, but the United States and other western leadership recognized that the Soviet combination of history and ideology dictated a cautious approach after the war. The United States vision for the post-war world was for an era of peaceful cooperation and recovery with security ensured by the "four policemen": the United States, Great Britain, the Soviet Union, and China. This desired stability would be accomplished by a strategy of "containment by inclusion" or integration, bringing the Soviet Union fully and equally into the "normal" community of nations. This would be accomplished largely through economic assistance and diplomacy. But Soviet intransigence at every turn led the United States to search for an alternative implementation strategy, or one of "containment by isolation."

From its philosophical-political-economic roots in the arguments of George Kennan to its blueprint for military implementation in National Security Council (NSC)-68, containment was built to both limit and channel Soviet behavior toward eventual conformation to Western norms and structures. Of the "four policemen," now joined by mainland Western Europe into five "power centers," only the USSR was seen as antagonistic and obstructionist. China remained weak and relatively peripheral, so the early policy focus was on shoring up the psychological strength while rebuilding Great Britain and Europe. Early efforts sought to include the Soviets, including direct recovery programs such as the Marshall Plan and more symbolic efforts such as granting the USSR great power status in the United Nations (UN). But the balance of President Harry S. Truman’s "patience and firmness" approach was tilted by events across 1948 and 1949 such as the rise to power of the Communist Party of Czechoslovakia, the blockade of Berlin, the Soviet test of an atomic bomb, and the "fall of China" to Mao Tse-tung.

The balance shifted toward firmness and isolation, as evidenced by the Truman Doctrine's promise of all assistance, including military, to states on the Soviet periphery that were threatened by Communist insurgency, and by the formation of
the directly counter-Soviet North Atlantic Treaty Organization (NATO). The United States policy review NSC-68 found that the USSR represented a significant and direct military threat, and it recommended the constitution of an unprecedented United States peacetime military capability to implement military containment of the USSR. This recommendation and its hefty price tag were subject to some heated debate in Washington until the outbreak of hostilities in Korea, which were taken as validation of the NSC-68 argument. At that point the balance had fully shifted to the firmness and isolation end of the spectrum, and all elements of United States strategy followed suit.

**Implementation: Nuclear Strategy.** The United States enjoyed a nuclear unipolarity for the first few years after Hiroshima. During those years, nuclear weapons were primarily viewed as they had been in World War II, as a war-ending ultimate military weapon to be used in widespread conflict. With the militarization of containment, the lack of the force structure needed to confront the USSR conventionally, and the economic imperatives and policies of the Dwight D. Eisenhower Administration, the United States shifted toward a nuclear strategy based on overwhelming nuclear retaliation in response to any significant military confrontation. Eisenhower’s “New Look” policy of massive strategic retaliation was later augmented with smaller, “tactical” nuclear weapons intended for employment on the European battlefield, but it remained almost totally nuclear at the effective heart of United States strategic posture—also the heart of containment implementation.

Finding the choice between nuclear options and no effective military options unacceptable—particularly if the strategic nuclear options could be called into doubt in the aftermath of sputnik—the Kennedy Administration set upon the course, to be carried forward by President Lyndon B. Johnson, of building a wider range of military capabilities. The goal was to ensure the president would have the flexibility to respond in a manner of choice, and not be locked into a single option—particularly from a nuclear-only option set. United States involvement in Vietnam both reflected and delayed the creation of
this full-spectrum option set, but the course was set to continue across the middle and late stages of the Cold War.

**Implementation: Arms Control.** In the immediate aftermath of World War II, the United States was still led by the same individuals who had provided strategic leadership to the endgame of that great conflict—Harry S. Truman, George C. Marshall, and Henry H. “Hap” Arnold to name just a representative three. Their experience prompted them to seek global and cooperative answers to the highest challenges of the day. They launched historic efforts and built enduring institutions—the Marshall Plan, the UN, and NATO for example. Thus, they also agreed to at least seek a solution to the nuclear dilemma through global and cooperative means. In the Baruch Plan they proposed internationalizing nuclear capabilities under the UN, only to see those efforts rejected by the USSR. Their immediate successor generation of American leadership grew up in the operational environment of the war, and they were somewhat less global and cooperative in their approach to strategic issues, and particularly in their approach to the Soviet Union.

This group, from Eisenhower on, moved forward in an atmosphere of caution, seeking certain guarantees and sure verification for any diplomatic agreement. And while such certain verification means were being developed and some regularity in US-Soviet diplomacy built, they sought to bound the nuclear arena, limiting the nuclear players and setting the parameters, laying the foundations for a continuing future nuclear arms-control process as technology and trust might allow. While much of their effort was given impetus by a series of crises (from the U-2 incident to the Bay of Pigs, and from confrontations over Berlin to the Cuban Missile Crisis), they created structures such as the International Atomic Energy Agency and the US Arms Control and Disarmament Agency to provide focus and an implementing structure. And they bounded both the global and bilateral nuclear arena through such early agreements as the Nuclear Nonproliferation Treaty and the Limited Test Ban Treaty. Thus, they built a foundation and focus for a continuing arms-control process even as they built weapons to ensure security in the absence of suc-
cessful diplomacy. And they built reliable national technical means (NTM) of arms testing and deployment verification that would not rely on on-site inspection to enable diplomacy should other conditions allow for agreement to limit arms.

**USAF Development.** The United States Air Force was established as an independent service in the wake of its largely strategic experience in the later days of World War II and based on the legacy of its band of strategic, independent operations advocates dating from early in the interwar period. Even with its tactical involvement in Korea, it was centered on building strategic capability, superiority, and deterrence. This mission centered on the growth and dominance of SAC, which was both an Air Force organization and, as a specified command, a national war-fighting command. SAC quickly became the preeminent USAF core, with its leaders rising to command the USAF, and its pursuit of the Single Integrated Operational Plan (SIOP)—the United States nuclear target list and war plan—by eventually developing and fielding its implementing triad strategic posture of manned bombers, intercontinental ballistic missiles, and submarine-launched ballistic missiles. Secondary USAF focus fell on North American air defense and the theater air component of NATO.

Early technological limitations gave focus to countervalue, or non-precision, and strategic nuclear capabilities augmented by theater counterforce weapons and delivery vehicles. Lessons learned from lacking precision delivery capability in Vietnam spurred ongoing technical development toward the production of precision delivery weapons and platforms for the full range of conventional, theater nuclear, and intercontinental aircraft and missile employment. Other USAF development efforts centered on improved early strategic attack warning and air defense, and on global command and control to support warning and defense, and centrally on global positive control during SIOP execution. The USAF was born and developed as a centrally and overwhelmingly strategic force.

**Military Containment Period Summary.** The early Cold War focus, then, saw a shift from containment of the Soviet Union by offers of integration to containment-by-isolation centered on military implementation. The United States carried
out this strategy by first building and relying on its nuclear arsenal, only later beginning to build a full range of conventional-to-nuclear response capabilities. The United States-Soviet strategic relationship was not mature enough, nor were technical means of verification reliable enough, to allow direct arms-control agreements that would limit or reduce systems.

The focus, instead, was on bounding and defining the field while building verification means and diplomatic trust, as well as rudimentary international and national organizational structures, as a foundation for future efforts. In and from the confrontational push of this environment, the USAF developed as a strategic force, centered on SAC and led by SAC-developed chiefs.

1969–80, Détente

The period 1969–80 saw the drawdown and end of the American presence in Vietnam, the pursuit of détente and heightened cooperation with the USSR, and active progress on strategic arms limitations. It was also an era of significant technological advance in every area of strategic arms. Thus the USAF found itself pushing the development of these advanced systems and almost simultaneously “pulling their punches” through limitations on their deployment or even outright cancellation.

These crosscutting pressures represented the confluence of several factors in security strategy, nuclear strategy, and arms control. They also prompted the USAF to organize and involve itself more actively in the arms-control process.

National Security Strategy. The era of détente began with several decisions in the Richard M. Nixon Administration. First, as formally represented in the Vietnamization program and the Nixon Doctrine, the United States modified its relatively unqualified and military-focused assistance to governments fighting Communist-inspired insurgencies. This served to moderate the confrontational approach to Soviet activities and policies. Second, there was an acceptance of the attainment of a state of nuclear balance resulting in the reality of mutually assured destruction (MAD). The Soviets had been building their strategic forces while the United States was
fighting in Vietnam, and rough nuclear parity was the result—the United States had lost its clear advantage, and a new and more equal relationship had to be forged. The result was a move to détente, or containment through a mix of confrontation and cooperation, with actions in one arena linked to rewards or penalties in the relationship in that as well as other arenas. A final key factor here was China. Once seen as fully entrenched in the Soviet camp, this important power center was now seen as an independent actor, allowing United States policy more wide-ranging flexibility.

Presidents Gerald R. Ford and Jimmy Carter continued the détente focus across the 1970s, with Carter adding particular emphasis to the place of the Middle East in American policy and seeking to reduce confrontational pressures in that vital region. The period was not without confrontation, but after the 1973 Arab-Israeli conflict, the arenas of conflict moved primarily to the periphery of the superpower relationship (Africa, Latin America). However, this era of détente ended in 1979 with the seizure of the American embassy and its staff in Tehran, which demonstrated the relative inability of the United States to influence rebellious regimes even in a vital region, and the movement of the Soviet Red Army into Afghanistan, its first incursion outside of the bounds of the Warsaw Pact. These events—increased Soviet adventurism coinciding with demonstrated American military weakness—prompted a reversal of United States policy, and a return to hard-line confrontation of the Soviet Union.

**Implementation: Nuclear Strategy.** Under détente United States nuclear strategy did not retreat from MAD. Instead it evolved within the MAD construct under a steady stream of technological improvements, the development of advanced systems and concepts, and a shift enabled by these capabilities toward counterforce targeting and a countervailing strategy. Advanced systems such as the B-1 bomber, the MX missile, space systems, precision delivery systems, and the neutron bomb were under development while others such as multiple independently targetable reentry vehicles (MIRV) were refined. Research and development also progressed on advanced con-
ventional capabilities to augment strategic systems in fulfilling the development of a full-spectrum force posture.

The net result of these advances was to provide counterforce capabilities sufficient to allow the United States to evolve its nuclear strategy from its overwhelming emphasis on countervalue targeting for second-strike deterrence to a countervailing strategy designed to present the Soviets with the firm conviction that they could not win in any circumstances should nuclear conflict erupt. The US range of capabilities to strike both military systems and societal infrastructure would ensure Soviet failure in any exchange. This increased flexibility and range of options allowed American presidents a much more complete “quiver of arrows” to enhance deterrence, even if to critics it made nuclear war fighting somewhat more plausible.

Late in this period, crosscutting decisions by the United States unilaterally and with its European allies represented the complexity of the issues and influences within this strategic realm. President Carter cancelled both the neutron bomb and the B-1 bomber programs, self-limiting future technical advances in these two areas. On the other hand, NATO’s dual-track decision on intermediate-range missiles—to both complete development and deploy the systems even while continuing negotiations toward limiting them—advanced Western capabilities at least in the short term in this theater-strategic arena.

**Implementation: Arms Control.** The combination of generally reduced bilateral tensions with the reality of essential nuclear parity, plus the attainment of technological advances such as those cited above, all combined to provide the incentive toward active negotiations to limit future growth and advances in strategic systems. This move into active bilateral arms control was both enabled and limited by the technical capabilities of remote verification—national technical surveillance, primarily from space-based systems. Earlier arms-control efforts had hung up on compliance verification concerns after Soviet refusals to consider intrusive on-site inspections, then the only means by which to confidently assure compliance. NTM development and certification represented an alternative that would allow negotiated limits on deployed launch vehicles with assurance of verifiability. This provided the agenda and the
bounds for the Strategic Arms Limitations Talks (SALT) and the eventual series of agreements.

Thus, this period saw extensive, protracted, bureaucratic, and highly detailed negotiations—with a central focus on verifiability—leading to SALT I and its adjunct Antiballistic Missile (ABM) Treaty, freezing strategic systems in the short term and significantly bounding the development of strategic defenses which were then seen as destabilizing MAD. Ultimately the SALT process led to more significant limitations in SALT II, extending and deepening limits on launch vehicles and incorporating limits on sub-systems such as MIRVed warheads and air-launched cruise missiles. The period also saw continuation of the earlier period’s focus on limiting nuclear testing, with completion of agreements establishing limitations on underground nuclear testing for both weapons and “peaceful” nuclear explosives. Finally, progress was also seen in the continuing efforts to stem proliferation of nuclear weapons and development of biological weapons. This was indeed an active period of both bilateral and multilateral arms control.

**USAF Development.** The USAF during this period found itself squarely in the middle of significant technological advances, political pressures toward détente and reduced superpower tensions, and a maturing arms-control process enabled by the verification capabilities of NTM systems. The technological push to field advanced systems, the continuing imperative of assuring the capability to fulfill the demands of the SIOP as the foundation of détente, and the organizational centrality of the power of SAC—both as a specified command and as the breeding ground of USAF senior leadership—moved the USAF in one direction.

At the same time, arms-control advances and agreements, coupled with selected cancellation of systems development, pulled the USAF in the opposite direction, and the service slowly began to adapt to this environment. USAF reaction to early arms-control experience—SALT I and ABM—in which the service had no formal role or representation, was to designate a small formal organization within the Air Staff to advise the chief of staff, enabling a more assertive say in the development
of United States negotiating positions. This more active role would continue until the end of the Cold War.

The experience of Vietnam also heavily influenced the USAF. The service began a fundamental transformation from its almost singularly strategic focus toward a strategic-operational balance, beginning the development of “effects” delivery doctrine and systems, elevating the Tactical Air Command (TAC) and its operational focus and leaders toward the creation of the balanced force that would fly to impressive results in the 1990s. With the return to more direct confrontation of the USSR at the end of this period, the stage was set to field the force that we know as today’s USAF.

**Déntente Period Summary.** The mid-Cold War period was characterized by the move to reduce the United States’s presence in Vietnam, the attainment of rough strategic parity and MAD, and the move to reduce bilateral tensions and move from confrontation into greater cooperation via détente. It saw the maturation of a protracted and productive arms-control process, both enabled and bounded by NTM verification capabilities, that led to limitations on both strategic offensive and defensive systems.

Soviet aggression in 1979 capped the era of détente and this “first generation” of arms limitations. As a result of these events, the United States returned to a hard-line containment by confrontation, seeking to redefine the relationship, and arms control was returned to square one—addressing confidence building and agenda setting in preparation for an eventual second generation of arms reductions. The USAF found itself pushed to field advanced systems and pulled to limit, even cancel, their production and fielding. This push-pull effect caused the service to begin to organize for and play a more active role in arms control.


Ronald W. Reagan came to his presidency committed to redefining the US-Soviet relationship in terms more favorable to the United States. He sought a new beginning in the superpower relationship, one based on the reaffirmation of American strength and resolve, and then—and only then—the establishment of a new generation of equitable, verifiable
strategic arms reductions that would be certain to enhance, not degrade, United States national security. The USAF, recipients during this period of significant advances in strategic and conventional arms, asserted itself as an important arms-control player, protecting the national assets and interests that were granted to its control, in active partnership within the bureaucratic process.

**National Security Strategy.** The Reagan Administration sought to move away from what it saw as the stagnation of “containment” policy as it had been practiced. Their “beyond containment” construct was founded on what the administration called “credible deterrence” and “peaceful competition.” Implementation here was via a defense buildup beginning with a wide-ranging strategic modernization program to reaffirm to the Soviets that any nuclear conflict could only lead to destruction. Once strategic stalemate could be reasserted through primarily confrontational means, then the policy could pursue a range of more cooperative efforts to advance the overall relationship. This cooperative thread did not necessarily seek to move far toward the “friendship” end of the spectrum, but instead recognized that a state of competition short of confrontation could endure into the long term. The criteria for both credible deterrence and peaceful competition revolved around clear enhancement of United States national security—all policy elements were measured against that single end.

The Reagan era started, then, in confrontation. This status endured across the late stages of the Leonid I. Breshnev leadership in Moscow and also across the short tenures of his immediate two successors, both of whom died shortly after assuming office. Finally, with the generational and philosophical change in Soviet direction that arrived with Mikhail S. Gorbachev, the first stages of less confrontational competition could begin. The United States had regained the confidence of strength, and the USSR had faced the reality of their overextension. This allowed the beginnings of a revised strategic relationship, the establishment of a new round of arms controls—this time toward true reductions, even elimination, of weapons and systems—and eventually the complete redefinition of global politics.
**Implementation: Nuclear Strategy.** As stated, the departure point for the Reagan efforts was in a program of strategic modernization to reassert the nuclear capabilities underpinning America’s deterrence posture. The visible systems enhancements here were the rebirth of the B-1 bomber program, the development of the B-2 stealth bomber, the fielding of the MX missile, and the development of the D-5 enhanced submarine-launched ballistic missile, and the land-based theater missiles that were to make up the NATO theater intermediate-range nuclear force (INF). The development and fielding of these technologically advanced, precision-capable systems provided the United States with a true countervailing capability (some would say even a war-fighting capability) to firmly convince the Soviets of the futility of seeking nuclear advantage through conflict.

On top of this strategic modernization effort and its follow-on conventional modernization corollary, the administration also added the concept of strategic defenses back into the mix. The Reagan Strategic Defense Initiative ([SDI], or popularly “Star Wars”) added this second dimension to the strategic calculus, it complicated and extended the arms-control negotiations process as the Soviets sought to get SDI on the negotiation table, and it provided additional leverage to the United States in every phase of the bilateral relationship.

**Implementation: Arms Control.** The United States-Soviet arms-control process had matured through its first generation of agreements (SALT) into an established, protracted, and bureaucratic process, but it had also reached the verifiable limits that could be provided solely by NTM. The necessary pause to consider next steps in verification coincided with the American return to confrontation and the Reagan strategic modernization. In short, arms control returned to step one. This establishment of its second generation constituted the focus of strategic arms control across this period. The only final agreement was the INF Treaty that, after the beginning of American missile deployments into NATO countries, withdrew and effectively eliminated the entire class of weapons. Other than that final agreement, the focus was on the process of arms control. This process building was less visible than the series of hard products from the previous period, or of the
even larger series of products that would follow. However, it was an important period and it left an important legacy.

Hard agreements awaited the establishment of a new level of confidence and self-security on each side. Thus, the period saw wide-ranging negotiations, starts and stops, talks withdrawals then summits and resumptions, and the completion of a whole series of peripheral agreements that increased contact and confidence (titles like Early Notification of Nuclear Accidents, Nuclear Risk Reduction Centers, Ballistic Missile Launch Notification, Dangerous Military Activities Prevention, and Notification of Strategic Exercises). From all of this eventually came the agreement in principle to accept on-site inspections as a necessary precondition to any START agreement, and a focus on verifiable reductions of systems and capabilities as the center of the START process. This amounts to serious and consequential arms-control activity, all with ultimate impact on the USAF.

**USAF Development.** This period was the highpoint of Cold War USAF development—the ultimate push—and also of capability to influence the arms-control process, and the pulling back of that capability. The USAF and its SAC constituency had always sought capabilities to enhance its central SIOP and deterrence missions.

Added to this focus, after Vietnam the USAF had sought development of technologically advanced conventional systems to ensure a full range of effects, with versatile and precision weapons and platforms rivaling at least the lower-yield end of the nuclear arsenal. The USAF that would fight over Iraq and Kuwait, Bosnia, Kosovo, and Yugoslavia, was brought to operational status during this period. And the USAF that had failed to influence SALT I and ABM, that had organized to have a say in SALT II, had a team in place to act as an important full partner within the bureaucratic process that crafted US arms-control positions for START.

**Endgame Period Summary.** The Reagan presidency was an important period for the USAF. It was the period during which new systems came on board to truly give the service a full spectrum of capability. It was also an important period for arms control, not in terms of completed agreements, but in
terms of implementing a process through which a renewed United States and a subdued Soviet Union—also under new leadership—could go forth into the next period toward real arms reductions. Finally, it shaped the transition to what would become the end of the Cold War and usher in a completely new context of national security.

1989–2000, Late and Post-Cold War Transition

The first George H. W. Bush Administration saw the fall of the Berlin Wall, the end of the Cold War, the immediate disorder represented by the Gulf War, and the ultimate deconstruction of the Soviet Union. This series of unprecedented events, and those across the Clinton Administration that followed, set the stage for both the culmination of the United States-Soviet strategic endgame and the introduction of entirely new dimensions and directions for security strategy, nuclear strategy, and arms control. And all of these changes were reflected in impacts on the structure, capabilities, and influence of the USAF. This period, then, demonstrates the fruition of earlier processes and efforts, and it points toward the next step to be prepared for and faced by the service now finding itself at the pointed end of both the American strategic and conventional spears.

**National Security Strategy.** The precipitous decline and fall of the Soviet bloc, and particularly the widespread reappearance of ethnic unrest and regional conflict that followed, led the United States to shift rapidly from a security strategy focused on East-West relations to one centered on the world’s regions. Bush initiated this shift, and the William J. Clinton Administration formalized it into a strategy of global engagement.

This new focus obviously entailed a reversal in emphasis from strategic systems’ primacy toward primary requirements for conventional capabilities. However, the Soviet strategic arsenal remained in the field, and after consolidation became the Russian arsenal. This presented the United States with the requirement to fully address a superpower-capable nuclear dimension even as it shifted operational focus to a point much lower on the spectrum. Nuclear strategy had to continue a strong role, at least until or unless arms control could find
alternative avenues to ensure strategic security, and the USAF continued to face requirements, pushes and pulls, in both the nuclear and conventional arenas.

**Implementation: Nuclear Strategy.** Nuclear strategy did not end, nor did nuclear deterrence responsibilities, with the end of the Cold War. Nuclear deterrence, along with its added strategic defense dimension, remained a center point of United States-Russia relations, and strategic systems also began to take on important roles in deterring or guaranteeing response to a range of nuclear, chemical, and biological weapons threats emanating from regional powers. Arms-control agreements and unilateral initiatives effectively changed the nature of our posture—with cuts, consolidation, and changes to alert status—but the strategic requirements of national security continued as a central dimension of the USAF role and mission.

**Implementation: Arms Control.** The START process finally delivered during this period with the formalization of the START I and START II agreements. The period also saw negotiations toward a possible START III agreement and discussions about how to end the restrictions posed to national missile defense by the ABM Treaty—discussions with significant possible limiting effects on USAF programs and systems. The bilateral process had become so mature that it hardly saw a blink with not only the end of the Cold War, but also the end of the Soviet Union. President Bush made the symbolic and substantive first step of offering a Presidential Nuclear Initiative (PNI), or unilateral cut or restriction in strategic arms, and in turn both Gorbachev and then Yeltsin reciprocated. United States-Soviet Union Cold War arms control became post-Cold War and then United States-Russia arms control with barely a hiccup.

The scope of arms control did, however, change after the Cold War. First, the United States aided Russia in consolidating its ownership and control of the strategic nuclear weapons and systems that had been deployed across four Soviet republics. Then the two sides jointly implemented programs to withdraw and stockpile or destroy weapons. For the United States, this meant both instituting stockpile safeguards for its own warheads and helping the Russians control and safe-
guard their warheads. Much of both of these programs fell to members of the USAF, as did other aspects of implementing START.

At the same time, the field of strategic arms-control focus widened, with heightened international efforts to control biological and chemical weapons proliferation, and with new dimensions added to nuclear control and counterproliferation efforts with the demonstrations of India’s and Pakistan’s nuclear capabilities. Further, the nonstrategic arms-control arena gained prominence through the completion of a Conventional Forces Europe Treaty and its adjunct agreements such as Open Skies. Here again, the USAF found itself as a player in implementing these agreements, and it continued to find the need to have a voice in their negotiation. But with the end of the symbolic centrality of the Cold War, the United States disbanded the Arms Control and Disarmament Agency (ACDA), shifting its responsibilities (and downgrading them in the process) to a number of bureaus within the State Department. And the USAF, facing budget cuts and changed priorities, began to draw down its structure and capability to influence the widening process of arms control.

**USAF Development.** By this period, the USAF was no longer a centrally or even primarily “strategic” service in the sense that strategic equals nuclear—it retains its focus on airpower as a “strategic” asset in the sense of strategic meaning theater or even global in scope and focused on winning wars rather than battles. The modern USAF focuses on delivering decisive military effects, including strategic effects from conventional platforms and operational effects from strategic platforms. This transformation has been accompanied by the replacement of the SAC-groomed leadership of the service by generals who rose to power through the tactical and operational—albeit usually also NATO and nonstrategic nuclear weapons—path. And perhaps the ultimate change was the replacement of the USAF specified command SAC by the Unified Strategic Command (STRATCOM). USAF strategic systems were reassigned, with bombers joining fighters in the Air Combat Command and missiles joining space launch vehicles and satellites in the Air Force Space Command. Thus, the
path into the USAF arms-control structure was altered, even ended, and that structure began to draw down in numbers and capabilities, shifting much of its focus to implementation of, in some cases severely limiting, arms controls rather than to influencing the arms-control process.

The period ends with the USAF established as, arguably, history’s most capable fighting force. Yet the service’s strategic structure is divided and reduced. As a result, it is less capable of exerting influence on the process that holds both its future and its ability to fulfill what must remain its most essential mission element—nuclear deterrence and defense—in balance.

Table 1 graphically summarizes this entire Cold War context and these themes as a transition to this book’s detailed coverage of strategic arms control and USAF roles and outcomes across the Cold War and into its transitional endgame. Arms control continues today, and will continue tomorrow, to greatly influence USAF structure, posture, and capability. Therefore, the parallel developments of arms control and the USAF remain salient to the current and future generations of USAF leadership. They deserve your study.

**Overview**

Within that broad context of security and nuclear strategy, arms control and USAF development, this book provides the details of the development of strategic arms control and of the USAF roles in and implications from that arms control. The central body of the book examines, in turn, four chronological periods of United States nuclear strategy and strategic arms-control practice, each with specific emphasis on the USAF roles, positions, outcomes, and implications from arms control across that period. The authors were selected to combine academic inquiry and experience-based reflection on each period. For each period, one author is an active duty USAF officer assigned (at this writing) to the faculty of the United States Air Force Academy. Their approach is one of academic analysis of the record, with that analysis tailored to making arms control operational and toward interagency and Pentagon bureaucratic processes and positions within the process. Their pair
### Table 1

**Milestones in USAF Arms Control 1945–2000**

**Overview Summary**

<table>
<thead>
<tr>
<th>Period</th>
<th>Security Strategy</th>
<th>Nuclear Strategy</th>
<th>Arms Control</th>
<th>USAF Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1945–1968</strong></td>
<td><strong>Conceptualization</strong></td>
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<tr>
<td></td>
<td>–Containment by integration (United Nations, Marshall Plan) vs. containment by isolation (Truman Doctrine, NATO)</td>
<td>–War-ending strategy; H-bomb and basic technologies advanced</td>
<td>–No foundation, process, confidence -Unilateral operational world, unilateral “bounding” proposals (Baruch Plan)</td>
<td>–Net effect a confrontation push—SAC¹ formation and development</td>
</tr>
<tr>
<td><strong>–Korea to Vietnam</strong></td>
<td>–Military containment based in NSC-68 analysis and spurred by US perception of Korea and Soviet actions</td>
<td>–New look/massive retaliation reliance on strategic nuclear forces in countervalue role –Flexible response increased the full range of military options for direct and indirect responses to Soviet challenges; added some counterforce focus</td>
<td>–Crises (U-2, Bay of Pigs, Berlin Wall, Cuban missile Crisis) spurred deepening of the negotiation process –Products still toward limiting and bounding field (LTBT, ¹ NPT) –Little confidence, only rudimentary process, only limited transparency and verification capability</td>
<td>–Early warning/air defense system development –TRIAD development –Missiles, MIRVs² –JSTPS and SIOP³ –Precision toward counterforce capability</td>
</tr>
<tr>
<td><strong>1968–1980</strong></td>
<td>–Détente focus toward balance of confrontation and cooperation; broadening role of economic instrument; broadening of containment field</td>
<td>–Technological advances in both strategic and conventional systems –Counterforce additions to strategy toward a full countervailing strategy in face of nuclear parity</td>
<td>–Residual continuing focus on limiting/bounding field (TTBT, ¹ PNET, ⁷ and nonproliferation/B WC)⁸ –Focus within existing field enabled by NTM⁹ capabilities and confidence</td>
<td>–Strong push, particularly with technical advances (B-1), MX, ⁸ precision, space) –Beginnings of strong pull from détente cooperation, arms control agreements, (ABM, ¹⁰ SALT)</td>
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# Table 1—Continued

## Milestones in USAF Arms Control 1945–2000

### Overview Summary

<table>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Bilateral focus on graduated limitations of future capabilities (SALT I and II, ABM)</td>
<td>I/I/I and unilateral decisions (neutron bomb, MX Basing, B-1 initial cancellation)</td>
</tr>
<tr>
<td>1980–1988</td>
<td>“Beyond containment” focus on confrontation in the absence of détente reciprocation; cooperation where warranted by prospects for success and enhanced US national security</td>
<td>Strategic modernization to strong countervailing base (B-1, B-2, D-5, INF) systems</td>
<td>Drawn-out negotiation process combining direct competition and moderation, aimed at reducing and/or eliminating existing systems as well as limiting growth and advances</td>
<td>Expanded strategic and conventional systems, innovations (stealth, precision), foundation for new dimensions (space, information)</td>
</tr>
<tr>
<td>1988–2000</td>
<td>Immediate shift from Soviet Union/Russia focus to regional conflicts and issues</td>
<td>Post-Cold War transition: drawdown in numbers, consolidation in basing, and de-alerting in posture</td>
<td>Fruition of Reagan-era bilateral negotiations in START I and II</td>
<td>Gulf War/Bosnia/Kosovo showcase strategic effects from conventional platforms and operational effects from strategic platforms—all from post-Vietnam push advances</td>
</tr>
</tbody>
</table>
authors are four retired USAF officers each of whom was a participant in arms control while on active duty—often central players in the periods they are discussing—each of whom continues to advise USAF arms-control efforts as a civilian contractor.

The 1945–68 foundation period is addressed in chronological form, with Michael O. Wheeler discussing the cooperation-oriented, containment by integration period of the 1940s and Edward Kaplan addressing the more confrontational period of containment by isolation and military implementation of the 1950s and 1960s. Together they chronicle the earliest foundations of strategic arms control as represented by the Baruch Plan and the bilateral Limited Test Ban Treaty. They also highlight early USAF support to the president followed by a growing dis-
trust of the USSR, all revolving around the centrality of SAC and support of the SIOP in even this early USAF experience.

The remaining periods involve more active arms-control efforts built on the early foundation and involving more direct USAF implications and, eventually, involvement. Each is addressed in tandem by both an active duty and retired officer team. In each case, the active duty officer provides a detailed context of the period’s strategic arms-control efforts, with emphasis on the United States and Soviet objectives and positions, and providing an overview of the internal bureaucratic process and positions within the United States approach to the negotiations. The retired arms-control insider then presents an essay detailing USAF roles, structures, involvement, and outcomes for the period.

For 1969–80, the period of détente and SALT, the emphasis is on the confluence of events that enabled such an active era of arms control, on the details of the SALT I, ABM, and Salt II Treaty processes and provisions, and on the USAF recognition that as an organization they must become an active player within this arms-control process. Initial USAF organizational efforts and the first generation of lessons learned are emphasized. The USAF started late on arms control, but they worked to catch up.

For the Reagan years 1981–88, the focus is first on administration efforts to reestablish the bilateral basis for arms control from a new position of American strength. Eventually, after a series of successions in Soviet leadership, after the US strategic modernization and defense buildup had created the firm impression in the Soviets that nuclear war could not be won, and after a whole series of complementary confidence- and security-building measures enabled the acceptance of on-site inspections for verification, the foundation for a second generation of arms controls was established. Those events plus the story of the now matured and influential USAF arms-control structure and its role are the focus here.

The coverage of the transitional years at the end of and immediately following the Cold War, 1989–2000, highlights the fruition of the protracted negotiations process begun under Reagan. This decade saw the START process reach the agree-
ments stage, and the entire Cold War arms-control process reach many of its ultimate objectives. The period also saw the post-Cold War reductions in total United States military forces, well beyond the reduced strategic systems mandated by START, and with those reductions came a drawdown in the manning and capability of the USAF structure built to influence arms controls.

What does this history tell us? The final chapter traces threads of continuity and draws conclusions from the historical record, summarizing and highlighting the implications from arms control on contemporary and continuing USAF posture and operations. Its three threads and eight lessons learned capture the enduring legacy of this effort to the USAF. Finally, the book concludes with a bibliographic essay designed to provide additional references to guide further inquiry by the reader.

This book, then, chronicles a journey—a progression of strategic arms development, strategy refinement, and arms-control progression across the truly unique and critical period of the Cold War—that parallels and reflects the development of the USAF. This was an important journey, one that has a story to tell for both the past and the future. Arms control has changed in focus and priority, but significant efforts—with significant potential implications for the USAF—continue in the more cooperative areas of national security. Strategic offense and defense controls are considered, accepted or rejected, even agreed to and announced with little or no negotiation. Issues such as military space and military informational operations and defenses are raised as possible new arenas for international control. And tangential agreements such as those on antipersonnel land mines (to which the United States is not a party) seek to include certain USAF conventional munitions. Arms control in its broad sense is far from dead; its lessons and legacy from Cold War practice continue to inform the USAF today.

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Director
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Notes

2. See the bibliographic essay included at the conclusion of this book for an excellent listing and discussion of the relevant literature.
PART I

Foundations for Strategic Arms Control, 1945–68
Chapter 1

The United States Air Force and Arms Control: The Early Years

Michael O. Wheeler

This chapter addresses arms control and the US Air Force prior to 1953. I use air force as a generic term to describe that branch of the US Army that in 1947 became an independent service. For the most part, the historical evolution of the Air Force—first an aeronautical division of the War Department’s Signal Corps in 1907, then the aviation section in 1914, then (briefly) a division of military aeronautics in 1918, then the Army Air Service in 1918, then the Army Air Corps in 1926, and Army Air Forces in 1941—is of significant interest to students of modern airpower who want to understand military organization and bureaucratic politics. It is less relevant to the arms-control story.

As for arms control, I begin the discussion with the Hague Conference of 1899. By that time, the use of nondirigible balloons for military purposes was over a century old and the world was on the verge of a new age in military aviation. Count Ferdinand A. Zeppelin conducted his first flight of a powered dirigible in 1900, followed three years later by the first flight of a manned, heavier-than-air aircraft at Kitty Hawk, North Carolina, by the Wright brothers. The 1899 Hague Conference represented the first attempt to bring airpower under arms control, and thus is an appropriate place to begin this story.

Arms Control and Airpower before World War II

In August 1898, the Russian foreign minister on orders of Tsar Nicholas II issued a circular note proposing an international conference to address a host of issues on the state of international relations, pending arms races, potential reductions
in armaments, and the laws of war. One of the topics specifically mentioned in the note was a possible prohibition on “the discharge of any kind of projectiles or explosives from balloons or by similar means.”¹ The United States agreed to attend the meeting. An American delegation appointed by President William McKinley included five members: three civilians and two uniformed military officers. Capt Alfred T. Mahan represented the US Navy (one of the major issues to be addressed at the Hague was whether and, if so, how to extend the laws of land warfare to maritime operations). Army Capt Brian Crozier, an ordnance specialist, represented the US Army.

The American delegation went under instructions that stipulated inter alia that nothing agreed at the Hague should unduly restrain “the inventive genius of our people in the direction of devising means of defense.”² Captain Crozier brokered the deal at the first Hague Conference that allowed agreement on the question of rules governing bombardment from the air. When the discussions in committee deadlocked on whether to seek a permanent ban on aerial bombardment, Crozier proposed a five-year prohibition, arguing that the balloon bombing of the day, which was indiscriminate and ineffective, should be prohibited, but that future technologies might make bombing more discriminate and thus more militarily effective.³ The five-year restriction was adopted by the full conference in plenary session and confirmed in Washington. A separate committee at the Hague adopted rules governing warfare which, while primarily aimed at other forms of combat, had relevance to air war, that is, prohibiting bombardment of undefended towns, requiring advance warning of bombardment, and the like.

By the time the second Hague Conference convened in 1907, a race in aerial armaments was well underway. The United States and Britain favored an extension of the five-year prohibition but were unable to carry the day. The arms race intensified as Germany stepped up Zeppelin production and France produced heavier-than-air combat aircraft. In 1911, an airplane was used for the first time in combat (by Italy in Libya during the war with Turkey) to drop bombs from the air. When World War I broke out, there was a spurt of development in
military aviation. Although strategic bombardment remained peripheral to the central conduct of the war, it did take place and in the immediate aftermath of World War I, this new form of warfare appeared to a number of strategists to offer a means for avoiding the carnage of stalemated trench combat, to bring any future such confrontation to conclusion. Martin Middlebrook, the respected British historian of air warfare, captures the mood of the times nicely.

Let us draw up a list of the main points that emerged from that first use of the bomber aircraft; they were all to be seen again in the Second World War: the vulnerability of civilians when airmen attempted to bomb industrial targets in poor bomb-aiming conditions; the effect on civilian morale and the apparent conclusion that this would quickly break under sufficiently heavy attack; the belief that concentration on one particular type of industry would cause a more widespread industrial collapse; the myth of the self-defending daylight-bomber formation and the inevitable turning to less efficient bombing by night; the controversy over when a city was a legitimate target; the increasing diversions of manpower from the fighting fronts by both attackers and defenders; and the dreams of whole fleets of bombers that must prove decisive. For those who looked ahead to the use of the bomber in the next war, all the signs were there in the one just ended.4

World War I was tremendously destructive and was followed by a host of postwar efforts to control war and preparations for war. One of the major issues raised in this regard was the question of how to protect civilians. During World War I, President Woodrow Wilson was explicit: “I desire no sort of participation by the Air Service of the United States in a plan . . . which has as its object promiscuous bombing upon industry, commerce, or populations in enemy countries disassociated from obvious military needs to be served by such action.”5 This policy was reinforced by Wilson’s Secretary of War Newton Baker and was reflected in Army instructions. World War I ended before early plans to build an American force capable of strategic air attack on German manufacturing proceeded to the point of political scrutiny.

After World War I, the international community undertook a number of new initiatives—for example, enforced disarmament of Germany, a new League of Nations, and various international covenants—designed to prevent a recurrence of modern
world war. Related to these efforts was a renewed interest in inhibiting, limiting, and controlling the use of airpower in war. Early Air Force leaders were sensitive to those activities. For instance, William “Billy” Mitchell, commenting on talks under way at the Hague, called attention to the fact that the international community might adopt rules limiting attacks on manufacturing areas in the rear—rules that Mitchell opposed.6 Ronald Schaffer in his impressive study, Wings of Judgment: American Bombing in World War II, argues that the Air Force doctrine developing in the 1920s and 1930s at the Air Corps Tactical School was attentive to, although not dominated by, the issue of civilian casualties. American Air Force leaders were careful not to be seen as pushing the permissible boundaries for aerial bombardment set by their civilian leaders and public opinion. A strategic bombardment doctrine of attacking the enemy’s war-supporting economy instead of focusing directly on civilian morale was preferred both on strategic and political grounds.7

At the Washington Conference of 1922, largely remembered as an effort at naval arms control, there was a subcommittee on airpower that grappled with the question of limits on aerial bombardment. Then, and in subsequent international conferences culminating in the World Disarmament Conference of 1932–1933, a number of important issues began to achieve something akin to consensus in the world community. There was recognition, for instance, that military aviation could not be limited unless civilian aviation (that could quickly convert to military uses) also was controlled. At the World Disarmament Conference in Geneva, the British—sensitive to their new vulnerabilities—tried unsuccessfully to prohibit strategic aerial bombardment (distinguishing “tactical” from “strategic” emerged as a contentious issue). The French proposed that all “strategic” aircraft, civilian and military, should be placed under control of the League of Nations, with nations allowed to retain only short-range “tactical” aircraft in their national air forces. One subcommittee of the World Disarmament Conference addressed elaborate proposals for limiting construction programs, payloads, and operational ranges of aircraft.8 Most of these discussions became moot after October 1933 when Hitler
withdrew Germany from the League of Nations and from the disarmament talks in Geneva. The US Air Force was, at best, far removed from these debates.

To summarize, the situation before World War II was one in which a new technology—military aviation—matured rapidly. It posed the dilemma that while strategic bombardment might shorten wars and thus help avoid the seemingly endless slaughter of World War I, it also could increase civilian suffering in the short run. The arms-control agenda for military aviation prior to World War II thus foreshadowed the debate on the atomic bomb.

**The Road to the Baruch Plan**

Whatever political limits US Air Force leaders might have anticipated on strategic air war prior to World War II, what they in fact encountered once war erupted was a political leadership supporting—and often demanding escalation of—strategic air warfare. And notwithstanding earlier international efforts to bring strategic bombing under the laws of war, it was generally accepted that this had taken place only in the most general fashion. At the Nuremberg trials in 1946, when the senior German air leaders—Hermann Goering and Albert Kesselring—were brought to trial, the indictment included no charge of unlawful aerial bombardment (they were tried for their role in helping prepare for and executing a war of aggression, and for other war crimes such as illegally executing prisoners of war).

The direction that arms control would take in the immediate postwar years concerned the newly developed atomic bomb, and there, two aspects of the World War II experience are germane to the present discussion of the Air Force role. First, the head of the Army Air Forces, while remaining subordinate to the chief of staff of the Army, was elevated to roughly equal status for purposes of advising the president on matters of policy and strategy in the newly created Joint Chiefs of Staff (JCS). By the time the Air Force gained independence in 1947, it thus already was established that the Air Force chief would have a co-equal voice with the other service chiefs on matters of arms control. Second, the newly developed
atomic bomb was so large that the only realistic means of
delivery was by the very heaviest bombers available to the
American armed forces (at the time, the newly developed B-29),
which gave the Air Force a special interest in matters regard-
ing nuclear weapons.

During the war, the crash program to develop the atomic
bomb (which went under the cover name of the Manhattan
Project) was highly secretive and heavily compartmented. Only
a handful of Air Force leaders were read into many of its com-
partments. Gen Hap Arnold himself, the head of the Air Force,
was not fully apprised of the project until the summer of 1943
when he received a request from the Army officer in charge of
the Manhattan Project, Maj Gen Leslie Groves, for assistance in
testing the ballistics of the bomb.11 There were very cursory,
informal discussions during the war on what type of arms con-
trol might be appropriate for the postwar period. Air Force lead-
ers do not appear to have been party to these discussions.12

The first atomic bomb was dropped on Hiroshima on 6 August
1945—an event that removed some of the veil of secrecy from
the project.13 A second bomb of a different design was dropped
on Nagasaki three days later. The Japanese finally communi-
cated intent to surrender and hostilities effectively ceased on
14 August (the formal surrender would take place a little over
two weeks later in Tokyo bay). On 18 August, Gen George
Marshall, chief of staff of the Army, proposed—and the JCS
agreed—to have their senior subcommittee, the Joint Strategic
Survey Committee (composed of three-star members) begin to
analyze the impact of the atomic bomb on postwar military
matters. Pending at the time was a massive reorganization of
the US armed forces. It also was unclear how quickly and to
what extent the armed force would demobilize, and what funds
would be available for defense activities after the war.

There already were elaborate planning exercises going on in
the service staffs (including the Air Staff) on these postwar
matters, but the extreme secrecy surrounding the Manhattan
Project had ensured that virtually all such planning proceeded
with no knowledge of the prospect of nuclear weapons.14 To
make up for lost time, on 14 September 1945, the Air Force
convened a board for the purpose of “determining at the earliest
practicable date the effect of the atomic bomb on the size, organization, composition and employment of the post-war Air Forces." The extreme secrecy that still surrounded the bomb limited the pool of individuals that could conduct the study to a very few, very senior officers. The board was chaired by Gen Carl A. “Tooey” Spaatz, who had just returned to Washington from commanding the strategic air forces in the Pacific, one specialized unit of which had secretly deployed and delivered the atomic bomb. His two colleagues on the board were Lt Gen Hoyt S. Vandenberg and Maj Gen Lauris Norstad, the two senior planning officers on the Air Staff. Col W. P. Fisher—who had been General Arnold’s personal representative to Leslie Groves on matters like target selection for the first bomb—was the recorder. This arguably was the most senior study group in Air Force history.

The Spaatz board carried out its work in highest secrecy, meeting in continuous session for the next five and one-half weeks. It delivered a final report (only three copies of which were made) on 23 October 1945. More will be said of the Spaatz report in a moment. First, however, for purposes of this chapter, it is necessary to recognize parallel events that affected the decision-making process in the Truman Administration on arms control.

In his address to the nation on 9 August 1945, reporting on the Potsdam Conference that had just concluded, Truman discussed what he called “the tragic significance” of the atomic bomb. The bomb, he said, “is too dangerous to be loose in a lawless world. That is why Great Britain and the United States, who have the secret of its production, do not intend to reveal the secret until means have been found to control the bomb so as to protect ourselves and the rest of the world from the danger of total destruction.” A process already was under way to develop a policy to translate these words into an action plan. Two days later, Secretary of War Henry Stimson sent the president a memorandum recommending a new approach to Russia on the A-bomb. Truman’s senior advisors were at odds with one another on this issue, and their differences—coupled with unfortunate leaks to the press—delayed development of a policy. On 2 October 1945, the London foreign ministers’
meeting ended with no agreement with Russia on how to proceed with the postwar European settlement. The issue of the newly discovered nuclear bomb was in the background of every discussion.

Recognizing that something needed to be done quickly about the bomb, a summit meeting in Washington between the three wartime collaborators in its development—the United States, Britain, and Canada—was hastily scheduled. On 17 October, roughly one month before this summit meeting was to begin, Adm William D. Leahy—the president’s chief of staff for national security matters and the de facto chairman of the JCS—conveyed to the JCS the president’s desire that they advise him on the issue. The JCS advice was delivered to Truman on 23 October 1945, the same day that the Spaatz report was completed. Thus, the senior Air Force leaders simultaneously were considering what position to take on the strategic significance of the bomb and on arms control at the same time. One finds in this synergism the logic of the earliest Air Force position on nuclear arms control.

The Spaatz report, informed by the knowledge of the truly laboratory-like nature of the early atomic bombs that made them unsuited for sustained military operations, looked at both the opportunities and the threats posed by nuclear weapons. It made the sober assumption that the atomic bomb would be developed by other nations, presumably earlier than later, and also assumed that other nations would develop aircraft and other delivery means comparable to those of the United States. While the bomb offered the United States an “additional” weapon (Spaatz also would call it a “complementary” weapon in a speech to a group of aircraft manufacturers on 20 September 1945), it did not alter the basic concept of strategic air offensive, nor did it warrant a material change in the near-term conception of the employment, size, organization, and composition of the Air Force. As for threats, however, atomic bombs in enemy hands would pose a severe defense challenge. A successful attack with atomic bombs on vital areas in the United States might critically affect the outcome of the war.
These conclusions were reached at the same time that the JCS were being asked to advise the president on what position he should take on the bomb at the coming three-power summit. The JCS referred the matter to the Joint Strategic Survey Committee (JSSC) and a draft letter was prepared for JCS consideration. The initial draft narrowly addressed the question asked of the JCS, namely, what policy to adopt in regard to secrecy in the matter of the atomic bomb. The JSSC considered three alternatives: (1) to make available to all nations, with or without agreements as to its use, information concerning atomic energy and the atomic bomb; (2) to entrust the control of the atomic bomb to the Security Council of the United Nations; and (3) in so far as practicable and for as long as possible, to withhold the secrets of the atomic bomb from all other nations. The JSSC recommended a letter based solely on the third alternative.20

Somebody took the unusual step of furnishing a copy of the draft JCS paper to Assistant Secretary of War for Air Robert A. Lovett. The official JCS history for the period notes, “This is an unusual incident since civilian Secretaries and Assistant Secretaries of Military Departments do not normally see JCS Papers.”21 Lovett recommended that the JCS broaden their advice to indicate their support for a major effort to place the atomic bomb under arms control. The JCS, including the Air Force, agreed and the letter was redrafted so that, while it recommended that the United States not disarm unilaterally or prematurely disclose restricted information on atomic weapons, the chiefs were strongly on record that they regarded “it as of great military importance that further steps of a political nature should be promptly and vigorously pressed during the probably limited period of American monopoly, in an effort to forestall a possible race in atomic weapons and to prevent the exposure of the United States to a form of attack against which present defenses are inadequate.”22

Was it General Marshall that first consulted with Lovett on this matter? Was it Arnold or someone close to Arnold? Both Marshall and Arnold had close, constructive relations with the assistant secretary, based on strong bonds of mutual trust and respect that developed during the war. They most certainly
already were discussing the bomb’s implications with Lovett. It is not surprising, given the views contained in the Spaatz report, that the senior Air Force leadership would support a renewed effort at political controls. The atomic bomb at the time was not seen as a near-term replacement for other weapons for the conduct of strategic warfare, and in the hands of an enemy power, it posed extremely difficult challenges to air defenses. That the bomb later would come to play such an important role in American defense policy was less a matter of strategic choice in the early postwar years, and more a function of the limited defense budgets, the expanding security commitments, and the need to offset Soviet conventional power. But that lay in the future. First came the effort to control atomic bombs.

**The Baruch Plan**

Wartime secrecy and the pressures of bringing World War II to a satisfactory conclusion conspired to prevent serious planning during the final months of the war to develop a postwar policy for the bomb. Secretary of War Stimson, who nominally had responsibility for such matters, met with President Truman on 3 September 1945 to initially broach the subject, then followed up with a memorandum (11 September) and another short meeting (12 September). Truman circulated Stimson’s memorandum to his cabinet officers and asked Stimson to address the issue in a full cabinet meeting on 21 September, Stimson’s final day in office. As discussed earlier in this chapter, that meeting ended inconclusively and a leak to the press led Truman not to call another large meeting to discuss the matter. There is no record that JCS views were solicited during this time on the arms-control questions relating to the bomb.

Stimson had recommended a coordinated US-British approach to the Russians to achieve consensus on how to handle the bomb before going to the United Nations. At the Washington summit, however, Truman, Prime Minister Clement Attlee, and King rejected this approach in favor of bringing the matter up directly at the United Nations prior to reaching detailed agreement with the Russians. Joseph Stalin
did not object and the issue thus was placed on the agenda for the first session of the United Nations that convened at a temporary location in London in January 1946. The United States had opted to seek political controls on nuclear energy in a multilateral forum. It now needed a specific proposal.

One hour before he departed for the London UN meeting, Secretary of State James Byrnes asked his deputy, Dean Acheson, to convene a small group to develop a plan for controlling the atomic bomb—a group formally known as the Secretary of State’s Committee. Acheson’s associates in this matter were Vannevar Bush (the president of Carnegie Institute who had overseen all defense research and development during the war); James B. Conant (now president of Harvard and one of Bush’s wartime deputies); John J. McCloy (Stimson’s wartime assistant secretary); and Gen Leslie Groves (still head of the Manhattan Project). Herbert Marks, Acheson’s deputy, arranged for a board of consultants chaired by David Lilienthal (then head of the Tennessee Valley Authority). Lilienthal’s group included J. Robert Oppenheimer (wartime director of Los Alamos who now was at the University of California at Berkeley). Oppenheimer was the principal author of the arms-control plan.25

When the question was raised at the State-War-Navy Coordinating Committee on 24 January 1946 as to how the arms-control proposal would be coordinated with the JCS, the answer was that for the time being General Groves would serve as liaison.26 That appeared to be a satisfactory arrangement. The Acheson-Lilienthal group conducted an intensive 11-week study, toward the end of which they met over several long weekends at Dumbarton Oaks in Washington, D.C., to compose their consensus report. The report was delivered to Secretary Byrnes on 17 March 1946.

Notwithstanding Groves’s membership in the drafting group, neither the JCS nor the military staffs appear to have received regular updates on the work of the Acheson-Lilienthal effort. This is understandable given their other priorities at the time and the extreme secrecy still surrounding the A-bomb.27 This is not to say, however, that the chiefs were totally removed from what was going on. On 2 December 1945,
General Eisenhower was informed that Sen. Brien McMahon, chairman of the Senate Select Committee on Atomic Energy, planned to hold hearings in the near future on the relationship between the A-bomb and defense planning. Eisenhower requested that the JSSC should review and update the ongoing JCS 1477 series of studies begun in August 1945 to assess the impact of the bomb on the military, with three alternative futures in mind: (1) one that banned the use of atomic energy for military purposes; (2) one that set up a nuclear arms-control regime regulated by the United Nations; and (3) one in which there was an unrestrained nuclear arms race. The JCS agreed, and the JSSC began work on an urgent basis. JCS 1477/10, the final version of the study, finally was approved by the chiefs on 31 March 1946.28

Senator McMahon introduced his legislation for domestic control of atomic energy on 20 December 1945. He was convinced by Secretary of State Byrnes to defer his hearings on the A-bomb’s relation to defense planning and the question of international control, pending completion of the Acheson-Lilienthal study. In early January 1946, Groves sent Eisenhower a long memorandum on the subject, which Eisenhower circulated to the other chiefs. At the same time, subcommittees of the JCS were working on draft guidance for contingency planning (one contingency being confrontation with Russia), and on guidance to the JCS representatives to the Military Staff Committee (MSC)—a body established by the UN Charter to assist the Security Council in enforcement and arms-control activities. The Air Force was involved in all these activities (in fact, its representative on the MSC—Gen George Kenney—was the ranking American military member of that body). The JCS guidance to their representatives on the MSC (JCS 1567/26) gave them broad latitude on how to proceed. The chiefs approved this guidance on 24 January 1946 and sent it to the State-War-Navy Coordinating Committee for information, as well as to the MSC. The essence of the JCS position on arms control at the time was captured in two paragraphs of the paper:

No realistic system of inspection and control is as yet apparent which will ensure against the production of atomic bombs for military use in
a nation that possesses such capability. However, in view of the certain alternative that failure of international relations and control will result in an atomic armament race, every effort must continue to be made to develop and establish such a system.

Atomic weapons can be most effectively used against highly developed nations having centralized industries. The United States is such a nation. Consequently it is to the interest of the United States to assume active leadership in establishing international means to control atomic weapons. So long as the United States is the sole nation actually having atomic bombs and is furthest advanced in the field of atomic energy, it holds a preeminent position for the exercise of such leadership. This preeminence will wane with the passage of time. Therefore all possible action should be taken under United States leadership before other nations develop their own atomic weapons.29

The Acheson-Lilienthal report went to the president on 21 March 1945. Acheson was not aware prior to delivery of the report to Secretary Byrnes on 17 March, that Byrnes and Truman had selected Bernard Baruch to head the delegation that would present the US proposal. The White House announced on 18 March that Baruch’s name had been sent to the Senate. Baruch began assembling a team of advisors that included Maj Gen Thomas F. Farrell, Groves’s deputy. Eventually, Groves also would be assigned to Baruch as his senior military technical advisor.

For the next two months, an intense interagency struggle ensued between Baruch and Acheson on the details of the American proposal. Baruch insisted, and Truman agreed, that Baruch would have latitude in developing the American proposal, using the Acheson-Lilienthal report as a starting point. By late May, Baruch had come to the conclusion that the basic approach proposed by Acheson—an international authority with positive developmental functions—was sound, and agreed that while an inspection system was necessary as part of a step-by-step approach to arms control, no inspection system could guarantee compliance. But Baruch was disturbed that the plan did not spell out what would happen in the case of cheating.

The military found itself in the middle of this debate. Meanwhile, Air Force leadership and organization was changing. On 1 March 1946, Arnold finally had retired, to be
replaced by General Spaatz. Three weeks later, Spaatz announced a major reorganization of the Air Force (still the Army Air Corps since the military reorganization legislation still was being worked). Part of the reorganization entailed the creation of Strategic Air Command (SAC). General Kenney was dual-hatted for the moment as the first commander of SAC and as senior Air Force representative to the MSC. One gets a sense of the priorities of the time from the fact that until late 1946 Kenney elected to give most of his attention to his UN duties, letting his deputy run SAC.

On 15 April 1946, Baruch met with the Army and Army Air Force leaders. Generals Eisenhower, Groves, Spaatz, and others were present. A memorandum for the record of the meeting was prepared by Lt Gen John E. Hull, assistant chief of staff for the Operations Division on the Army General Staff. Hull’s memo indicated that there was agreement at the meeting that the plan Baruch was considering (basically the Acheson-Lilienthal report with adjustments) was sound, that the crux of the matter was whether or not the Russians would accept inspection and control on an international basis, and that the United States should not stop producing atomic weapons until accord actually was reached.³⁰ It is unclear whether the issue of sanctions was discussed at this time. A memo prepared for Hull prior to the meeting by Brig Gen G. A. Lincoln, the influential chief of the Strategy and Policy Group on the Army Staff, was skeptical whether the Russians ever would accept any such system.³¹ Eisenhower appears to still have been more optimistic than his staff on the possibility of cooperation with the Russians.³² Spaatz appears to have shared his staff’s skepticism.

By late May, Baruch realized he needed to finish preparation of the proposal since the mid-June meeting of the United Nations Atomic Energy Commission (UNAEC) was fast approaching. On 24 May, Baruch sent identical letters to nine senior US military officers including each member of the JCS, asking them broad questions about how compliance with the treaty might be ensured and specific questions about whether the plan should allow for automatic punishment in event of violation of the treaty.³³ Eisenhower, about to depart
Washington for a tour of military facilities in the Pacific, suggested to Baruch that he should ask the JCS for a formal recommendation, and suggested at the same time to the JCS that they task the Joint Staff to begin drafting a joint reply. Spaatz and his colleagues agreed, and the Air Staff began working with the Joint Staff on a draft. On 7 June 1946, however, the JCS learned that President Truman had just approved instructions to Baruch, including authorizing him to propose that the veto be suspended in the Security Council on matters involving allegations of violations of a treaty for control of atomic weapons. This was at the heart of the sanctions issue, and in light of the presidential decision already having been made, the JCS opted to have each member respond directly to Baruch with personal views instead of composing a joint reply.

Spaatz agreed with Eisenhower and Nimitz on most of the fundamentals of the US proposal. He disagreed on penalties, however. Spaatz believed that the control agreement should provide for immediate, effective multilateral action in the case of violations. He reportedly felt that the control system was unlikely to succeed and that America would have to develop a deterrent as the best insurance against failure of control.

After the Baruch Plan

What next happened is well known. On 14 June, Baruch presented the US proposal for control of atomic weapons. The Russians responded with a counterproposal that called for immediate prohibitions on the bomb and dismantling of the American nuclear stockpile, to be followed by working out the details of a control regime. A stalemate ensued as the Cold War unfolded. Some scholars reviewing this period have suggested that the chiefs were categorically opposed to arms control. The record does not support this conclusion. While the chiefs had varying views on whether a plan could be negotiated with the Soviets, they supported the Baruch plan as the technically best alternative and were on record wanting negotiations to succeed. They were being asked, in a much less formal setting than would later be available, to provide advice on what we today would call the military sufficiency of the proposal, and on how to respond to militarily significant cheating.
Their advice in hindsight appears sound. The Air Force, notwithstanding the fact that it still technically was part of the Army, had a coequal voice in the development of the advice. And the chief Air Force spokesman, General Spaatz, was the chief author of the Air Force report which a year earlier had highlighted the dangers of the bomb for future US security.

When the Air Force officially became a separate service on 18 September 1947 when the National Security Act took effect, Spaatz ceased being commanding general of the Army Air Forces and formally became chief of staff of the US Air Force. He retired seven months later, and Gen Hoyt Vandenberg succeeded him. General Vandenberg was especially well-positioned to assess the unfolding Soviet threat since he had served as an early head of the newly created Central Intelligence Group—a forerunner of the Central Intelligence Agency that would be created by the same legislation that gave the Air Force its separate service status.

Arms-control discussions continued in the UNAEC and in the United Nations Commission for Conventional Armaments (UNCCA) that was created by the Security Council in February 1947, but they no longer were conducted on the basis of anticipating real results. By the autumn of 1948, Bernard Brodie—a respected analyst of the times (who for a brief period would serve as a special assistant to the Air Force Chief of Staff)—expressed the views of many when he wrote in *Foreign Affairs*:

> The impact of the atomic bomb on United States policy has thus far been evidenced most clearly in the almost frantic effort to secure the adoption of a system of international control of atomic energy. . . . Two years of work by the United Nations Atomic Energy Commission have resulted in some illumination of the problem but almost no progress toward a solution. . . . [W]here does that leave us? It leaves us, for one thing, with the unwanted bomb still in our hands, and, so far as we know, still exclusively in our hands. It leaves us also under the compulsion to go on building more bombs and better ones if possible. We must continue our search for a workable and secure international control system by any corridor which reflects even a glimmer of hope of success, but we must also begin to consider somewhat more earnestly and responsibly than we have thus far what it will mean for the nation to adjust to an atomic age devoid of international controls.37
And adjust the United States did. In early 1949 the West created the North Atlantic Treaty Organization (NATO), and in the fall of 1949, the Soviet Union tested a nuclear bomb, shortly before the Chinese Communist Party won the Chinese civil war. In 1950, the Korean War erupted. The massive nuclear armaments race that the JCS had anticipated if arms control failed was under way, and nuclear deterrence was rapidly moving to the center of American defense policy. This dominated Air Force planning, even during the Korean War. While the United States did not cease arms-control discussions in the United Nations, the Air Force was not deeply involved in such activities for the remainder of the time under discussion in this chapter. The Air Force chief, like the other chiefs, would be apprised of developments on matters such as NSC 112—principles for arms control approved by Truman in July 1951—but he was not a major player in its development. During this time, senior Air Force officers, active duty and retired, shared a basic skepticism widespread in Washington that the Soviets would be willing to engage in serious discussions, or that they would open their closed society to inspections.

In the autumn of 1951, the UN created a single disarmament commission as a successor to the UNAEC and the UNCCA. In the aftermath of this event, and to review existing US arms-control policy, J. Robert Oppenheimer was asked to convene a panel to assess the prospects for arms control. The panel's report was delivered to the White House in January 1953, in the waning days of the Truman Administration. It laid out in detail the case why the prospects for arms control with a Soviet Union governed by a leader such as Stalin were unfavorable. That was a view shared by the Air Force.

**Concluding Observations**

This chapter has not attempted to reconstruct the details of how the Air Staff helped the Air Force chief of staff on arms-control matters prior to 1953—a task that may be impossible to reconstruct, given the passage of time, the informal way of doing business for much of the period under discussion, the freshness of the activity, and the extreme secrecy that surrounded the
A-bomb in the early years. It always is difficult to reconstruct the workings of a large body like the Air Staff, all the more so in nuclear matters for the period in question.

Still, there is enough of a documentary record to establish that the senior Air Force leadership was involved at a high level on arms-control matters and took positions largely supportive of the early effort—positions that can be explicated in modern terms such as military sufficiency and safeguards against militarily significant violations of potential treaties. There is no reason to believe that the JCS, corporately or individually, wanted the Baruch plan to fail. They, like many other American officials at the time, were uncertain about the future. They agreed that the central thrust of the Acheson-Lilienthal proposal and the Baruch plan offered the technically best alternative to a limited arms race. They cautioned that the United States should be prepared for either outcome, at the same time that they tried to work political arrangements that protected the West. That is the central story of the early Air Force involvement in arms control.

Notes

2. Ibid., 7.
6. Mitchell’s lengthy paragraph on possible restrictions on aerial warfare can be found in his 128-page “Notes on the Multi-motored Bombardment Group, Day and Night”—a paper which otherwise addresses operational matters. Gen Laurence Kuter, himself an early student and instructor at the Air Tactical School, recalls that these notes in essence constituted Air Force doctrine until the late 1920s. I rely for this account on Kuter’s unpublished paper, apparently written in 1943 or 1944 when Kuter was assistant chief
of the Air Staff for Plans and Combat Operations, entitled “Air Power-The American Concept (Notes on which a Series of Articles Might Be Prepared).” This paper can be found in Box 2 of the Kuter Papers in the Special Collections Division, USAF Academy Library, Colorado Springs, Colo.


9. This is discussed in detail in F. M. Sallagar, The Road to Total War: Escalation in World War II (Santa Monica, Calif.: RAND, April 1969). Also see Eric Larrabee, Commander in Chief: Franklin Delano Roosevelt. His Lieutenants, and Their War (New York: Simon & Schuster, 1987).


11. Walton S. Moody, 7. Arnold already appears to have a general knowledge of the program, probably learned directly from his immediate superior, Gen George Marshall, chief of staff of the Army and Groves’ boss.

12. The best account of the limited arms-control deliberations during the war can be found in chapter three of McGeorge Bundy’s book, Danger and Survival: Choices About the Bomb in the First Fifty Years (New York: Random House, 1988).

13. A statement had been crafted at Potsdam, for public release in Washington upon word that the first bomb had been dropped. Announcement of the bomb was expected to produce a torrent of requests for information. With this in mind, a detailed report prepared by the physicist, Henry DeWolf Smyth, was to be made publicly available. This report was intended to establish a boundary between what could be said publicly and what would remain highly classified. The Smyth report has been reprinted in the Stanford Nuclear Age Series as Henry DeWolf Smyth, Atomic Energy for Military Purposes (Stanford, Calif.: Stanford University Press, 1989).


15. Copies of the tasking memo and the report can be found in the Papers of Carl Andrew Spaatz, Series I, Box 22, Manuscript Division, Library of Congress, Washington, D.C.

16. In October 1945, Vandenberg was the assistant chief of staff for Operations, Commitments, and Requirements. Norstad was the assistant chief of staff for Plans.

17. President Truman’s 9 August 1946 address to the nation is included as an appendix in US Department of State, The International Control of
18. Although the Spaatz report did not estimate how long it would take a state like the Soviet Union to acquire nuclear weapons, there is circumstantial evidence that the Air Force leaders favored the earlier vice later estimates then circulating in Washington. In October 1946, when Norstad briefed President Truman on military reorganization matters, he told the president that planning was premised on the belief that the Soviets could develop the bomb as early as 1949 although they probably could not produce nuclear weapons in significant numbers before 1951. I base this on a copy of briefing notes entitled, “Presentation Given to the President by Major General Lauris Norstad on 29 October 1946,” that can be found in the Papers of Hoyt S. Vandenberg, Box 63, Manuscript Division, Library of Congress.

19. Spaatz report. The report recommended that a senior officer “of the caliber of Maj Gen Curtis E. LeMay” should be assigned to a newly created position on the Air Staff, to direct future research and development related to atomic energy. Typed at the bottom of the report was Arnold’s response: “I approve this report without qualification, and I strongly emphasize that the national interest demands relentless efforts, operationally and technically, in research and development, especially as they relate to future air weapons.” By this time, Arnold had commissioned Theodore von Kármán to conduct a broad study of future technologies for the Air Force. In December 1945, on behalf of the Scientific Advisory Group that he chaired, von Kármán submitted the report entitled “Toward New Horizons” to Arnold.

20. I base this account on a declassified memorandum, subject: “Military Policy as to Secrecy Requirements for the Atomic Bomb (J.C.S. 1471/2),” 22 October 1945. This paper can be found in the records of the JCS, central decimal file 1948–50, Box 222, CCS 471.6 (8-15-45) sec. 1. The National Archives, Washington, D.C.


22. Memorandum for the President from the JCS, 23 October 1945. The copy of the memorandum I am working with comes from the Papers of Harry S. Truman, President’s Secretary’s Files, Box 199, Harry S. Truman Library, Independence, Mo.


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27. In his memoirs, Groves recalls the late 1945 and early 1946 period in the following terms: “I was receiving little if any guidance from the Executive Branch [in running the Manhattan Project], since both the Secretary of War and the Chief of Staff, having only recently come into the atomic picture, felt that my background enabled me to make the necessary decisions better than they could. . . . When I first started to explain the atomic program to Mr. Patterson [who replaced Stimson as Secretary of War] and General Eisenhower [who replaced Marshall as chief of staff of the Army], they said that they did not want me to give them any secret information if I could help it, particularly about the production rates and the number of bombs on hand. As General Eisenhower put it, ‘in a project such as this, where knowledge is held to such a few people, it makes it particularly difficult.’” Leslie M. Groves, *Now It Can Be Told: The Story of the Manhattan Project* (New York: Harper, 1962, [reprinted by Da Capo Press, 1983]), 380.


33. I am using a copy of Baruch’s letter that can be found in the Papers of Bernard M. Baruch, Seeley G. Mudd Manuscript Library, Princeton University, Box 52.


38. The text of NSC 112 can be found in *FRUS*, 1951, vol. 1, 477–97.

Chapter 2

**Peace through Strength Alone:**
**US Air Force Views on Arms Control in the 1950s and Early 1960s**

*Edward Kaplan*

The United States Air Force of the 1950s and 1960s exemplified the general principle that organizations tend to reflect their leaders’ beliefs. During this period, an extraordinary string of generals whose formative combat experience was as bomber pilots and commanders in the Second World War led the USAF and the Strategic Air Command (SAC) through a period in which the latter became the cornerstone of America’s deterrent strength. These decades also saw the continuation of early attempts at arms control and disarmament conducted in an environment of doubt and fear barely comprehensible today. Furthermore, the John F. Kennedy and Lyndon B. Johnson administrations signed agreements over the objections of those Air Force leaders responsible for SAC and the deterrent force.

Air Force mistrust of arms-control initiatives during this era was centered on a perceived incompatibility of those initiatives with deterrent and war-fighting strategy, a general mistrust of the Soviet Union, a refusal to adapt to evolving deterrent thought, and friction with the post-1961 civilian Department of Defense leadership. This chapter examines each of these problems in turn and then briefly recounts the debate over the Limited Test Ban Treaty of 1963 as a historical example of these objections.

**The Air Force Perspective**

Before delving into Air Force objections to the arms-control process in the 1950s and 1960s, some definitions are necessary. Specifically, who best represents the Air Force view on
any subject? For the purposes of this chapter, I have construed this as narrowly as available sources allow—the Air Force chiefs of staff and their planning organizations. Unlike the Strategic Arms Limitation Talks I (SALT I) and later arms-control agreements, the Air Force in this period did not have formal negotiating teams or a separate planning body for arms control and disarmament. Rather, the Air Staff plans branch appears to have provided disarmament guidance to the chief of staff on an as-needed basis. There are no readily available documents showing a separate Air Force view on arms-control issues other than those created by the plans branch for Air Force internal consumption. Views provided upward to the National Security Council (NSC), the Office of the Secretary of Defense (OSD), and the president appear only in a consolidated form with other service views in Joint Chiefs of Staff (JCS) papers. The long-range plans branch that later produced arms-control positions was not even created until the mid-1950s as an outgrowth of an ad hoc long-range planning group, the Lignon Committee.

So, the question arises, “How to get at an ‘Air Force’ position”? The four best sources for these opinions are Air Force chief of staff testimony before congressional committees, books produced after retirement, internal Air Force plans staff papers, and NSC and JCS papers and discussions where the chief of staff participated. During the period in question, the opinions of a few men stand out as most relevant to discerning an Air Force stance. Generals Thomas D. White, Nathan F. Twining, Curtis E. LeMay, and Thomas S. Powers can best be said to represent the Air Force position. The first three were Air Force chiefs of staff during the 1950s and early 1960s. The last two led SAC from its formative years in the late-1940s through its heyday in the mid-1960s.

They share a number of common characteristics. Notably, all these men were members of what Col Michael Worden refers to as the “senior World War II generation” in his insightful book *Rise of the Fighter Generals*. This group is notable for its rapid ascent to command positions during World War II and dominance of the Air Force hierarchy in the early Cold War years. “[They] showed resolve, steadfastness, and determination. Sortie
production, tonnage dropped, and bombs on target were their concept of strategy; strict flight discipline, perseverance, and growing numbers their methods. 5 These experiences, and the methods derived from them, shaped early Cold War Air Force fighting doctrine and the generals’ opinions of the value of arms control and disarmament.

**Postwar Arms Control**

The arms control and disarmament proposals and agreements they were asked to weigh in on during their tenures at the top of the Air Force hierarchy would be precedent-setting for later negotiations. The Eisenhower Administration pursued a number of arms control-related measures from 1953 forward. The Atoms for Peace proposal in that year called for an international organization to supervise the peaceful development of nuclear energy with nuclear material donated by the United States and USSR. 6 A later plan, Atoms for Police, envisioned an international atomic armed force under the auspices of the United Nations (UN) Security Council, which would enforce its mandates. 7 Both proposals, with their emphasis on international regulation, clearly show their roots in 1940s proposals such as the Baruch plan. President Eisenhower also proposed measures more directly related to the control of nuclear weapons. The Open Skies proposal of 1955 recommended aerial reconnaissance, rather than the more intrusive ground inspection, of the United States and USSR as a first step toward arms reductions. 8 Although that plan failed, Eisenhower showed his dedication to disarmament by agreeing to a testing moratorium from 1958 to 1961, followed by ultimately fruitless negotiations on a formal agreement. 9 As will be discussed, the Soviet breaking of the moratorium in 1961 was an important source of Air Force opposition to the Limited Test Ban Treaty two years later.

The Kennedy and Johnson administrations achieved more progress in their efforts at formal arms-control agreements. The 1963 Limited Test Ban Treaty succeeded where the Eisenhower Administration had failed from 1958 to 1961 in outlawing the testing of nuclear weapons in the three environments of air, sea, and space. The Johnson Administration followed this with
two further agreements: the Outer Space Treaty of 1967 and the Nuclear Nonproliferation Treaty the following year. The former prohibited the placement of any nuclear weapon in orbit or on a celestial body. The latter attempted to slow the spread of weapons to other countries by having nuclear signatories pledge not to aid any nonnuclear country in gaining nuclear weapons and nonnuclear signatories promise not to seek such a capability. The bomber generals opposed these agreements to a greater or lesser degree and based their opposition on a genuinely felt opinion that such treaties were gravely damaging to the national security.

**Nuclear Strategy**

Much of their opposition stemmed from their view of how the Air Force and the United States would fight and win a conflict with the USSR. The bomber generals and their staffs were reluctant to change their notions of what composed an effective fighting strategy. At its core, this strategy called for having a war-winning capability should deterrence fail. This capacity required continuous technological advancement to preserve America’s nuclear superiority, which was the essential requirement for such a strategy. Arms control and disarmament initiatives that would directly interfere with the necessary measure of this superiority were anathema.

Contrary to later notions that a nuclear war could not be won in any meaningful sense, the Air Force’s first strategic air operations doctrine manual, Air Force Manual 1-8, *Strategic Air Operations* published in 1954, defined the role of the strategic air force as “to defeat the enemy nation.” These operations were to be carried out with a maximum amount of force in the smallest amount of time because “the rapidity of collapse will be directly proportional to the timing and weight of attack.” More generally, the Air Force’s primary task if deterrence should fail was to “prevail in general war.” The war plan to implement this doctrine, which originated with LeMay in the early 1950s, was known informally as the “Sunday Punch.” This concept called for the unrestrained use of the stockpile in the first blow.
The Sunday Punch had at its core a belief in the primacy of atomic airpower. In the words of Maj Gen Richard C. Lindsay, the head of Air Force Plans in 1955, “One or the other [nuclear armed nation] gains the ascendancy through better use of his atomic weapons and becomes the victor.” That ascendancy must be brought about through the “maximum effort” against the “sources of enemy strength.” This effort needed to be compressed into the smallest amount of time to maximize shock. During the mid-1950s, Air Force plans called for the decisive phase of the war to last no more than 30 days. The first four days of combat would constitute the most intensive phase of this effort. During this period, SAC would hit 388 airfields and 24 guided-missile sites. Furthermore, 14 cities with populations over 100,000 would be hit as “a bonus effect.” The second phase, which would extend until D+30, would see the destruction of a further 2,800 targets. In the words of an unidentified Air Force planner, “Is there a humanly contrived organization which can resist such stupendous force applied in such a short period? I doubt it.” In other words, the clear objective of such a plan was victory.

Chief of Staff Nathan F. Twining stated his expectations of victory in a speech to the secretaries of the Armed Services in 1955, “General atomic warfare will be characterized by maximum destruction during its opening phases. If one contestant does not capitulate as a result of the opening phase, the decision may well rest with the side retaining the most effective atomic delivery capability.” That is, if deterrence failed, the United States needed to achieve “relative advantage.” Success in the initial phase would determine the ultimate outcome of the conflict. Air Force planners also recognized that the faster the United States struck the Soviet Union, the fewer bombs would land on American targets. “We dare not risk one deniable hydrogen bomb on our country for want of urgency in our reaction.”

Such sentiments were reflected in a planning emphasis on destroying what would later be termed counterforce targets. Contemporary war plans divided up the Soviet target complex into three categories. The first and most important set was BRAVO, blunting targets whose destruction would hinder a
Soviet atomic offensive. Only after BRAVO had been destroyed would SAC follow up with raids on DELTA, the disruption set. These targets included industries and sites critical to Soviet war-making capability such as atomic energy, liquid fuel production, and jet engines. The third target set, ROMEO or retardation, included troop concentrations and their supporting infrastructure. This was to be SAC’s direct contribution to the defense of Western Europe and would be struck simultaneously with DELTA.25

As American estimates of Soviet offensive and defensive capabilities increased through the 1950s, the quantitative and qualitative requirements for these operations spiraled ever upwards. Maintenance of the qualitative edge compelled continued technological superiority. Not only must Air Force bombers be able to penetrate to their assigned targets, but the faster they could do so and the heavier bomb loads they could carry, the faster victory could be achieved. Therefore, any arms-control measure that hindered such technological development would be against the US national interest. According to General Twining, “To counter [the increasingly sophisticated Soviet air threat] we must continue to maintain better aircraft, better weapons, and a higher degree of operational readiness and flexibility. . . . [We must] maintain the qualitatively superior strategic Air Force.”26 Recent experience with the vulnerability of the B-29 to the MiG-15 over Korea reinforced this opinion and forced the cessation of B-29 daylight strikes in 1952–53.27

Research and Development

The Air Force and the joint chiefs feared that this critical research and development could be hindered by arms-control agreements. In 1955, the JCS warned the president’s disarmament advisor, Mr. Charles Coolidge, that any reductions in research and development could lead to the withering away of the US capability to carry out that research as industry realigned to more profitable endeavors. In the meantime, the Soviets, with their subsidized economy, would be able to maintain the organizations and personnel in place to carry out research in secret or to be prepared to do so should they
abrogate an agreement. "[It] is essential to maintain a continuous program to update our materiel." Furthermore, the long lead times required for development meant that interruption of research would result in unacceptable delays in fielding necessary updated weapons systems. The JCS warned, "We specifically disagree with any concept of limiting the forward march of technology in military fields, for example, by the elimination of further nuclear tests."29

The advances the Air Staff and JCS foresaw were not limited to simply updating existing weapons systems. As early as 1952, the Air Staff stated a requirement to develop reconnaissance satellites as soon as possible. A memorandum from then Lt Gen Thomas D. White, dated December 1952, asserted that such a vehicle was absolutely necessary to provide warning of an impending Soviet attack due to limits of aerial reconnaissance. This would allow SAC to launch its assault on the BRAVO target set as soon as possible. White went on to cite the reconnaissance satellite as a stepping stone toward future space-based weapons, as well as providing significant "political, scientific, and psychological advantages."30

Fewer than 10 years later, White, then vice chief of staff, foresaw even larger advantages to continued research and development in space vehicles. He thought the new Kennedy Administration’s dedication to the peaceful use of space was shortsighted. Future technologies that might supercede thermonuclear weapons might only be invented if space were fully exploited for military use.31 One year earlier, LeMay approved an Air Force Council recommendation that stated unequivocally, “The use of space as an extension of the battlefield is inevitable. . . . Space operations are a natural extension of the present USAF operational environment.”32 Within a year of this general decision to go forward with USAF space capabilities, the Air Force Council was urging manned military missions and a rapid increase in Air Force funding of space programs such as the Dynasoar and sharing the Apollo program with the National Aeronautics and Space Administration (NASA). Recommended milestones in the Air Force program included a permanent manned space station by 1967 and a permanent
lunar base by 1971. Thus, research and development were designed to provide any possible edge to the Sunday Punch.

To summarize, during this period (1953–60) Air Force plans for war with the Soviet Union called for a rapid and powerful strike against a full range of targets with an emphasis on the BRAVO or blunting mission. The goal was to first minimize damage to the United States from a Soviet attack by preemptively destroying it at its source and then go on to destroy Soviet war-making capability. The critical part of this would be the speed and weight of the initial attack. These, in turn, required a continued qualitative and quantitative edge over the Soviet Union. Therefore, disarmament agreements that hampered the Air Force from fulfilling this mission were contrary to the national security.

**Alternative Perspectives**

Many outside the Air Force in the late 1950s began to question this notion of deterrence that required maximum effort in minimum time. Air Force leaders reacted by resisting any change to what they believed constituted an effective deterrent. In the words of then Lt Gen Frank F. Everest, the deputy chief of staff for Operations in 1955, “The only apparent restraints on the conduct of Communism have been obviously attributable to their need to avoid total war. Such restraint was imposed by the significant U. S. superiority in nuclear warfare [emphasis added].”

Notions of minimal deterrence, graduated deterrence, and a solely countervalue force were deemed ineffective and dangerous. Since these new ideas informed many of those supporting arms-control measures, by opposing these notions, USAF leaders were simultaneously questioning the underpinnings of the proposals.

**Minimum Deterrence**

The most alien idea to the existing USAF doctrine was minimum deterrence which cast uncertainty on the counterforce policy emphasized by the late-1950s war plans with their requirement for striking BRAVO targets first. Minimum deterrence
advocates claimed that the counterforce arsenal was wasteful and that all that was required for an effective deterrent was a small, invulnerable force capable of inflicting unacceptable damage on Soviet population centers and industry. This threat would be adequate to prevent Moscow from launching a general war. Furthermore, since advocates assumed that the US arsenal would be used only after a Soviet first strike, a counterforce-oriented force would be wasteful since it would land on empty airfields and silos. Thus, minimum deterrence provided adequate security at a much lower cost than the 1950s counterforce-oriented SAC.

Air Force planners disagreed. They argued that forces designed to “present a credible threat of defeat” constituted a more effective deterrent than did forces, such as those advocated by minimum deterrent proponents that only exacted a high price for victory. Furthermore, such a force, “[supported] completely the only sound military and national policy, that of winning a war should deterrence fail.” While a minimum deterrent might function under most circumstances, a “force adequate to achieve victory under any circumstances . . . is also a deterrent to the highest achievable degree.” By contrast, the minimum deterrent would be inadequate because it would not “confront an enemy with a credible threat of defeat.” Further, they criticized the underlying assumptions of minimum deterrence—that sufficient damage against a nation could be precisely forecast in advance. If a nation had provision for industrial recovery and had shown a willingness to “sacrifice human life on an extravagant scale in the attainment of political objectives” as had the USSR in World War II—then the price exacted by a minimum deterrent might be one that nation would be willing to pay.

Beyond this issue was one tied directly into Air Force warfighting philosophy. The planners criticized that a minimum deterrent force would be unable to take the initiative. One study stated,

What has deterred aggression in Europe, and in other vital areas for the past ten years, has been primarily the counterforce aspect of the general war capability, backed up by the expressed willingness to use any and all forces to defend the Free World if it should become necessary. An enemy nation is most effectively deterred from attempting
major acts of limited aggression if he is made to realize that we have both the will and the physical capability to retaliate with general war forces, and that, should we do so, the resulting possession of the ini-
tiative and a counter force capability will lead to our destroying his general war retaliatory capability.\textsuperscript{40}

Finally, since a minimum deterrent would only be targeted against a general war capability, the United States would have to build up expensive conventional forces solely for limited (i.e., nonnuclear) war. This potential expense would far exceed that required for a continued counterforce arsenal that would be capable of deterring both limited and general war. “Such a strategy would eventually become a far greater drain on the taxpayer, than the present one if Europe survived long enough to implement it in the first place.”\textsuperscript{41}

\textbf{Graduated Deterrence}

Related to the arguments against the minimum deterrent were those arrayed against graduated deterrence. As defined by the Air Force planners examining the concept in 1960, this meant the development of a “politico-military capacity capable of containing every conceivable type of Communist threat.”\textsuperscript{42}

Clearly harkening back to the Korean experience, the planners claimed that this concept was flawed in several areas. First, it assumed that all war was divisible into neatly defined categories against which an efficiently planned force could be programmed and maintained. This ran against what the authors claimed was recent experience that levels of war tended to blend together and could not be considered separately. Second, this new idea assumed that all kinds of war were equally likely instead of acknowledging that wars of attrition belonged to the past. As with the minimum deterrent, this thinking led to the conclusion that expensive conventional forces must be main-
tained for all levels of war. Third, the planners believed that segmentation of the spectrum of war, and the forces designed to wage it, into distinct elements ignored the capability of forces to operate at multiple levels of conflict. A credible counterforce deterrent could eliminate or greatly reduce the chance of conventional war. Finally, a military tailored to a graduated
deterrent model, like one keyed to a minimal deterrent, would be an unlimited strain on national resources.  

**Countervalue Targeting**

The plans staff also addressed the underlying issue of countervalue targeting versus counterforce targeting. The former concept, which formed the underpinning of the minimum deterrent, was considered irrational. In their thinking, the only valid target for the application of military force was the enemy military or targets that directly affect them.

Destruction that does not affect the war's outcome in one's favor was "politically and morally unjustifiable." Given the assumption that no future general war would last long enough for industry to have an impact on victory, attacking a city would be "anachronistic and inhumane." Thus, countervalue was militarily and morally bankrupt. By contrast counterforce meant that, "the United States has the means to defeat the enemy's military forces, and by so doing, to deter general war, or to prevail should it occur." It was, "the most essential ingredient of the US war-winning capability." As these examples show, the Air Force strongly resisted modifying its counterforce dogma as the 1950s drew to a close.

**(Dis)trusting the Soviets**

Underlying apprehension at the prospect of undermining Air Force war-fighting methodology was a deep-seated mistrust of the Soviets and complete lack of confidence in any agreement that could be negotiated with them. Peace required effective deterrence and effective deterrence required military superiority. In 1955, after consulting with the joint chiefs, Secretary of Defense Charles Wilson advised President Eisenhower that, "deterrence through armed strength is our best real hope for peace." He characterized mutual deterrence as a "fail-safe" course of action for the United States: if the Soviet Union acted in "bad faith," the United States would not be any worse off; if however the USSR cheated in an arms-control treaty, American national security could be "irreparably damaged." Statements of this sort demonstrate the thinking in Air Force and other
senior defense circles that effective deterrence and arms control were to some degree mutually incompatible.

The issue of political settlement constituted the major source of Air Force disagreement. Air Force leaders believed that reductions in arms should only follow a resolution of the political tension between the Free World and the Communist Bloc. As one JCS paper put it, "arms" did not "beget tension." Rather, "tensions" begat "arms."49 Thus, any arms limitation agreements should be preceded by a political settlement. Otherwise, a treaty would only be the basis for future tension as each side accused the other of violating the agreement. In this way, the arms limits could actually become destabilizing rather than the hoped for stabilizing force.50 Air Force leaders and the JCS also feared that the Soviets might gain an overwhelming advantage by seeking an agreement limiting nuclear weapons without concurrent cuts in conventional weapons.51

That specific example of suspecting Soviet motives about disarmament agreements is illustrative of a more general trend questioning any negotiation with Moscow. The joint chiefs advised the president in 1954 that the Soviets would never negotiate openly. They would, instead, seek their objective by, "disregarding any accepted code of ethics or any conception of honor in the conduct of negotiations or in the carrying out of any agreements which might flow from them" (emphasis added).52 This distrust was rooted in the often repeated sentiment that the Soviet goal was an unwavering one aimed at the destruction of the West. “The objective of militant Communism is plain to all but those who will not see. That objective is world domination.”53

With such opinions being common, it is not surprising that Twining advised President Eisenhower in 1960 that the Soviets had "consistently sabotaged all efforts" towards arms-control agreements and used negotiations as “propaganda exercises.”54 He then advocated what was a cornerstone of the Air Force position on arms control during this period—the requirement for a strict inspection regime. Top Air Force and JCS leadership cited interwar disarmament treaties that lacked effective inspection regimes as damaging to the security of nations that abided by their strictures. They permitted
the rearmament of violators without allowing other nations the
time to react.55 Furthermore, the very nature of the Soviet
regime prevented an effective inspection program. The Iron
Curtain "would make a mockery of any inspection system
which might be devised and, if the record of past Soviet con-
duct with respect to solemn international agreements is a true
index, Soviet bad faith, evasion, and outright violation would
render any disarmament agreement sterile, except as a means
to advance Soviet objectives."56 Even with advances in tech-
nology through 1960 including the U-2, senior military lead-
ers such as Twining did not change their opinions markedly.
For him, it was less the Iron Curtain in any one form than the
Soviet "penchant for secrecy" that was a key obstacle to any
agreement.57 It was deemed critical that the inspection system
for any agreement be in place and tested before weapons
reductions took place. Any agreement would only be as strong
as the inspection regime supporting it.58

**Interagency Distrust**

Just as Air Force distrust of the Soviets shaped their view of
arms control, friction with new political leadership in the
Kennedy Administration’s Department of Defense added to a
general atmosphere of suspicion regarding arms-control ini-
tiatives. Under the Eisenhower Administration, both the sec-
retary of defense and the president had, by and large, endorsed
Air Force views. Twining had made a special effort to establish
a smooth working relationship with Eisenhower as soon as
that administration took office. In mid-June 1953, the general
sought a personal meeting with the president to smooth over
some difficulties with the budget process that threatened to
jeopardize the chief of staff’s ability to "operate inside and not
outside the current administration." The goal was to ensure
that "Air Force positions will be consistently and carefully con-
sidered by the Commander-in-Chief and the Defense
Department."59

Efforts such as this resulted in close cooperation between
the Eisenhower Administration and the Air Force. This was
amply demonstrated in a 1956 meeting in the White House
with members of the joint chiefs, when Army Chief of Staff Gen
Maxwell Taylor asked the president to resolve an impasse over the basis for future planning. The Air Force, Navy, and chairman of the joint chiefs all agreed that future planning must be based on the use of atomic weapons. The services believed that war plans should involve use of atomic weapons at the outset without restriction—the Air Force’s counterforce/BRAVO strikes. Further, they held that forces capable of carrying out these strikes would be sufficient to deter limited war. Although presented in the context of JCS views, they were consistent with the Air Force positions at the time. General Taylor, on the other hand, believed that this was incorrect. He found it dangerous, and if fully adopted he claimed it would eliminate “flexibility.” The resulting force structure would “freeze out” any other kind of conventional forces.

Eisenhower came down firmly on the USAF side. He responded that Taylor’s position was predicated on the assumption that the Soviets were an enemy that valued human life as much as the United States—a false assumption given experience in the Second World War. Eisenhower did not see any reason to believe that the Soviets would hold back from using atomic weapons immediately and in full force. Therefore, it was logical that the United States anchor planning for future war on the basis of use of atomic weapons. Indeed, “prudence would demand that we get our striking force into the air immediately upon notice of hostile action by the Soviets.”

Furthermore, the president refused to tie down American forces in wars around the Soviet periphery. Instead, we should use our most efficient weapons—atomic weapons—to support local conventional forces. All these points—the nature of the Soviet enemy, the utility of nuclear weapons in general and limited war, and the requirement to strike hard and fast at the outbreak of war—were in accordance with the major Air Force positions.

This cooperation dissolved with the Kennedy Administration. Unlike the 1950s, the Air Force lost its special influence with the president. An early indicator of the changing times occurred when Kennedy walked out of the Air Force’s introductory “Net Evaluation” briefing summarizing the Soviet threat. Robert S. McNamara institutionalized the new separation between the Air
Force and higher leadership through the practice of placing a buffer of civilians between the chief of staff and the secretary of defense. To LeMay’s great annoyance, McNamara’s office worked directly with action officers rather than using the chain of command, thereby sidestepping the chief of staff. This tendency, added to the routine practice of setting short deadlines, kept the Air Force leadership off balance.63

One example of the fundamental difficulties encountered by the new administration was in the acquisition of new manned bombers—a matter essential to the continued future viability of the Air Force war-fighting strategy. The supersonic follow-on to the B-52, the B-70 Valkyrie, became an early McNamara target. He claimed that the aircraft would be vulnerable in the air to surface-to-air missiles, vulnerable on the ground to a first strike, would have to be launched immediately on warning of a suspected attack to ensure survival, and would be too slow for effective counterforce. By comparison, the new intercontinental ballistic missiles (ICBM) were cheaper, faster, and less vulnerable. When McNamara subsequently cancelled the B-70 program, LeMay went directly and successfully to Congress for restoration of the funds. An infuriated McNamara refused to spend the money. The Air Force’s fear that ICBMs were a questionable new technology that had limited accuracy and a high price tag led it to propose a compromise program of air-launched missiles—Skybolt. McNamara cancelled the Skybolt in 1962.64 In 1963, McNamara urged renewal of LeMay’s term as chief of staff for only one year rather than the customary two.65

The primary complaint raised by LeMay was McNamara’s discounting of military expertise. An embittered LeMay later remarked that McNamara’s attitude seemed to be “Get out of our way. We think nothing of you or your opinions.”66 Other Air Force leaders shared LeMay’s view. Gen Howell Estes thought the McNamara whiz-kids were “fuzz-cheeked PhDs that didn’t know the first thing in the world about the military.”67 General White believed they were “arrogant young professors” who lacked the worldliness and motivation to stand up to the Soviets.68 Gen Lauris Norstad, the commander of the North Atlantic Treaty Organization and considered one of the
Air Force’s most intellectual generals during this period, also experienced tension with McNamara. In a post-retirement interview he expressed similar beliefs to others held by Air Force officers. “I think they thought they created the Earth and everything in it. Well, they were just patronizing as hell. They thought they were the horn with all knowledge. . . . Every new administration brings in with it young, brilliant, eager, and ignorant people. The only difference in the Kennedy Administration was that they were younger, more eager, possibly more brilliant, but also clearly more ignorant.”

The Air Force Versus Arms Control

One area in which LeMay believed his military expertise should count most was defining what constituted an effective and stable deterrent—one poised to win if deterrence failed. LeMay referred to the idea of arms limitations bringing about stability as “inverted strategy” and dubbed McNamara the “high priest” of its “cult.” He charged that these arms controllers would prefer “surrender to general war.” One of LeMay’s appointees, Lt Gen Fred Dean, the bureau chief of the military division of the Arms Control and Disarmament Agency, stated

I questioned the motivation of the people working in that business. In military terms, I would say, they considered that their effectiveness reports should be determined more by the agreements they got on disarmament rather than on furthering the cause of the nation. . . . We as a nation are committed nationally and internationally to arms control. The question is how to do it, how to have some form of arms control without doing it unilaterally, without lessening our relative strength and whatnot. The military, of course, looks at that one way, and people, not defense minded, look at it another. I felt that the defense posture was being cheated. The point of view that would keep our defense posture where it was safe and where it was relatively strong was being disregarded. I might as well have not been there for the influence I had.

To attain these objectives, LeMay alleged that McNamara had actively deceived the American public about the threat posed by the Soviet Union. For example, when McNamara counted the number of intercontinental bombers, LeMay claimed he ignored the threat of intermediate-range refuelable
aerial aircraft or those capable of one-way missions. The general did not put such tactics beyond the Soviets, who had shown such callous disregard for life before.\textsuperscript{73} He believed that such a deception was a calculated attempt by McNamara to push forward his agenda for arms control while squelching military opposition.

**Test Ban Treaties**

Distrust of McNamara and of his arms-control proposals was sorely tested by the debate over the Limited Test Ban Treaty of 1963. Air Force leadership opposed this agreement using the arguments they had developed over the 1950s, and it serves as a demonstration of their views. The Air Force belief that only military superiority provided an adequate deterrent would be challenged by this agreement through its potential stifling of technological advancement. As far as USAF leaders were concerned, restricted testing translated into loss of a technological edge, and—potentially—a dangerously ineffective deterrent.

Hopes to achieve a test ban treaty were evident long before the actual August 1963 signing. Fear of fallout spiked due to the much-publicized incident of an accidentally irradiated Japanese fishing vessel by the 1954 Castle Bravo test. This drove the beginnings of talks on limiting aboveground tests the following year. The first real breakthrough toward test limitation came with the mutually agreed but unsigned 1958 moratorium on testing in any environment. The following three years of negotiations stalled primarily on the verification issue, with the West insisting on on-site inspection. The moratorium came to a disappointing end when the Soviets resumed tests on 30 August 1961 without prior notification. Notably, Moscow tested three weapons in one week, including one with a yield of 58 megatons.\textsuperscript{74}

The number and size of the tests indicated ample prior preparation—and to Air Force leaders reinforced their perception that the Soviet Union could not be trusted. Twining later stated that he had advocated against the informal moratorium from the beginning. At the National Security Council meeting where Eisenhower announced his intention to go along with
the Soviet proposal, Twining summarized his opposition based on mistrust of the Soviets and lack of verification by telling Eisenhower “This is going to be the saddest day of your life. This is a bad mistake.” In the ensuing discussion, Twining emphasized that the United States would likely lose all its capability to test weapons as the infrastructure withered and personnel moved on. When the Soviets ended the moratorium, Twining lamented the loss of three years of “technology time” that the United States couldn't make up.76

Despite this sentiment, the United States rebuilt its enfeebled testing infrastructure and launched several comprehensive series of tests centered on developing an antiballistic missile, ensuring the survivability of missiles and warheads against a Soviet attack, and their ability to penetrate Soviet defenses. The United States also acquired more general knowledge on the effect of nuclear explosions on contemporary technology such as radars, communications, and hardened silos.

The test ban issue received renewed attention in 1962 following the Cuban Missile Crisis. President Kennedy decided to resume seeking a test ban treaty as a way to reduce tensions. He saw the period immediately following the crisis as a limited window of opportunity during which an acceptable treaty might be negotiated. On 8 June 1963, Premier Nikita S. Khruschev sent word to Kennedy that he would be willing to resume negotiations in Moscow the next month.77 Secretary of State Dean Rusk, British foreign minister Lord Alec D. Home, and Soviet foreign minister Andrei Gromyko signed the agreement on 5 August 1963 after only 10 days of negotiations.78

The treaty itself was relatively simple compared to later agreements like SALT I or START. Its provisions were correspondingly straightforward. It disallowed testing in the three environments of water, air, or space. Underground trials could continue as long as the radioactive debris did not leave the territorial limits of the testing nation.79

Although the provisions were relatively few, the expectations for the treaty were comparatively high. Rusk, testifying about the treaty before the Senate Foreign Relations Committee, outlined three areas where he stated the United States would benefit. First, the treaty would reduce tensions. Successful
adoption of the treaty would "constitute a significant step in the direction of slackening the pace of the arms race." Second, adoption of the treaty would provide a military advantage. According to Rusk, the US lead in low- and medium-yield weapons would be protected while the US lag in high-yield weapons brought about by the recent Soviet violation of the moratorium was inconsequential because there was no military requirement for such weapons. Since there was an overall balance militarily, it was a good time to put a test ban into effect. Finally, the treaty would provide an important political gain because it would set a precedent. Assuming the treaty provisions could be implemented without any embarrassment to the Soviets or with the Soviets perceiving a disadvantage, then it was more likely that future agreements could be signed.

The limited test ban would hold other important nonbilateral benefits for the United States. Specifically, it would act as an instrument against proliferation. If borderline nuclear states could be encouraged to sign on, that would be an important gain. Further, the possible future agreements that Rusk foresaw the test ban making possible included specific nonproliferation measures such as the banning of technology transfer or halting the future production of fissionable material. The second nonbilateral advantage was the one that lay at the origin of the test ban movement—reduced fallout.

Despite these alleged advantages, Air Force leaders together with the JCS opposed ratification of the treaty. This opposition was grounded in the arguments outlined above. The generalized friction with McNamara and the administration reared its head from the very beginning. Rusk went to Moscow in August and negotiated and then signed the treaty without any military advisors present. When questioned by the Senate on whether the joint chiefs had been consulted in the writing of the treaty, LeMay responded that the president had consulted each chief individually—one—and then—one—collectively. McNamara had not even met with them at all.

During his first appearance before the Congress, LeMay discussed why he and the JCS believed the treaty was not "consistent with the national security." He said two things were required for the maintenance of military superiority: continued
expansion of the understanding of weapons effects and the development and application of new weapon techniques. Thus, LeMay began his argument against the treaty with the assumption that effective deterrence required military superiority as opposed to parity, minimum deterrence, or any of the other recent developments in strategic thought. LeMay’s specific objections to ratification flowed from this general premise.

The general claimed that US testing capability was bound to deteriorate rapidly and pointed to the 1958–61 moratorium as evidence. Moreover, that experience also showed that the Soviets were capable of maintaining their capacity to resume testing rapidly if they chose. Those tests they conducted after their abrupt resumption in 1961 could have given them important leads in very high-yield weapons and ballistic missile defense. Although overdesign of American silos and defensive systems could counter some of these advances, certainty was impossible without testing.86

Furthermore, LeMay claimed, it would be impossible for the United States to catch up to the Soviet lead in high-yield weapons if the test ban went forward. He contradicted Rusk’s earlier statement by asserting a military need for such devices. In a more general sense, “limited numbers of very high yield weapons would contribute measurably to deterrence in a manner which the Soviets would understand and respect.” This reinforced the notion that the Soviets only respected superior force. More specifically, high-yield weapons would be useful against hardened targets and also would provide a psychological edge.87

LeMay went on to disparage the underlying motivation behind the test ban movement, the fear of fallout. He claimed that the fallout from all tests performed through December 1962 was only one-twentieth of the normally occurring background radiation and consequently was not a realistic health threat. The fallout threat had been played up in the public mind through “cartoons, propaganda, half-truths, and misinformation.”88 To him, a Soviet Union with nuclear superiority was far more dangerous to American security than fallout. Finally, LeMay emphasized that the Soviets had not changed and could not be trusted to stay within the treaty’s limitations.
When Sen. Strom Thurmond asked whether the Soviet goal of “world domination and enslavement” had changed, LeMay responded that it had not.89 When further questioned about likely Soviet actions if the treaty were signed, he stated simply, “I think they would cheat.”90

LeMay summarized his position by stating, “In the current world environment, preserving peace means maintaining preponderant military power. To maintain a favorable balance of military power we must have nuclear superiority. To do this I firmly believe we must continue our nuclear weapon development programs and be able to conduct nuclear testing as required.”91 This opinion, grounded in a firm belief in the need for nuclear superiority and a grave mistrust of the Soviet Union, was a clear and consistent outgrowth of Air Force positions on effective deterrence stemming from the 1950s.

A Reversal on Test Bans

What happened next is somewhat unclear. LeMay appeared before the same committee a month later, but had apparently modified his opinion. Twining later speculated about the shift in LeMay’s and the JCS’s position “they didn’t want to sign, any of them, oh no, but the pressure was on them and on them, and finally, this was an out, I guess—‘political considerations are overriding.’”92 In other words, their military opinion and expertise were overridden by McNamara’s political requirements.

Despite this change, LeMay had not entirely changed his views. Although he and the joint chiefs were now in favor of the treaty, that support was contingent on four conditions. The United States must continue a vigorous underground testing program, maintain national labs for continued scientific research, make preparations to ensure speedy resumption of atmospheric testing, and vigorously develop “national technical means” to verify Soviet compliance.93 If, and only if, the United States met these requirements could the political benefits of the treaty be considered to outweigh the military risks.

Even if Chief of Staff LeMay reluctantly agreed to the treaty, SAC commander Gen Thomas Power did not. In his testimony before the same committee, he reiterated most of LeMay’s earlier objections. Power also started from the belief that military
superiority was the key to deterrence. In contrast to the new JCS position, he had “little confidence that we can and will maintain that military superiority under the test ban treaty than . . . under a condition in which we do not have a test ban treaty.”94 America’s current military superiority would be endangered by the treaty because of a number of unknowns that could only be adequately answered through testing. Specifically, he wanted to test high-yield weapons and perform a full test (including nuclear detonation) with an ICBM reentry vehicle.95 Like LeMay, he also believed the Soviets had not changed their basic unreliability. For example he believed that, even if the Soviets kept within the stated boundaries of the treaty, they could still arrange to conduct tests in the People’s Republic of China.96 Ultimately, Power stated that, “We have had overwhelming superiority, and whenever somebody examined the feasibility of attacking the United States, they immediately had to reject it because it was ridiculous. I think that is a sound position to hold if you can.”97

Both LeMay and Power assumed positions consistent with Air Force policy developed over the previous decade. A test ban without adequate verification would jeopardize the technological edge required for a superior deterrent. Against an implacable and demonstrated untrustworthy Soviet opponent, the American deterrent, and hence national security, would be in grave jeopardy.

Conclusion

Fewer than 10 years later, the Air Force took a decidedly more engaged role in the Strategic Arms Limitation Treaty negotiations. What led to that change? Most importantly, Air Force leadership had passed from the senior World War II bomber generals to more junior—and more flexible—leaders. Whether they embraced—or were simply resigned to—arms control is less relevant than the fact that they cooperated with the new initiatives. Changing personalities were matched by a changing strategic balance. The American quantitative lead in 1963 had eroded to rough parity by 1972. Even had the Twinings and LeMays still held sway over the Air Force, there was no longer a superiority to maintain. Finally, and perhaps

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in the end most stabilizing, maturing reconnaissance technology provided reliable means of verifying Soviet compliance to a degree not remotely possible in the 1950s.

Nonetheless, Air Force resistance to arms control and disarmament in the 1950s and early 1960s took place in a decidedly more threatening and uncertain world than that of détente a decade later. The first steps toward stabilizing the arms race had to be taken in a dark environment where only an enemy perceived to be inherently untrustworthy had, in the minds of the Air Force’s senior leadership, only been held back by the overwhelming force of Strategic Air Command. They firmly believed that maintaining that force was the only way to keep the Free World intact. As Power said before the Senate Armed Services Committee, “the surest way to cause a war, nuclear war or any war, is to disarm.”

Notes

1. Many thanks are due for the aid I received on this paper. Dr. Michael Wheeler was an immense help in refining my argument and in pointing toward valuable sources. Dr. Roger Lerseth, Dr. David Snead, Lt Col John Shaw, Lt Col John Farquhar, Capt Grant Weller, and Mr. David Walker all provided excellent comments on both style and substance. The staff of the Eisenhower Library were vital in ensuring a short trip became a valuable one as well.


5. Ibid., 11–12.


8. Smoke, 130.


10. Ibid., 139.

11. Ibid., 145.
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13. Ibid., 5.
17. “Objectives and Problems of the Plans Directorate: A Presentation to Selected Members of the CIA and Guests,” RG 341, NARA.
23. “Presentation by Colonel J. L. Dickman to the directors of the RAND Corporation,” RG 341, NARA, 10.
26. Twining, Secretary’s Briefing, 6.
29. Joint Chiefs of Staff, memorandum to the Secretary of Defense, subject: “Progress Report on the Control of Armaments by the Special Assistant to the President on Disarmament,” in *Disarmament*, vol. 1 (5), Subject Series, Alphabetic Subseries, Box 11, OSSAN, Eisenhower Library, 26 June 1955.
36. Ibid.
37. Ibid., 4.
38. Ibid., 5.
39. Ibid., 6.
40. Ibid., 7.
41. Ibid., 12.
42. Air Force Historical Research Agency (AFHRA), Brig Gen R. C. Richardson Papers, 168.7010-1 through 44, “An Analysis of the Fallacy of the Concept of Graduated Deterrence,” 29 March 1962, AFXPD/LR.
43. Ibid.
45. Ibid., 5.
48. Ibid.
49. NARA, JCS 1731/256, 2936.
51. NARA, JCS 1731/256, 2935.
58. Eisenhower Library, OSSAN, Title illegible, 4.
60. Eisenhower Library, Ann Whitman Series, DDE Diary, Box 15, May 1956, Goodpaster, Memorandum of Conference with the President, 24 May 1956, 10:30 A.M.
61. Ibid.
62. Worden, 112.
63. Ibid., 112–13.
64. Ibid., 121.
65. Ibid., 135.
66. Ibid., 148.
67. Ibid., 116.
68. Ibid., 115.


71. Ibid., 277.


73. Ibid., 288–90.


76. Ibid., 237–38.


78. Ibid., 9.

79. Smoke, 136.


81. Ibid., 4–5.

82. Ibid.

83. Ibid.


86. Ibid., 353.

87. Ibid., 355.

88. Ibid., 356.

89. Ibid., 378.

90. Ibid.

91. Ibid., 356.


93. Carnesale, 28.


95. Ibid., 781.

96. Ibid., 796.

97. Ibid., 788.

98. Ibid., 810.
PART II

Strategic Arms Limitations, 1969–80
The period from 1969 to 1980 marked a new era of détente between the Soviet Union and the United States, with the negotiation of offensive and defensive arms limitations. The Interim Agreement on the Limitation of Offensive Strategic Weapons (SALT I) and the Antiballistic Missile (ABM) treaties signed by President Nixon and ratified in 1972, as well as the SALT II treaty that was signed by President Jimmy Carter in 1979 but never ratified, ushered in a period of bilateral negotiations as a diplomatic means of enhancing both countries' national security at a time when tensions were high, when there were conflicts of interests, and outright armed conflict between proxies of the two nations across the globe. The motivations for SALT were complex, and for the United States varied a great deal amongst the various political actors and bureaucracies. However, it is clear that the massive Soviet buildup of the 1960s brought the two nations to a situation where there was for all practical purposes parity in strategic nuclear weapons, and the United States sought to enhance strategic stability to prevent an all-out nuclear war, as well as to lower the costs associated with preparing for war.

Certainly there were a number of significant bilateral and multilateral negotiations between the United States and the USSR during this period, and between the North Atlantic Treaty Organization (NATO) and Warsaw Pact communities. The Biological Weapons Convention (BWC) of 1972, the Threshold Test Ban Treaty (TTBT) of 1974, and the Peaceful Nuclear Explosions Treaty (PNET) of 1976 resulted in important limitations on biological and nuclear weapons and weapons testing. In addition, negotiations began on conventional forces, including the Council on Security and Cooperation in Europe and on Mutual Balanced Force Reductions by NATO and the
Warsaw Pact. However, the focus during this period was on bilateral negotiations between the United States and the Soviet Union. Hence, this chapter focuses on the SALT and ABM negotiations that were the centerpiece of strategic arms control during the period from 1968 to 1980. It delves into the dynamics of the US interagency process through a detailed analysis of the negotiation process between the two countries, as well as amongst the US agencies. This chapter pays particular attention to the Department of Defense (DOD) strategies, positions, and influence during the arms talks, and concludes with comments on the implications of the SALT and ABM agreements.

**SALT I and ABM Treaties (1969–72)**

In 1968 at the ceremonial signing of the Nonproliferation Treaty, the United States and the USSR announced their intent to begin bilateral strategic arms limitations talks. The impetus for talks was twofold. First, the Soviet buildup of strategic weapons had led to a situation of nuclear parity between the two great powers. The two sides felt “a mutual need to solemnize the parity principle . . . to establish an acceptance by each side of the other’s ability to inflict unacceptable retribution in response to a nuclear attack.”\(^1\) Second, as Johnson had noted publicly in January 1967, the Soviets had begun construction of a limited antimissile defense around Moscow, to which his administration reluctantly responded by announcing in September that the United States intended to deploy the Sentinel light ABM system, although officially it was a defense against the emerging Chinese ballistic missile threat.\(^2\) It was apparent that, without some form of negotiated limitations, both the Soviets and the Americans would confront the real potential for an offensive and defensive arms race. However, the Soviet invasion of Czechoslovakia in August 1968 and Richard Nixon’s election that November delayed the beginning of talks.

The focus of arms control shifted under the Nixon Administration. Nixon and his national security advisor, Henry Kissinger, saw arms control as a political tool to be used to open an “era of negotiation” with the Soviet Union, as well as to win points with the American public.\(^3\) Although the Soviets contacted Nixon on the day of his inauguration in January
1969, indicating their interest in beginning strategic arms limitations talks, Nixon and Kissinger deferred any decision for several months during which the National Security Council led a review of US strategic nuclear forces and doctrine. The delay was certainly warranted as the new president confronted a complex set of national security concerns. Secretary of Defense Melvin Laird noted, “The first major task before us was Vietnam—a war with no end in sight.” Writing at the end of his term in 1973, he noted that Vietnam had overshadowed other national security challenges and an environment that was dominated by four realities.

The strategic reality of growing Soviet momentum across the broad spectrum of military strength taking them from a position of clear inferiority in the early 1960’s to virtual strategic nuclear parity [in 1973]. The fiscal reality involving not only the heavy pressure in Congress for reduced defense spending, but upward pressures of inflation on the cost of everything we need to maintain adequate military forces. The manpower reality, reflecting little understood people costs. . . . It cost us in FY 1973 [with the end of the draft] some $230 billion more than it did in 1964 for some 133,000 fewer people. The political reality, complicating severely the other three realities from the standpoint of: the political and psychological effects of Soviet policy and growing presence around the world, such as in the Mediterranean and the Middle East; pressures from our allies to maintain forward deployed United States forces; congressional pressures to reduce those forces; or gaining broad political support here at home for doing all the things we have to do to assure our national security interests while continuing to reorder our national priorities (emphasis in original).

By any standard the strategic environment that Nixon faced from 1969 to 1972 was a challenging one. Internationally, the Soviet Union was now the equal of the United States in terms of nuclear weapons, and Moscow’s conventional forces and the proxies it armed were increasingly active around the globe. US relations with its NATO allies were somewhat strained as West Germany’s policy of Ostpolitik challenged US control over East-West relations. China was emerging as a potential nuclear threat. Above all, the United States had 550,000 troops mired in Vietnam, and there were no signs of victory on the horizon. At the same time, domestically the opposition to the Vietnam War led to a credibility gap of the military, and there were calls for the end of the draft. Budget deficits, inflation, and an
unpopular war were leading Congress to call for unilateral cuts in US troops in Europe, and cuts in the overall defense budget.

The first year of the Nixon Administration was used to review these and other challenges. The Nixon Doctrine and the implementing strategy of realistic deterrence that resulted from that review set forth a new direction for US foreign policy and a new national security strategy. Seeking to reconcile the increasing international challenges with decreasing domestic support and resources, Nixon’s aim was to “seek world stability through a more equitable sharing of the responsibilities for deterrence with our allies.” It sought “peace through partnership with our allies” with increased foreign assistance and decreased emphasis on the use of US troops, and promised a nuclear shield “for any nation whose survival we judge to be vital to our own security,” while “harmonizing” doctrine and capability with a 1½ war strategy “adequate for simultaneously meeting a major Communist attack in either Europe or Asia, assisting Allies against non-Chinese threats in Asia, and contending with a contingency elsewhere.” Laird noted that the new strategy also included “a willingness to negotiate” in an attempt to seek strategic “sufficiency through mutual agreement and restraint rather than through unbounded competition.”

Ultimately, arms-control negotiations made sense for many reasons, not the least of those being the DOD’s assessment of the continuing rapid expansion of Soviet strategic offensive capabilities. A brief look at the balance of US and Soviet strategic forces, as covered in the 1971 Secretary of Defense’s report to Congress is instructive. He noted that the Soviets had 1,110 intercontinental ballistic missile (ICBM) launchers to the US’s 1,054, with more than 275 launchers for the large SS-9, and a projection of over 1,250 operational ICBMs on launchers by mid-1970—compared to 250 ICBM launchers in 1966. The United States had 41 Polaris submarines; the Soviets were projected to have from 35 to 50 equivalent “Y” Class submarines by 1974–75. Only in the heavy bomber leg of the triad would the United States hold an advantage for the foreseeable future—about 200 for the USSR, over 500 for the United States. Furthermore, the Soviets were proceeding with their Moscow-based ABM system.
It was not surprising, given the strategic environment and the domestic support for arms limitations, that Nixon and Kissinger decided in June 1969 to proceed on arms-control talks with the Soviets, and after a few months of Soviet delay, preliminary talks began in Vienna in November 1969.

**US and Soviet Objectives for SALT I/ABM Negotiations**

It is not an easy task to state decisively what the objectives of the two sides were going into negotiations. First, the Soviet system precluded a clear insight into the motivations of the Soviet leadership. Second, even on the American side, there were numerous, and sometimes conflicting, objectives held by the various bureaucracies and their chief participants in the frontline and behind-the-scenes aspects of the negotiations. The following discussion attempts to present the broad objectives of both. The tensions amongst the different US agencies about the objectives of SALT are discussed later under interagency debates during the negotiations.11

Nixon’s handwritten notes on the cover of a recently declassified Top Secret Sentinel ABM system memo from March 1969 show that he was greatly concerned about the continued Soviet offensive strategic buildup. He wrote: “1) They have closed the gap; 2) They continue to increase; 3) They want to talk; 4) We must see that the gap is not widened on other side.”12 Nixon saw SALT as a means to address his concerns. In his memoir The Real War, President Nixon laid out his three primary goals for SALT in 1969. First, he saw long-term, equitable arms-control limitations agreements as a means to enhancing strategic stability with lower arms expenditures. He noted that Congress was not receptive to increasing strategic force expenditures, as evidenced by the Senate’s passage of the Safeguard ABM program by one vote. Second, Nixon saw SALT as a means of buying time, while testing the Soviets’ intentions regarding arms limitations; if they showed themselves not to be serious, that would provide him with evidence he could use to get congressional support for boosting strategic programs. Third, he saw the possibility of moderating the Soviet buildup and of a new era of improved relations, characterized by cooperation and negotiation rather than conflict—essentially a
period of détente, rather than of military competition. However, by 1971 he had lowered his goals for SALT due to the Soviet's continued strategic buildup. At that time he focused on obtaining offensive limitations that would halt the growth of Soviet ICBM launchers.\textsuperscript{13}

A crucial aspect of Nixon's (and Kissinger's) approach was the linkage of political and military issues, as well as the linkage between US-Soviet relations in different parts of the world. Kissinger quotes a Nixon memo (that Kissinger himself had drafted) in his \textit{White House Years} memoir.

I am convinced that the great issues are fundamentally interrelated. I do not mean this to establish artificial linkages between specific elements of one or another issue or between tactical steps that we may elect to take. But I do believe that crisis or confrontation in one place and real cooperation in another cannot long be sustained simultaneously. \ldots I believe that the Soviet leaders should be brought to understand that they cannot expect to reap the benefits of cooperation in one area while seeking to take advantage of tension or confrontation elsewhere.\textsuperscript{14}

Nixon and Kissinger were determined that the Soviets would not get a SALT agreement without some consideration on other issues of import to the United States. In particular, Nixon and Kissinger were interested in achieving Soviet cooperation on Vietnam in return for US participation in arms-control negotiations.\textsuperscript{15} This would provide a bonus for Nixon’s domestic political popularity as well, helping to soften Nixon’s image as a “warmonger.”\textsuperscript{16}

The Soviet leaders’ objectives for SALT were much less readily discernible. In fact it was only during the first round of preliminary talks, five weeks in Helsinki in November and December 1969, that the Americans got a sense of the Soviets’ major objectives. The State Department’s executive officer for the SALT delegation, Raymond Garthoff, noted the surprise of the American team at that first set of meetings when the Soviets indicated their desire to limit ABM deployments geographically and numerically—not excluding the possibility of a complete ban on ABMs.\textsuperscript{17} The ABM proposal was significant because it heralded a change of Soviet doctrine, indicating their acceptance of the logic of mutually assured destruction that recognized defensive forces as a potential threat to peace.\textsuperscript{18}
A second Soviet objective was to include all weapons capable of nuclear attack on the territories of the Soviet Union and the United States in the strategic offensive arms talks, that is NATO forward-based systems (FBS). A noteworthy omission was the issue of multiple independently targeted reentry vehicle (MIRV) limitations, although Garthoff noted that in later informal discussions the Soviets indicated surprise that the Americans had not brought up the issue of MIRVs.19

In his book, chief SALT negotiator Gerard Smith attributed additional political and security-related motivations to the Soviets’ interest in negotiations. First, the Soviets wanted to be formally recognized as a strategic equal, and hence a political equal. That is corroborated by a Soviet commentator who said that the recognition of parity between the United States and the Soviets was “the very essence” of the SALT agreements.20 Second, like the United States, the USSR was interested in diverting resources from military spending to civilian needs, and hence wanted to avoid a strategic arms race. Lastly, Smith believed that the Soviets saw China as the biggest security threat and they wanted to free up resources and energy to focus on that threat on their eastern front.21 In addition, although Smith did not discuss it, some thought the Soviets wanted to use SALT to drive a wedge between the United States and its NATO allies.22

SALT I/ABM: Interagency Negotiations

To understand how the SALT I and ABM treaties were negotiated, it is essential to understand the negotiating process—the two separate channels in which negotiations took place—and the extraordinary influence that one man, Henry Kissinger, exercised in those negotiations. In fact, Nixon saw to it that Kissinger exercised unprecedented authority over the entire national security policy-making apparatus. As the president’s national security advisor, Kissinger directed government agencies—such as State, Defense, Central Intelligence Agency (CIA), and Arms Control and Disarmament Agency (ACDA)—to prepare studies on various policy proposals. Kissinger chaired the National Security Council (NSC), and the NSC Review Group that gave him the authority to approve departmental
proposals before they reached the president. Kissinger also
chaired the Verification Panel that had direct responsibility for
all SALT issues.23 As Kissinger put it to Soviet Ambassador
Anatoly F. Dobrynin, “Only two people can answer precisely at
any given moment the position of the USA on this or that
question: these are President Nixon and Kissinger.”24

It is important to recognize that while Kissinger exercised an
inordinate amount of influence on the SALT negotiations, he
was still constrained by the realities of domestic politics. The
congressional push for defense spending cuts, its opposition
to certain programs and support of others, and its clamor for
some type of arms-control agreement, as well as the views of
different executive agencies certainly limited what the United
States could propose in negotiations—and the Soviets knew
that. In particular, Kissinger makes it clear in his analysis of
the negotiations that the views and concerns of the military,
the Joint Chiefs of Staff (JCS) and the Department of Defense
(DOD), were paramount in his development and analysis of
various negotiation proposals.25 If the joint chiefs spoke out
against the ratification of any SALT treaty, it would never
make it through the Senate. When Secretary of Defense Laird
advocated continuing the development of ABM technology in
case of “treaty breakout” by the Soviets, there were obviously
going to be limits on what Kissinger could negotiate.26

Finally, it should be recognized that the various agencies’
different positions on SALT issues were largely a result of the
natural differences in philosophies and worldviews prevalent
within the agencies. For instance, the State Department and
the Arms Control and Disarmament Agency personnel tended
to place more trust in the Soviets, tended to favor a “show of
good faith,” and saw arms control as an ends in and of itself—
opposing the Nixon/Kissinger policy of linkage, which saw arms
control as a means of gaining political leverage. Ambassador
Gerard Smith, director of ACDA and chief negotiator for the US
SALT delegation, represented the ACDA and State Department
thinking about the goals of SALT. In his book Doubletalk,
Smith said, “in this nuclear age, when rival nations live under
the threat of almost instant destruction, a chance to reduce
that threat has independent value. Adversary nations should
grasp any such opportunity even though their other relations are not improving.”

Smith favored a ban on ABMs and a moratorium on MIRV testing, and sought a quick start to negotiations, before a MIRV testing ban would be too late. He noted in a letter to Secretary of State Rogers that it would be better in the long run to keep MIRVs out of both countries’ arsenals because it would bring increased instability, and he saw the weak effort to ban MIRVs as “the leading lost opportunity” of the negotiations. ACDA and the State Department preferred a broad SALT agreement, sharing the doctrine that deterrence, rather than defense, was the rational strategic policy that the United States should pursue.

The Office of the Secretary of Defense (OSD), the JCS, and the NSC, on the other hand, tended to be more skeptical about the Soviets’ motives and preferred to negotiate from a position of strength. They did not want to lose access to new technology—such as MIRVs or futuristic ABM technology, and sought to minimize constraints. Ambassador Smith believed that Secretary of Defense Laird’s primary concern was to use the negotiations as an opportunity to make Americans aware of the Soviet strategic buildup and, thereby, to put pressure on Congress to fund strategic programs. As Smith put it, “Nothing concentrated the minds of American leaders on the advantages of SALT as much as the clear and present danger of one-sided arms control in the form of congressional cuts in US defense budgets.” On the other hand, the Joint Chiefs of Staff were, according to Smith, generally supportive of SALT, probably due to the lack of utility of additional offensive launchers, unless widespread ABM defensive systems were deployed.

Perhaps the one area of agreement going into the SALT negotiations—amongst the US agencies, as well as between the US and Soviet teams—was that any arms-control agreement had to be verifiable by “national technical means” (NTM) such as satellites and radar systems.

The SALT negotiations officially opened in Vienna in April of 1970. In the four months since the preliminary talks with the Soviet team in Helsinki, the US team had focused in on four options developed by the NSC Verification Panel.
**Option A**: Limit ICBMs and submarine-launched ballistic missiles (SLBM) to the current US total of 1,170; freeze strategic bombers at 527 US to 195 USSR; ABM at Safeguard level of 12 sites.

**Option B**: Same offensive limits as Option A. ABM limited to protection of the National Command Authorities (NCA) or banned ABM.

**Option C**: Same offensive limits as Option A. Ban on MIRVs provided the Soviets agree to on-site inspection. ABM: NCA or banned.

**Option D**: Major offensive cuts in ICBMs and SLBMs, from 1,710 reduce 100 per year until both sides reach a level of 1,000 by 1978. ABM: NCA or banned. No ban on MIRVs.

The problem, of course, was getting agreement on one of these options. Kissinger and Garthoff noted the following breakout in agency support for the different options:34

**Option A**: Preferred option of OSD and JCS.

**Option B**: NSC (Kissinger) preferred position, but wanted Safeguard ABM.

**Option C**: Arms Control and Disarmament Agency (ACDA) and State preferred option.

**Option D**: ACDA and OSD 2d choice.

As the chair of the Verification Panel, Kissinger took the group's recommendations to Nixon. However, while Kissinger favored Option B, he recommended C and D as the US opening positions.

This would respond to Congressional and bureaucratic supporters of MIRV and ABM bans; it would give us the positive public posture of having favored comprehensive limitations. If the Soviets accepted the proposals, we would have made a major step forward. If the Soviets rejected them, as I firmly expected, we could then put forward Option B from a much stronger domestic and bureaucratic position. If the Soviets surprised us by accepting our offer, the result would be compatible with our security.35

When it was down to the choice of Option C or Option D, Garthoff noted that State and ACDA both favored Option C with its NCA or zero ABM, a freeze on offensive missiles, and
a ban on deployment of MIRVs. The DOD favored Option D, because it did not call for limiting MIRVs, although he notes the JCS did not agree with the NCA or zero ABM proposal. Finally, Garthoff noted Kissinger’s intention that neither C nor D would be accepted, and that Kissinger had added provisions for on-site verification for the MIRV ban and unilateral cuts for Soviet offensive missiles, but none for the United States.36

**US-Soviet Negotiations on SALT I/ABM**

The top priority of the United States in the SALT negotiations was to limit Soviet offensive weapons to assure (or at least enhance) the survivability of the Minuteman ICBMs. The Soviets' top priority was to conclude an ABM treaty that banned the ABM or limited ABMs to NCA protection. The United States was determined not to conclude any treaty on defensive limitations without a concurrent agreement on offensive arms limits. Furthermore, the United States was determined not to count US forward-based nuclear systems, primarily aircraft based in Europe and carrier forces, in any offensive limits, seeing any such agreement as a threat to our allies' perception of our commitment to NATO. The Soviets sought offensive limits that would count all US FBS and heavy bombers, seeing any weapon that could reach the USSR as a strategic threat. And while the United States wanted to put qualitative limits on strategic launchers to prevent the Soviets from jeopardizing Minuteman survivability with heavy missiles, the Soviets wanted to avoid any qualitative limitations on their missiles since they were developing new ICBMs and SLBMs at the time.

Given the disparate and conflicting objectives of the two countries, it is not surprising that it took over two years of negotiations to come to an agreement. From the very beginning, there were several issues that would require significant compromise before the United States and USSR could reach any agreement. Three major areas of disagreement involved MIRV limitations, ABM limitations, and what systems were to be covered by the treaty—particularly FBS, SLBMs, and modernized ICBMs.
MIRV Limitations

From the first months of the Nixon Administration, task forces had been developing studies of what could and what should be accomplished under the auspices of SALT. The issue of the new MIRV technology was a major consideration. In fact, out of nine options that came out of those initial studies, four favored a ban on MIRVs. The State Department (under Secretary of State Rogers) and ACDA (under Ambassador Smith) urged the Nixon Administration to push ahead with SALT earlier, rather than later, partly due to their concern that talks begin before the US completed the testing of the MIRV, which would make it all but impossible to negotiate a MIRV ban under SALT. Indeed, a 9 April 1970 Senate resolution urged President Nixon to propose the immediate suspension of development on all offensive and defensive nuclear strategic weapons, and Sen. Edmund Muskie advocated an “interim strategic standstill” that included an end to MIRV flight testing. The reason was that a MIRV ban would only be readily verifiable using NTM if it involved a ban on the testing, and such a ban would only be effective before testing was complete. Once either side was ready to deploy, NTM would not be sufficient for verification.

How was it that only one of the four options considered by Nixon prior to the beginning of negotiations in Vienna in May 1970 included any limitations on MIRV, and even that offer was tied to a stipulation that any MIRV ban require on-site verification? The answer, according to Kissinger and State Department SALT delegation member Raymond Garthoff, is that the OSD and the JCS were “passionately in favor of MIRV,” and Secretary of Defense Laird, Deputy Secretary of Defense Packard, and General Wheeler, chairman of the JCS, demanded on-site verification of any MIRV limitation. Garthoff notes that the JCS and OSD were, above all, protective of the imminent American deployment of MIRV. Kissinger remarked that civilian and military defense officials were counting on MIRV to counter the increases in Soviet offensive missile launchers, as well as to penetrate a Soviet ABM system. Ultimately, Kissinger felt he had little recourse, because he needed the political support of the Pentagon and the
Pentagon’s conservative congressional allies, and that could only be had if MIRV limits were avoided. In fact, the issue of on-site verification that accompanied the MIRV ban is instructive in that it demonstrates how some offers were made to the Soviets solely for political purposes, rather than for serious consideration. Both Smith and Garthoff discuss at some length how even the CIA deemed on-site inspections for a ban on flight testing of MIRV to be unnecessary—or even undesirable from a national security perspective—but that the requirement was added by Nixon and Kissinger after the NSC Verification Panel reviewed the final four options to placate the JCS and the OSD. In fact, the military representatives had indicated during NSC meetings that they saw the on-site inspection requirement as a means of ensuring the Soviets would not accept a MIRV ban. They were correct. Garthoff noted how his counterpart on the Soviet delegation had been busily taking notes on the US proposal to ban MIRVs, but that he “simply put down his pen after the on-site inspection provision was read.” In short, the Pentagon did not want a ban on MIRV; so MIRV was, for all practical purposes, never “on the table.”

FBS, SLBMs, and Missile Modernization

Two major disagreements plagued the SALT negotiations from the beginning. First, the Soviets insisted that any limitations on offensive strategic arms count the forward-based systems—US bombers and aircraft carriers based in the European theater whose missiles could reach Soviet territory. Second, the United States insisted that there could be no agreement on defensive limitations without a concurrent agreement on offensive limitations. While ACDA and the State Department would have favored some concessions to the Soviet concern about the strategic nature of FBS, the White House would not and could not do so, due to the trouble it would have caused with our NATO allies and with the joint chiefs. As Kissinger stated in a congressional briefing in June 1971:

The Soviets believed that strategic means any weapons system capable of reaching the Soviet Union or the United States. This would have included our forward-based aircraft and carrier forces, but excluded
Soviet intermediate-range rockets aimed at Europe and other areas. We opposed this approach since it would have prejudiced our alliance commitments and raised a distinction between our own security and that of our European allies.47

Gerard Smith noted that a “breakthrough” occurred in May 1971 when Kissinger accepted the Soviet proposal to conclude ABM limitations in conjunction with an interim agreement to freeze offensive missile launchers, rather than concluding a comprehensive defensive and offensive arms limitation agreement.48 However, given the recent Soviet buildup, the freeze would mean a Soviet advantage in both ICBM and SLBM missile launchers. The agreement was concluded in the “back channel” negotiations between Kissinger and Dobrynin, however, and apparently Kissinger had inadvertently indicated to Dobrynin that the freeze might or might not include SLBMs—a significant oversight that both Smith and Garthoff indicated was to cost much time and effort to correct.49 It was a crucial oversight. Apparently Kissinger was concentrating on the Pentagon’s and Congress's concern with the Soviet ICBM buildup, and was ignorant of the fact that the United States did not have the programs or capacity to construct or deploy additional SLBM-carrying submarines for several years.50 During the following months, when the SALT delegation attempted to reincorporate SLBMs into the offensive arms freeze, the Soviets replayed their “then you must count FBS” card.51 In the end, Kissinger was only able to achieve a SLBM “breakthrough” in April 1972, by allowing the Soviets what Garthoff and Smith considered to be an overly generous number of submarines and SLBMs under the “freeze,” selling the Soviets the inclusion of the SLBMs only because the high numbers would not interfere with their continued SLBM buildup.52 Furthermore, Kissinger's agreement violated the US principle of not including FBS, since that would count both British and French submarines in the agreement. Based on absolute worst-case CIA projections, Kissinger was able to convince JCS chairman Adm Thomas H. Moorer that the 950 SLBM/62 submarines limit was, in fact, a limitation; although Kissinger’s pressure on Moorer and Secretary of Defense Laird to support the SALT SLBM limits in return for White House
support for an accelerated Trident SSBN-SLBM program was undoubtedly also influential. ACDA’s Smith and Secretary of State Rogers argued that it would be better to drop the SLBM freeze.

Another issue related to freeze limits negotiated by Kissinger in the back channels that was left to be worked out by the SALT negotiation team involved Kissinger’s agreement that within the numerical limits of the freeze on ICBMs and modern large ICBMs (like the SS-9) there would be no limitations on modernization or replacement of missiles or missile launchers. However, to achieve verifiable limits on heavy ICBMs, the United States needed to get constraints on modernization. Specifically, there needed to be a limit on the increases in the size of silos undergoing modernization, as well as a definition of what constituted a large or heavy missile. In the end, the United States succeeded at neither task, relying instead on a vague agreement that ICBM silo size could not be significantly increased, and never achieving a definition of what constituted a heavy missile, or any agreement on limiting changes in missile volume, leaving those definitions for the SALT II negotiators to work out.

**Implications of SALT I and ABM Treaties**

The SALT I and ABM treaties have had their critics. To some it seemed that the unequal numbers frozen in the interim agreement were a threat to US security, and that the US negotiators had given up too much for too little. For others, the United States wasted an opportunity to ban a costly and dangerous new technology when it failed to include restrictions or a complete ban on MIRV technology. However, considering the various agencies that ultimately supported the treaties, as well as their successful ratification by the Senate, there were clearly significant benefits associated directly and indirectly with these first arms limitations. While the freeze on offensive ballistic missile launchers did not appreciably limit the damages if war were to occur, the ABM and SALT I treaties did have significant benefits in terms of minimizing the likelihood of war between the two superpowers, and it may have had some effect in terms of reducing the costs of preparing for war.
As the first bilateral negotiations on arms limitations between the two superpowers, the SALT treaties were both a success and a failure. State Department SALT delegate and scholar Raymond Garthoff made the following assessment of the agreements:

The SALT I agreements of 1972 constituted a substantial step in strategic arms control, although an incomplete one owing to the weak constraints involved in the interim freeze on strategic offensive missiles and the unresolved differences on the whole complex of offensive systems. . . . It also served the mundane aims of halting the Soviet buildup of ICBM launchers without constraining the U.S. buildup of MIRV.56

Certainly SALT placed an upper limit on the up until then massive Soviet buildup of offensive strategic weapons launchers, and the ABM Treaty prevented an arms race fueled by a buildup of antiballistic missile defense systems. Due to the efforts of the American negotiating team, the ABM limitations also extended to futuristic technologies, further reducing the threat that defensive systems might lead to spiraling costs for offensive arms to counter them. So, there were almost certainly some savings in military spending realized by both sides.

However, Garthoff, Kissinger, and Ambassador Smith have all remarked on the opportunity lost when the SALT negotiations failed to “keep the genie in the bottle” when it came to MIRV technology. As discussed above, the military was strongly opposed to giving up the MIRV that was seen as essential to balance the overwhelming advantage the Soviets were gaining with their massive ICBM and SLBM programs. Furthermore, the military was understandably reluctant to forego the MIRV before it was certain that the two countries would indeed reach an ABM agreement. The problem was that it was inevitable that the Soviets would also soon develop MIRV technology, which would further exacerbate the strategic imbalance in ICBMs. Even Kissinger admitted as much in a press conference once it was clear that the Soviets were also developing MIRVs saying, “I wish I had thought through the implications of a MIRVed world more thoughtfully in 1969 and 1970 than I did.”57 Perhaps, with 20-20 hindsight, it would have been possible to delay the MIRV testing which would have made a MIRV ban possible.
In terms of the negotiation process itself, Smith’s and Garthoff’s reviews of the SALT negotiations provide some criticisms of back-channel approaches to negotiations. In particular, they note the opportunities for miscommunication, and the distrust that mixed signals engendered on both Soviet and the US teams. Unfortunately for the United States, the Soviet SALT delegation was much better informed about the issues being discussed and the deals being made in the Kissinger back channels, which put the US delegation at a distinct disadvantage and which also reduced the level of trust between the delegation and the White House. Furthermore, some of the “loopholes” and later disagreements regarding potential treaty violations might have been avoided had there been more coordination between the two negotiation tracks, particularly on the American side.58

While there has been considerable debate in recent years about the potential for the United States unilaterally pulling out of the ABM Treaty to work towards a national missile defense system to guard against ballistic missile attacks by rogue nations, the ABM Treaty undoubtedly served a valuable purpose during the Cold War. A system of antiballistic missile systems—a thick defense—would have worked havoc on the strategic doctrine of mutually assured destruction that provided stability during the Cold War. With the Soviets’ shift towards thinking of defensive systems as potentially destabilizing, it was more important than ever to prevent a defensive-offensive weapons arms race from spiraling out of control. In addition, the realities of domestic politics made it unlikely that the United States would have been able to field an ABM system, potentially permitting the Soviets to overcome the Americans’ temporary advantage in defensive systems. The related agreement of both countries on the necessity to allow national technical means of verification, primarily through satellite and other remote sensing, grew out of the mutual recognition that strategic stability required a certain level of transparency and predictability.

Probably the clearest benefit of the SALT negotiations was the opening up of an era of détente—just as Nixon and Kissinger had hoped. The negotiations were valuable in and of
themselves in relaxing the tensions between two adversaries. It was "negotiation as a substitute for confrontation." Kissinger said:

In my view SALT was not a cure-all. I saw in it an opportunity to redress the strategic balance but also to create the conditions for political restraint without which escalating crises were in my view inevitable, whatever happened to SALT. Militarily, SALT would delay the Soviet buildup and thus the ultimate threat to our land-based forces. It could help us preserve the sinews of our defense and to catch up numerically in the face of the stormy dissent produced by Vietnam. SALT could begin the process of mutual restraint without which mankind would sooner or later face Armageddon.

SALT II (1972–79)

The domestic context of the SALT II negotiations was somewhat less favorable than it had been for SALT I. First, there had been significant congressional dissatisfaction with the inequality of the limits on strategic offensive weapons negotiated under the interim agreement. As a result, while the Senate ratified SALT I, they stipulated in the Jackson Amendment, proposed by Sen. "Scoop" Jackson, that any future arms-control agreements would only be acceptable if they included equal levels of strategic offensive weapons, signaling that future arms-control agreements would face great scrutiny in the Senate. Second, President Nixon’s credibility and influence in foreign policy, including the SALT II negotiations, were adversely impacted by the Watergate scandal and cover-up that consumed much of the administration’s time and focus. In addition, the public support for détente, as well as the public’s trust that the Soviet Union would abide by negotiated limitations began to waiver in the mid-1970s. However, there was still the impetus for arms control provided by congressional and public desire for reduced defense budgets, as well as by the fact that the Soviet offensive strategic weapons buildup was continuing at an alarming rate. Finally, while the Soviets would have been happy to retain the numerical advantages in launchers permitted under the interim SALT I agreement, the United States could not maintain that status quo—particularly as the
Soviets began to replace their old ICBMs with new, more accurate, MIRVed ICBMs.

It was difficult to keep up the momentum in the negotiations with Nixon’s resignation and with some of the personnel changes that came with the Ford and Carter administrations. All three of the presidents during this timeframe—Nixon, Ford, and Carter—were seriously committed to the conclusion of a SALT II agreement. Henry Kissinger remained the “point man” for SALT II, and he continued to dominate the negotiations from 1972 through 1976, first as national security advisor (NSA) to Nixon and Ford, then as both NSA and secretary of state under Ford. Under the Carter Administration, Secretary of State Cyrus Vance and ACDA Director Paul Warnke were ostensibly leading the SALT II negotiation effort. However, the different secretaries of defense had a singularly important role in the process, as the following discussion on interagency negotiations illustrates.

US-Soviet relations had improved somewhat in the early 1970s as both countries pursued détente, and the United States gained some advantages from the triangular diplomacy that exploited the schism between the Soviet and Chinese communists. However, wars by the two superpowers’ proxies continued around the globe, and the Middle East in particular was of grave concern. Secretary of Defense James Schlesinger noted in his fiscal year (FY) 1976 report to Congress that the Middle East had the potential for turning into the Balkans of 1914, even while the Western powers were tending to look inward to deal with international economic problems that were similar to those that caused such great instability in the 1930s. All of the secretaries of defense during this period warned that the United States had to respond to the Soviets’ aggressive military buildup. Schlesinger noted that the Soviets were devoting significantly more resources than the United States—20 percent more in research and development and 60 percent more in strategic nuclear offensive forces. A year later, Secretary of Defense Donald Rumsfeld noted the Soviet military’s concerted, decade-long effort to increase both the quantities and quality of their strategic capabilities. In addition to adding 1,600 ICBMs, 700 SLBMs, and 2,000 warheads
and bombs, in 1975 the Soviets were developing four new ICBMs (two of which were MIRVed), they were producing a new generation of ballistic missile submarines (SSBNs, one with a 4,200-mile range), they had improved the accuracy of their ICBMs, they were deploying large MIRVs with high-yield warheads, and they were developing the SS-20 mobile intermediate range ballistic missile (IRBM).63

The increase in offensive strategic programs on which Secretary of Defense Laird had predicated his support for the SALT I and ABM treaties continued into the beginning of the Carter Administration. As a counter to the Soviets’ buildup, the DOD was working on the Trident SLBM system with new submarines and missiles, the B-1 strategic bomber with subsonic cruise armed decoys (SCAD) and short-range attack missiles (SRAM), plus air-launched cruise missiles (ALCM) and sea-launched cruise missiles (SLCM), and finally the new MX ICBM.64 Secretary of Defense Rumsfeld noted that these programs were essential to achieve four basic objectives for the US strategic nuclear forces: a second-strike capability; a flexible nuclear response; essential equivalence to maintain strategic nuclear balance; and stability in strategic nuclear competition that would forsake a disarming first-strike capability and that sought to achieve equitable arms-control agreements.65

**US and Soviet Objectives for SALT II**

As mentioned above, there was naturally somewhat of a gap between the two countries’ levels of motivation for the quick conclusion of a treaty that would, in accordance with the Jackson Amendment, have to provide for equal levels of strategic offensive arms. The Soviets had a five-year numerical advantage in strategic missile launchers to lose, and any agreement to limit the numbers of ICBM or SLBM launchers would force much more significant cuts on the USSR, given its military buildup. In fact, from the course of negotiations, it appears that the Soviets were generally quite happy with the relatively minor limitations to their offensive buildup under the Interim Agreement, and that their objectives were primarily to retain as much of an advantage in their offensive capability as possible, at the same time as they restricted US technological
advantages, such as the cruise missile and bombers which were not counted under SALT I limitations. They were also interested in getting the US forward-based nuclear systems in Europe counted in any offensive weapons limits. Additionally, they were concerned about our NATO allies, Germany in particular, getting access to US cruise missile technology. Nixon’s assessment in his memoirs was that the Soviet objective during the SALT II negotiations was to develop and maintain a first-strike capability against the US ICBMs; the United States could not, according to Nixon, succeed in achieving its objectives because the United States had nothing to bargain with.66 In Nixon’s eyes, the Soviets did not seek equality or equivalency, they sought to prepare to win a nuclear war that they believed was quite possible, undesirable as that might be.67 The “histrionic lengths” that the Soviets went to in refusing to consider any proposal to roll back the limit of 308 heavy ICBMs, to avoid any limits on their MIRVed modern large ballistic missiles (MLBM), and their hostile reaction to President Carter’s “deep cuts” would seem to support Nixon’s conclusion.68 It could be that the Soviets only participated in the SALT II negotiations because they were obligated to after their conclusion of SALT I. However, it is also possible that they actually sought to enhance strategic stability and to avoid a nuclear conflict; President Gerald R. Ford was impressed with Brezhnev’s sincere desire to avoid a third world war when the two negotiated at Vladivostok.69 During the Carter Administration, Brezhnev was also working hard at reducing barriers to trade with the United States, and for that cooperation on SALT II was as much of a necessity as the USSR respect for human rights.70 In a sense, the Soviets wanted the economic benefits of détente under SALT II negotiations as much as Nixon and Kissinger sought the political benefits of détente under the SALT I negotiations.

The United States objectives for SALT II were much more focused than they had been under the previous set of negotiations. Throughout the SALT II negotiations, the basic US goal was to preserve strategic stability—to deter a nuclear war with the Soviet Union by ensuring a second-strike capability. The challenge was to achieve parity given the two adversaries’
different mixes of strategic weapons and the need for verifica-
tion of qualitative restrictions. The Soviet testing of their MIRVed MLBMs in the summer of 1973 made it clear that one rationale Nixon had used to sell SALT I to Congress—the US superiority in the number of warheads—would not apply for long. The USSR would have more ICBMs; it would have MIRVed ICBMs, and among those would be 308 heavy missiles that could be MIRVed.\textsuperscript{71} Nixon stated that at the beginning of the SALT II negotiations:

Our objective was to redress the inequalities that had been accepted by necessity in SALT I, and particularly to obtain reductions in the massive 4-1 throw weight advantage that had been permitted the Soviets. Our concern was that the Soviets would be able to convert their throw weight by the middle 1980s into a disarming first-strike option against our land-based ICBMs, our submarines in port, and our bombers on the ground. In such a situation the United States would have no response available except for the completely illogical and suicidal response of attacking Soviet cities with our small remaining force, inviting a massive, certain Soviet retaliation upon our own cities.\textsuperscript{72}

In short, the United States was still concerned about the vul-
nerability of its Minuteman ICBM force.

There was one notable, if relatively short-lived, shift in US objectives for SALT II. Shortly after he became president in 1977, Carter proposed a much grander scope for SALT II, particularly given the Vladivostok Accord of November 1974. According to Leslie Gelb, the State Department's main voice on arms control under Secretary of State Vance, arms control was Carter's highest priority at the beginning of his administra-
tion, and Carter wanted “to go beyond what President Ford and Henry Kissinger had done and to have truly deep cuts in nuclear weapons—not marginal cuts, but deep cuts, to really end the nuclear competition.”\textsuperscript{73} However, that objective ran directly counter to what the Soviets sought from SALT II, and the Carter team backed down from their more ambitious goals.

**SALT II: Interagency Negotiations**

Henry Kissinger was still very much the central figure for the first few years of SALT II negotiations, from November 1972 through 1976. However, his control over the US agenda
began to wane when President Ford relieved him of his position as national security advisor (NSA) as part of the “October Massacre” of 1975 that saw Donald Rumsfeld replace James Schlesinger as secretary of defense, and Kissinger’s former deputy Brent Scowcroft take over as NSA. Kissinger still had the helm of the State Department that he had taken over in August 1973 after William Rogers resigned, and he continued to run the back-channel negotiations.74 As a Ford speechwriter put it, “Kissinger no longer got to play God during his daily one-hour meeting with the president.”75 With Kissinger’s institutional advantage over the other cabinet members neutralized, the close personal relations between Ford and his former chief of staff, Donald Rumsfeld, allowed the new secretary of defense to play a stronger role in the development of the Ford Administration’s SALT II negotiating positions. A few months after Rumsfeld became secretary of defense his doubt that the Soviets ever intended to accept strategic equality, and his hesitancy to move ahead with a strategy that did not have political and bureaucratic support were instrumental in Ford’s decision to give up on achieving a SALT II agreement during his term by early 1976.76

The lines of interagency dispute shifted somewhat during the Ford Administration. As had been the case for Nixon, Ford recognized that the secretary of defense and the joint chiefs held a “trump card,” in that the loss of support from any of them would likely end the chances of Senate ratification of any agreement.77 However, ACDA Director Fred Ikle tended to side with defense and the CIA, expressing reservations about Kissinger’s negotiations, breaking the old alliance that had existed between state and ACDA.78 Rumsfeld, the joint chiefs, and Ikle blocked Kissinger’s Ford-approved proposal for a compromise that limited cruise missiles in exchange for Soviet constraints on the Backfire bomber—the two major outstanding issues that prevented an agreement based on the Vladivostok Accord from being reached in 1976.79

During the Carter Administration, it was again the secretary of defense, now Harold Brown, who “quickly established himself as the single most influential SALT policy maker in the new administration aside from the President himself.”80 Brown
had been a member of and consultant to the SALT negotiation teams under both the Nixon and Ford administrations, and he and his deputy both favored more ambitious goals than Kissinger had been willing to attempt.81 Brown’s influence was partly attributable to his position, for Carter, too, recognized that he needed the support of the Defense Department and the JCS to have a chance at gaining Senate approval of SALT II.82 However, Brown also gained clout due to his considerable government experience, and his bold manner, and perhaps also due to the fact that Secretary of State Cyrus Vance was extremely busy with other foreign policy.

There were two general issues that were a source of interagency (and personal) rivalry from the first days of the Carter Administration. The first concerned whether or not there would be a Kissinger-type linkage between the SALT II negotiations and broader US-Soviet relations. The second concerned the scope of negotiations: would Carter continue along the lines of Ford and Kissinger, or would he seek to propose more radical reductions. Vance’s influence on Carter’s arms-control negotiations approach and US-Soviet relations in general was challenged by the president’s Assistant for National Security Affairs Zbigniew Brzezinski, as well as by Brown. While early on Carter eschewed a policy of linking arms control with broader Soviet-US relations, he ultimately ended up doing just that. Brzezinski noted that a sharp division developed between himself, Secretary Brown, and the joint chiefs on one hand, and Secretary Vance and ACDA Paul Warnke on the other hand on the issue of linkage.83 Brzezinski wanted Carter and Vance to avoid emphasizing SALT so heavily, without some reduction in the USSR’s interventionism around the globe, while Vance (and Carter at first) initially sought to use SALT as an opening for improved relations. Brzezinski called for “a firmer response and a more direct sustained dialogue with the Soviets on what was and was not acceptable.”84 Domestic political realities ultimately dictated linkage, for as Brzezinski had opined, without “comprehensive and reciprocal détente,” SALT II would never be ratified, and Carter explicitly imposed linkages between SALT negotiations and Soviet-sponsored revolutions in Africa.85
The second major issue arose in developing the administration’s opening move for the SALT II negotiations. Carter had come into office with a vision of eliminating nuclear weapons from the face of the earth, but the fact was that the United States and USSR were not too far apart on an agreement based on the accord reached by Ford and Brezhnev in Vladivostok and subsequent Kissinger-Dobrynin meetings. Vance and ACDA Director Warnke favored the quick conclusion of an agreement based on Vladivostok, but Brzezinski and Brown favored deep cuts. Brown and Brzezinski sought an agreement that would reduce overall levels of strategic weapons, especially of ICBMs and MIRVs that threatened the survivability of US ICBMs, while Vance saw the diplomatic drawbacks of an overly ambitious agenda.86

The cruise missile and Backfire bomber issues were to plague the SALT II negotiations up until the very end in both the US interagency process and US-Soviet negotiations. During the Ford-Kissinger era, the Pentagon had made it clear that they wanted the Backfire counted as a strategic weapon system, as a heavy bomber, because if the Soviets were to develop refueling support capability, the Backfire would have intercontinental range. However, Kissinger did not believe it should count in the ceiling for strategic launchers and in his back-channel negotiations with the USSR, he made that concession, believing he could override the Pentagon’s position.87 He was wrong. Secretary of Defense Rumsfeld and chairman of the JCS Gen George Brown forced Kissinger to back down, rather gracelessly given that Kissinger had already briefed the press on that facet of his negotiations.88 Carter and Vance had similar difficulties. While State favored the Soviet proposal to exclude the Backfire from the 2,400 ceiling of delivery systems, the JCS were determined to count it as a strategic weapon, and the Defense Department urged a trade-off between the Backfire and the US ground-launched cruise missiles (GLCM).89 As the following section on key issues in the US-USSR negotiations discusses, the Backfire issue was only finally resolved between Carter and Brezhnev the day the treaty was signed two and a half years later.
The second challenging issue for SALT II negotiations involved developing US cruise missile technology. When Kissinger and Ford met with the Soviets in Vladivostok in November 1974, they thought they had all but wrapped up the negotiations. However, in preparing the record of the summit meeting, the aide-mémoire, the Soviets brought up the issue of air-launched cruise missiles, even though cruise missiles had not been discussed at the summit. They wanted the record to specify that the 2,400 ceiling on strategic delivery systems would include “air-to-surface missiles,” while the United States had only been discussing ballistic missiles, not cruise missiles. Despite the fervent protestations of the secretary of defense and the JCS, Kissinger and Ford agreed to include the more general term “air-to-surface missiles.” This led to problems in later years as the Air Force and the Navy began to see a bigger role for cruise missiles, and wanted to undo the concession made at Vladivostok.

Cruise missiles remained a major issue throughout the negotiations during the Carter Administration. In the interagency negotiations in which the comprehensive proposal presented to the Soviets in March 1977 was developed, there was significant disagreement on limits for cruise missile range. The OSD proposed a 2,500 kilometer (km) limit for ALCMs, with stricter limits for GLCMs and SLCMs, which Vance supported, while the NSC and ACDA proposed a 1,500 km limit for all cruise missiles. The JCS actually supported the lower limit, but with an ulterior motive. According to a JCS officer, they “figured that a 1,500-kilometer limit on ALCMs was sure-fire insurance that we would get the B-1, because without the B-1 the limit made no sense.” When Secretary of Defense Brown, with Carter’s support, cancelled the B-1 program in 1977, it was a shock to the US delegation in Vienna and the JCS, both of whom had been counting on the B-1. The result was that the issue of range had to be revisited, and Brown himself sought to increase the range to 3,000 km, but Vance and Warnke persuaded him that it was too late.

Toward the very end of negotiations, in July 1978, another cruise missile issue cropped up as the delegations got into the fine points related to verification of the agreement—whether
missiles with conventional warheads would count against the launcher limits. The DOD and the JCS were adamant on the principle that the SALT agreement should not limit conventional or tactical weapons, particularly as both the Air Force and the Navy began to see more possibilities for conventional cruise missiles. Indeed, our German allies wanted access to conventional GLCMs, so they were also pushing to exclude them from any agreement. Over the objections of State and ACDA who argued that such a distinction would be unverifiable, Carter agreed to push for the differentiation. In the final agreement the United States and the USSR compromised and counted all long-range cruise missiles as strategic launchers—but only for three years, after which time only ALCMs on long-range bombers would count against the 2,400 launcher limit.

**US-Soviet Negotiations**

The complexity of the highly technical and myriad intertwined issues involved in SALT II led to the negotiations being drawn out over seven years and three presidential administrations. Nixon, Ford, and Carter all thought early in their administrations that an agreement with the Soviets was imminent. However, the two countries’ very different strategic nuclear force structures made agreeing upon essential equivalency very difficult. The Soviets concentrated their nuclear warheads overwhelmingly in their ICBM forces as well as in their SLBMs. The United States, on the other hand, was not building any new ICBMs, had a lead in SLBMs (during the early negotiations), and was far ahead in developing cruise-missile technology, potentially enhancing the strategic bomber leg of the triad. The negotiations only got more complicated as time went on and each side continued to develop their weapons technology, so that mobile ICBMs, increasingly accurate MIRVs, new ballistic missiles such as the intermediate range SS-20, and the US’s improving cruise-missile technology all had to be dealt with in the context of the negotiations. Furthermore, the Soviets sought equal security, which in their eyes required taking into consideration US forward-based nuclear systems, as well as our NATO allies’ nuclear forces capable of reaching
the USSR. At the same time, the United States was contending with already strained relations with its NATO allies, and any agreements that could be perceived as divorcing the security interests of the United States from those of Western Europe had to be avoided.

SALT II started out as a challenging endeavor. The detailed negotiations required due to qualitative limitations, new technologies, and the complexities of verification meant that SALT II only became more challenging as the years of negotiations dragged on. To make sense out of the very complex negotiations that transpired over the seven-year period, the following discussion examines the major agreements and disagreements between the United States and the Soviets at a few critical points in the process—the Ford/Kissinger Vladivostok negotiations of October–November 1974, the Carter/Vance comprehensive proposal and deferral proposal of March 1977, and the breakthrough negotiations of November 1977 along with the final SALT II agreement. The primary concerns of the two sides remained the same. The United States was focused on reducing or eliminating the threat to the survivability of its Minuteman ICBM force posed by the Soviet MIRVed, heavy ICBMs. The Soviets were primarily concerned about putting limits on the range and deployment of the US cruise missile, as well as the threat posed by all NATO nuclear forces. The debate about the Soviet Backfire bomber and the US cruise missiles were often at the center of the conflict, as was the problem of verifiability of treaty provisions.

**Vladivostok (October–November 1974).** When Ford completed his summit meeting with Brezhnev in Vladivostok in November 1974, he thought that with the SALT II negotiations were 90 to 95 percent complete, and he looked forward to signing a treaty sometime in the spring of 1975. The groundwork had been laid out the month before in meetings between Kissinger, and Brezhnev and his Minister of Foreign Affairs Andrei Gromyko, as well as in meetings between Kissinger and Soviet ambassador to the United States, Anatoly Dobrynin. Kissinger proposed the following in October 1974:

- a ceiling of 2,200 strategic nuclear launch vehicles (SNLV);
• a subceiling of 1,320 MIRVed SNLVs;
• a limit of 250 heavy systems, including the Soviet’s SS-9 ICBM and the US B-52 and [future] B-1 heavy bombers;
• a ban on air-to-surface missiles with ranges of over 3,000 km; and
• a limit of modernization on launchers to 175 per year.98

However, Brezhnev sought to have unequal ceilings on strategic launchers, proposing a ceiling of 2,400 for the USSR and 2,200 for the United States in recognition of the approximately 200 British and French nuclear missiles.99 They discussed an equal aggregates approach, whereby the Soviets would get more launchers while the United States would get more MIRVs. Brezhnev said nyet on any cuts to Soviet heavy missiles, but he proposed a compromise on that issue—in exchange for not counting the American FBS or its NATO allies’ nuclear weapons capable of reaching the USSR, the United States would not ask the Soviets to reduce their 308 heavy ICBMs.100

The agreement on the framework for SALT II that was reached by Ford and Brezhnev in November 1974 still failed to reduce the number of Soviet heavy ICBMs. The Vladivostok accord included

• a ceiling of 2,400 SNLVs, including ICBMs, SLBMs, and long-range bombers;
• a subceiling of 1,320 MIRVed ICBMs and SLBMs;
• a duration from October 1977 through December 1983;
• no compensation for forward-based systems; and
• maintain SALT I ban on additional ICBM silos and ban on converting silos for light ICBMs into launchers for heavy ICBMs.101

The Soviet concession on FBS was a relief to the Americans, as was the agreement on equal levels of launchers which would make it much more palatable for the domestic US audience—particularly given the Jackson Amendment to SALT I. However, as former President Nixon noted, the Soviets resisted limits on throw weight and on the number of warheads (versus the number of MIRVed launchers)—the two limitations that would have made the greatest contribution to reducing the threat of a Soviet first-strike capability destroying
the ICBM component of the US strategic triad. The inability of the United States to overcome Soviet intransigence was due, in Nixon’s judgment, to the American’s not having much to bargain with.\textsuperscript{102} The agreement did, however, limit the risk to the United States somewhat by limiting the growth of the number of Soviet warheads in the face of a rapid Soviet buildup in ICBMs and its efforts to MIRV those missiles.

For the Soviet’s part, the Vladivostok accord allowed them to continue their program of MIRVing ICBMs, and avoided any cuts in their heavy ICBMs, while placing limits on US MIRVs when the United States had already deployed 80 percent of the 1,320 limit.\textsuperscript{103} Surprisingly, the Soviets never raised the issue of cruise missiles at the summit, but they soon sought to rectify that oversight. As noted in the discussion on interagency negotiations above, the issue of cruise missiles came up in the weeks following the summit as both sides sought to agree on an aide-mémoire. Ultimately the Soviets prevailed on that point. Apparently in his haste to get an agreed-upon communiqué to show to Congress, Kissinger allowed the Soviets to leave out the word \textit{ballistic} and to state that “air-to-surface missiles” were included in the 2,400 SNLV limit if they had a range over 600 km.\textsuperscript{104} The United States considered the issue of cruise missiles unresolved; the Soviets thought they had won a concession. Finally, an issue that both sides recognized as being unresolved was whether the Soviet Backfire bomber should count as a heavy bomber, and therefore count under the 2,400 SNLV ceiling.

There was general support for the Vladivostok guidelines for SALT II. The secretary of defense and the chairman of the Joint Chiefs of Staff approved it, and both the House and Senate passed resolutions supporting it.\textsuperscript{105} However, the momentum was lost in the following months as the SALT delegations struggled with the cruise-missile issue, the Backfire bomber, the verification of MIRVing, what constituted a “new” ICBM silo, and how to define “light” and “heavy” missiles. Domestic US public opinion and congressional opinion were beginning to turn against the Soviets, and new Secretary of Defense Rumsfeld was wary of the agreement. The roots of congressional opposition were clearly there from the beginning,
for as Kissinger admitted in a background briefing to the press the day after the Vladivostok summit, the accord did not provide a solution to the throw-weight problem; that would only be solved if the president would decide to deploy heavier missiles, which the accord permitted him to do.\textsuperscript{106}

Kissinger came close to working out an agreement with the Soviets in early 1976; however, based on domestic opposition within Congress and within the Ford Administration, the cruise missile and the Backfire issues remained unsettled. When the Soviets turned down Ford’s offer to conclude a treaty based on the Vladivostok ceilings, with a three-year agreement on cruise missiles and the Backfire bomber, that ended the chances for a SALT II treaty with the presidential elections and Ford’s hesitancy to push ahead with an agreement that was being criticized on all sides—for either doing too much to limit the United States, or too little to limit both sides.

Carter: Comprehensive Proposal and Deferral Proposal (March 1977). As discussed above, Carter, with the urging of Secretary of Defense Brown and National Security Advisor Brzezinski, decided to push for major reductions in the ceilings agreed upon at Vladivostok. In a press briefing immediately after his meeting with Brezhnev and Gromyko, Secretary of State Vance revealed that the Soviets had turned down two proposals.\textsuperscript{107} The first was a deferral proposal, proposed to defer the difficult cruise missile and Backfire bomber issues and to sign a treaty based on the agreements reached at Vladivostok. The second, the comprehensive proposal that Carter preferred and urged the Soviets to seriously consider, called for a

- 20 percent reduction in the SNLV ceiling from 2,400 to 1,800;
- reduction in MIRV launchers from 1,320 to between 1,100 and 1,200;
- sublimit of 550 MIRVed ICBMs;
- cut in large Soviet heavy ICBMs from 308 to 150;
- range limit of 2,500 km on all cruise missiles and mobile missiles;
- limit of six ICBM flight tests per year;
- continued ban on construction of new ICBM launchers;
• continued ban on the modification of existing ICBMs;
• ban on the development, testing, and deployment of mobile ICBM launchers; and the
• Soviets would provide a list of measures to assure Backfire bombers would not be used as strategic launchers.\textsuperscript{108}

The comprehensive proposal met US needs by reducing the number of Soviet MIRVs and heavy ICBMs, the major threat to US Minuteman ICBMs, and by slowing down the Soviets’ ICBM programs in general, while the United States could keep its 550 Minuteman ICBMs and accepted only minimal limitations on cruise missile range. However, the proposal failed to meet Soviet needs, and Brezhnev’s needs in particular. The JCS representative on the SALT negotiation team notes that his Soviet counterparts attributed the Soviets’ outright rejection of the proposal to the fact that Brezhnev had staked his domestic credibility on the US acceptance of the Vladivostok accords.\textsuperscript{109} ACDA’s Warnke was told similarly that Brezhnev had “spilled political blood” to reach the compromise that excluded US FBS in return for the Soviets’ maintaining all 308 heavy ICBMs.\textsuperscript{110}

In his own press conference, Gromyko explained the Soviets’ utter dissatisfaction with both proposals, noting that, contrary to what Vance had said to the press, there had not been progress. The problem with the deferral proposal was that it claimed that Vladivostok gave the green light to cruise missiles, but they should be considered under the limitations as air-to-surface missiles; Kissinger’s aide-mémoire was coming back to haunt the United States. Therefore, it was no concession for the United States to put off dealing with the cruise missile, in particular because the Soviets categorically rejected the idea that the Backfire was a strategic weapon. Furthermore, in the comprehensive proposal, the United States proposed that the USSR “liquidate half of those rockets in our possession which are simply disliked by somebody in the United States” and the new ban against modernization would only hurt the Soviets’ ICBMs while the United States went ahead with its new B-1 bomber. Gromyko indicated that two proposals they had put forward in the past should also be open to renegotiation—not handing strategic weapons over to third
countries and the advance deployment of US nuclear weapons in Europe; if the United States was going to reopen issues agreed upon at Vladivostok, then the USSR was entitled to address these questions again. The Soviets decried the US attempt to gain unilateral advantage, and urged the Carter Administration to take up “a more realistic stand.” In other words, the United States needed to go back to the Soviets’ understanding of Vladivostok.111

**Breakthrough in September 1977 and the Signed Agreement in June 1979.** After the inauspicious beginning of SALT II negotiations under the new administration, Carter and his team recaptured some momentum later that year, despite other complicating factors such as the Soviet deployment of SS-20 intermediate-range nuclear missiles and the Backfire bomber, and the US plans to deploy enhanced radiation weapons (ERW) or neutron bombs as a response.112 However, in September of that same year in a meeting between Carter, Vance, and Gromyko, the latter indicated that while the Soviets would not cut the number of their heavy missiles, they could negotiate a MIRVed ICBM subceiling in exchange for the United States agreeing to count its cruise missiles on heavy bombers in the 1,320 MIRV limits, plus the Soviets would guarantee measures to assure the United States that the Backfire bomber would not have intercontinental range.113 Taking his cues from the Soviet concessions, and the apparent necessity that any SALT II agreement incorporate the 2,400 and 1,320 ceilings from the Vladivostok agreement, Brzezinski and some of his NSC staff came up with a three-tier proposal which included

- the initial ceiling of 2,400 SNLVS to be lowered to 2,160 during life of treaty;
- a subceiling of 1,320 MIRVed launchers, including cruise-missile-carrying bombers and MIRVed ICBMs and SLBMs;
- an additional subceiling of 1,200 MIRVed ICBMs and SLBMs; and
- a maximum of 800 MIRVed ICBMs.114

From the Soviet point of view, the proposal had the virtue of including the 2,400 and 1,320 limits from the Vladivostok accord, and it required the Americans to include long-range
capable ALCMs under the subceiling for MIRVed launchers. From the American point of view, it limited the number of MIRVed ICBMs, which was beginning to be a bigger concern as the Soviets deployed the SS-19 and SS-18, and the United States had to consider the possibility that the Soviets might MIRV all of their ICBMs.\textsuperscript{115} It also reduced the overall number of launchers and gave the United States 120 “free” ALCM carriers—the difference between the 1,320 ceiling and the 1,200 MIRVed ICBMs and SLBMs that the Soviets would have.

Although it would take another 19 months until Carter and Brezhnev reached final accord in June 1979, the basic structure of SALT II limitations came from that November 1977 breakthrough. The major provisions of the final SALT II agreement included a treaty, a protocol, and a joint statement of principles. The treaty included

- a limit on SNLVs, 2,400, to be reduced to 2,250 by the end of 1981;
- a subceiling of 1,320 ICBMs, SLBMs, and long-range bombers equipped with long-range cruise missiles (range greater than 600 km);
- an additional sublimit of 1,200 missile launchers with MIRVs and within that sublimit a maximum of 820 ICBMs could be MIRVed;
- a limit on modern large ICBMs frozen at 308 for USSR, 0 for the United States;
- ceilings on throw-weight and launch-weight for heavy/light ICBMs;
- a limit of one test of a new type of ICBM;
- fractionation limits—10 reentry vehicles (RV) on new ICBMs, 14 RVs on SLBMs, and 10 RVs on air-to-surface ballistic missiles;
- a ban on testing/deployment of ALCMs with a range above 600 km other than on long-range bombers;
- a ban of heavy, mobile ICBMs, heavy SLBMs, and air-to-surface ballistic missiles;
- a ban on ballistic missiles with ranges greater than 600 km deployed on surface ships;
- advance notification of certain ICBM test launches; and
- a ban on ICBM systems that can be rapidly reloaded.\textsuperscript{116}
As is often noted, “The devil is in the details.” And it was the many details related to these SALT II provisions that caused the negotiations to go on for months after the basic numerical ceilings and subceilings had been agreed upon. The issue of the Backfire bomber was only resolved the day that Carter signed SALT II, when Brezhnev told Carter that the Soviets would not produce more than 30 Backfire bombers a year—an agreement that was heavily criticized during Senate ratification hearings.\textsuperscript{117} Other politically contentious provisions related to the encryption of missile test data which impeded verification of new types of missiles, how the range of a cruise missile is counted, differentiating between conventional and nuclear cruise missiles, how to differentiate between MIRVed and unMIRVed ICBMs, and whether a mobile land-based missile—like the MX planned by the United States—was verifiable and, hence, allowable.\textsuperscript{118} The United States wanted the Soviets to concede that if one missile in an ICBM field was MIRVed, all missiles in that field would have to be counted as MIRVed because the United States could not differentiate between what was in the different silos using national technical means. However, at the same time, they wanted the Soviets to acquiesce to a mobile-basing concept for the MX missile, where the survivability of US ICBMs would be enhanced precisely because the Soviets would not know what was in a missile silo. It was, as Soviet foreign minister Gromyko said, like a “ball of twine” with each issue in the negotiations tied to other issues.\textsuperscript{119}

**Implications of SALT II**

Unlike its predecessors, SALT II was never ratified by the Senate, although both sides agreed to abide by its provisions and the United States did so even into the first few years of the Reagan Administration. Its demise in the Senate was due to a combination of opposition within the broader defense community coupled with domestic politics and the negative linkages that inevitably occurred when the Soviet Union invaded Afghanistan in December of 1979. This section highlights the shortcomings of the treaty, as well as the strengths of the treaty. The vocal, organized opposition to the terms of the treaty was the single most important factor to its failure to pass.

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President Carter had been worried all along about getting support from Paul Nitze and Senator Jackson; in the end his treaty was vigorously opposed by both men. In fact, the Committee on the Present Danger was organized in 1976 specifically to watch over the SALT negotiations, and it used its significant resources and influential supporters from government, industry, and organized labor to publicize what it perceived to be the weaknesses of the treaty that was negotiated in 1979. The committee and other groups sought to get the Senate Armed Services Committee (SASC) involved in the ratification process, knowing that SASC member Senator Jackson would be willing and able to highlight the shortcomings of the treaty in a way that the Senate Foreign Relations Committee never would. A particularly convincing voice raised in opposition to the treaty was that of then Lt Gen Edward L. Rowny, the JCS representative on the SALT II negotiation team in Geneva, who resigned in protest two weeks after President Carter and General Secretary Brezhnev signed the treaty. Rowny joined forces with the committee and others who believed that SALT II would actually harm US security. The major perceived problems were that SALT II had

- failed to reduce the threat that Soviet heavy ICBMs posed to US ICBMs;
- prohibited mobile ICBMs which would be necessary to ensure the survivability of US ICBMs;
- failed to achieve parity in throw weight;
- restricted US ability to develop a medium-heavy missile, due to inclusion of only two throw-weight categories—light and heavy;
- allowed the Soviets to encrypt some of the telemetry data on missile tests that were essential to assess the technical capability of the missiles, particularly regarding the number of MIRVs, yield, and accuracy;
- failed to count the Soviet Backfire bomber as a strategic launch vehicle, leaving it as an unrestricted platform for cruise missiles in the future;
- restricted cruise missiles, an area of US superiority; and
• in conjunction with Carter’s stopping the B-1 bomber and neutron bomb weapons, SALT II sapped the strength of US security.

In support of SALT II, the treaty dealt with some of the difficult issues that SALT I had failed to address. The treaty

• included quantitative limits on the number of MIRVed missile launchers, with sublimits on MIRVed ICBMs that posed greatest threat to US ICBMs;
• included fractionation limits on the number of warheads on MIRVed missiles which was significant given the Soviet throw-weight advantage;
• finally defined a “heavy” missile;
• limited the development of new ICBMs;
• maintained the limit on the number of Soviet heavy ICBMs;
• reinforced the agreement that there would be no interference with NTMs; and
• banned heavy, mobile ICBMs that the Soviets were developing and would have been destabilizing to mutually assured destruction.

But perhaps most important of all, it maintained a constant channel for dialogue between the two superpowers, and provided for a degree of parity that reinforced the perceptions of both the United States and the USSR that there was no advantage to be gained by a nuclear first strike.

Perhaps the greatest benefit of SALT II was, like its SALT I and ABM predecessors, its contribution to reducing the likelihood of war between the United States and the USSR, by engaging the two sides in negotiations that led to dialogue rather than confrontation on arms control and other areas of dispute. While SALT II included limits on total numbers of strategic launchers and limits on total numbers of warheads, it is not clear that these limits reduced the damages should a war have occurred, primarily because those limits did not entail any reduction in forces, but instead allowed both sides to increase the number of nuclear weapons from their existing levels. Its contribution to the goal of reducing the costs of preparing for war are uncertain, as once again there seemed
to be a buildup of certain defense programs—such as the cruise missile, the MX missile, and the B-1 bomber—associated with the treaty negotiations. SALT II was also invaluable in laying the basis for later agreements in terms of verification procedures, definitions, qualitative differentiation of weapons systems, and many other highly technical details that were first tackled by the SALT II negotiation teams. The SALT I and ABM treaties and the SALT II agreement provided the basis upon which future arms reductions agreements could and would be based.

Notes
2. Gerard Smith, *Doubletalk: the Story of the First Strategic Arms Limitations Talks* (New York: Doubleday & Co., 1980), 19. The United States had been considering an Army-proposed ballistic missile defense system for several years, although there was significant opposition to the proposal because of the assessment by some—like the President’s Science Advisory Committee and Secretary of Defense Robert McNamara—that an ABM was inconsistent with strategic stability. (See the National Security Archive at www.gwu.edu. “Missile Defense Thirty Years Ago: Déjà Vu All Over Again?” ed. by William Burr, 18 December 2000, document 1.)
7. Ibid., 17.
10. Ibid., 35–36.
11. For brevity’s sake, I will refer to both the offensive and defensive arms limitations negotiations as the SALT negotiations, since they were conducted concurrently and were not split into the separate SALT and ABM agreements until late in the process.


17. Garthoff, 153.

18. Smith, 32; Newhouse, 173.


20. Garthoff, 220, footnote 159.


22. Newhouse, 5.


24. Burr, 8.


27. Smith, 26.

28. Ibid., 154, 156.

29. Newhouse, 41–42.

30. Smith, 30.

31. Ibid., 29.

32. Ibid., 27.

33. Kissinger, *White House Years*, 541–43; Newhouse, 176–78; and Garthoff, 154–55. The Verification Panel was chaired by Kissinger and included Under Secretary of State Elliott Richardson; Deputy Secretary of Defense David Packard; chairman of the JCS, Adm Thomas Moorer; CIA Director Richard Helms; ACDA Director and Chief SALT Negotiator Gerald Smith; and Attorney General John Mitchell. See Newhouse, 178.

34. Kissinger, *White House Years*, 542; Garthoff, 154–55. Kissinger indicated that state’s first preference was for Option D; however, this author included Garthoff’s recollection of his own agency’s position as Option C.


37. Newhouse, 170.

38. Garthoff, 154.


40. Ibid., 540; Garthoff, 154.


42. Ibid., Newhouse, 180; Smith, 170.
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43. Garthoff, 157–58; Smith, 171–73.
45. Garthoff, 159, footnote 34.
47. Ibid., 195.
48. Smith, 225.
49. Ibid., 228; Garthoff, 180–81.
50. Garthoff, 181.
51. Smith, 320.
52. Garthoff, 183, 185.
53. Ibid., 187.
54. Smith, 372–75.
58. See, for example, Smith, 461.
59. Garthoff, 217.
60. Kissinger, White House Years, 550.
67. Ibid., 173.
74. Burr, 125.
75. Rowny, 88.
76. Rowny, 90; Burr, 429; Garthoff, 881. Former National Security Advisor Brent Scowcroft also noted the decisive role played by Secretary of Defense Rumsfeld in a telephone interview conducted by Maj Charles Dusch, USAF, on 15 July 2001.
77. Ford interview, 357.
78. Scowcroft interview, 15 July 2001; Garthoff, 599; Talbott, 37.

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79. Talbott, 37; Garthoff, 598–99.
80. Talbott, 50.
81. Ibid., 50.
82. Carter, 222, 239.
84. Brzezinski, 317.
85. Ibid.; Talbott, 146–47.
86. Garthoff, 887.
87. Ibid., 498–500. Also see Talbott, 33–35.
88. Garthoff, 598.
89. Vance, 48; Talbott, 65.
90. Garthoff, 498; Rowny, 71.
91. Talbott, 61; Vance, 48.
92. Talbott, 61.
94. Talbott, 183.
95. Garthoff, 901–2; Talbott, 183–86.
96. Talbott, 189.
97. Ford interview; Garthoff, 497.
98. Garthoff, 494.
100. Garthoff, 495–96.
104. Garthoff, 498; Rowny, 71.
110. Garthoff, 889; Talbott, 72.
113. Talbott, 124–28; Garthoff, 896.
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114. Talbott, 126.
117. Rowny, 122.
119. Talbott, 212.
120. Rowny, 123.
This chapter reviews the role of the United States Air Force in making arms-control policy during the Strategic Arms Limitation Treaty (SALT) era. It does this using a five-part approach, examining in turn the international strategic setting of the 1970s (reviewing and highlighting the previous chapter), the details of the strategic arms-control agreements concluded during that decade, the competition between services over strategic acquisition programs, and the organization of the Air Force for arms-control policy making. It then presents some themes regarding arms control and the Air Force during this period.

A note on methodology: Conducting historical research over a period some 30 years ago, particularly when dealing with issues of great sensitivity that were highly classified at the time, is a challenging exercise. One ends up looking for traces of evidence on the margins of the material rather than expecting to find direct evidence. For example, most books written on the SALT negotiations deal with strategic-level issues, not organizational considerations. The US Department of State has published a comprehensive series of books detailing the history of American foreign policy since the beginning of the republic, but so far it only covers the years through 1968. The Air Staff has not typically written unit histories, histories that might prove quite helpful if they existed. As a result, one resorts to first-hand accounts from interviews with participants of the era. But in many cases those memories and anecdotes are biased or faint, as most of the Air Force’s leaders during the late 1960s and 1970s are now at least 75 years old.
Setting the Stage: Strategic Decisions and Programs, 1969–80

Reviewing the historical background of the period clearly shows the close interrelationship between offensive forces, defensive concepts, acquisition programs, and arms control. Lyndon Johnson was still president of the United States when our period of consideration began. During his final months in office, the United States tested a new technology, multiple independently targetable re-entry vehicles (MIRV), on both intercontinental ballistic missiles (ICBM) and submarine-launched ballistic missiles (SLBM). A year later, under President Richard Nixon, the request for proposal was released for a new manned bomber—the B-1. The new president also announced his doctrine of strategic sufficiency and essential equivalence. Under these strategic guidelines, the United States accepted the fact that the Soviet Union had achieved parity—that is, reached a level of strategic forces equivalent to those of the United States—and abandoned its previous strategy of superiority in nuclear arms and the means to deliver them. This opened a window for arms control as a method of controlling the continued growth of Soviet strategic forces, a vital necessity now that the United States had accepted essential equivalence and had few new programs of its own under development.

In 1970 the United States began deploying MIRVs on its existing Minuteman ICBM fleet. MIRVed warheads were seen as a technological “fix” for matching the growing levels of Soviet ICBM deployments, thereby maintaining parity without having to build more missiles. To the great surprise and consternation of American strategists, however, the Soviets began testing their own version of MIRVs in 1973.

In 1972 the United States and the USSR signed the SALT I treaty in Moscow, agreeing to limit future offensive forces and avoid defensive systems. That same year the United States promulgated National Security Decision Directive 242, which called for a strategy of proportional deterrence, flexible targeting, and a counterforce emphasis. Both the Trident submarine/missile combination and the B-1 bomber were also approved for production in a package deal designed to show American strength despite signing the SALT I treaty.
Studies on the MX (missile experimental) ICBM began in 1973, as did the air-launched cruise missile (ALCM) program as part of America’s continuing qualitative improvements to its strategic forces. The first test flight of an air-launched Minuteman ICBM, as well as the first prototype B-1 test flight, took place in 1974, at about the same time that Secretary of Defense Melvin Laird was warning Congress of a growing Soviet first-strike capability. This fear, coupled with a desire to rein in Soviet growth, led to a major breakthrough in the SALT II negotiations that fall, when President Gerald Ford met with Soviet chairman Leonid Brezhnev in Vladivostok. Their summit agreement set the parameters for what would eventually become the SALT II treaty five years later.

President Jimmy Carter came to Washington in 1977 with a personal vision of achieving lasting arms-control agreements with the Soviet Union and reducing the levels of strategic nuclear weapons in the US arsenal. He cancelled the B-1 bomber program, at which time the State Department and the Arms Control and Disarmament Agency (ACDA) recommended that the United States move from a strategic Triad to a Dyad (with land- and sea-based missiles only). At the same time, he continued the research and development programs under way for the ALCM (which had its first test flight in 1976, and held a fly-off competition in 1979), the MX missile (which went through multiple iterations of basing plans), and the Trident submarine (the first Ohio-class boat was launched in 1979).

The SALT II treaty was signed by the United States and USSR in 1979. One year later, the president announced Presidential Decision 59 that changed US policy to a countervailing strategy—essentially the same as under Nixon, but with a new name. He also authorized the beginning of studies on the stealth bomber and advanced cruise missile.

These years proved to be a golden era for arms control, with a success rate (measured in terms of negotiations, agreements, and treaties) not seen again until the Cold War was ending, 1989–1992. Half of the agreements during this period were the direct result of the SALT negotiations that began in Helsinki and Vienna in 1969. Those SALT-derived agreements are highlighted in bold in table 2.
Table 2

SALT-Derived Agreements

<table>
<thead>
<tr>
<th>Year</th>
<th>Agreement</th>
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| 1969 | US unilateral ban on biological weapons and research
      | SALT talks begin |
| 1971 | Seabed Treaty
      | Nuclear War Risk Reduction Agreement
      | Hot Line Modernization Agreement
      | Zanger Committee created |
| 1972 | Biological Weapons Convention
      | Prevention of Incidents at Sea Treaty
      | Interim Offensive Agreement (SALT I Treaty) and ABM Treaty
      | Special Consultative Commission established |
| 1973 | Mutual and Balanced Force Reduction (MBFR) talks begin
      | Prevention of Nuclear War Agreement
      | Conference on Security and Cooperation in Europe talks begin |
| 1974 | Threshold Test Ban Treaty
      | ABM Treaty Protocol
      | Vladivostok Agreement |
| 1975 | Helsinki Accords
      | NPT Review Conference
      | US ratifies 1925 Geneva Convention on chemical and biological warfare |
| 1976 | Peaceful Nuclear Explosions Treaty
      | US Arms Control Export Act
      | Chemical weapons talks begin
      | Military services begin providing ACDA with annual arms-control impact statements on strategic R&D programs |
| 1977 | Environmental Modification Treaty
      | Comprehensive Test Ban Treaty talks begin
      | Conventional Arms Transfer talks begin
      | Indian Ocean arms limitation talks begin |
| 1978 | Camp David Accords
      | US-Soviet antisatellite talks begin |
| 1979 | SALT II Treaty
      | NATO adopts dual track strategy on Intermediate Range Nuclear Forces (INF) |
| 1980 | Convention on Physical Protection of Nuclear Material
      | Second NPT Review Conference |
SALT I Negotiations and Treaty Details

The Strategic Arms Limitation Talks between the United States and Soviet Union began in November 1969, alternating between Helsinki and Vienna. The rationale for holding strategic negotiations at all has been summed up by Gerard Smith, the chief negotiator of SALT I. He suggests that both sides were reaching a level of strategic maturity, and both sides recognized that large arsenals of nuclear weapons were a wasting asset. They also recognized that parity or sufficiency had been achieved. The Soviets believed SALT was a way to prove that they were the political and military equal to the United States, thereby overcoming the embarrassment of the Cuban Missile Crisis in 1962. In addition, President Nixon wanted to negotiate a zone of stability with the USSR (later called détente), and thought that SALT would serve the cause of nonproliferation by setting the example with limits between the superpowers.4

A US threat assessment conducted in 1969 drove a dual-track policy in the early 1970s of simultaneously pursuing arms control (leading to SALT and ABM) and new or accelerated strategic systems. President Nixon did not want to look “soft” on defense issues. Accordingly, Secretary of Defense Laird told the Senate in 1972 that he and the joint chiefs could only support the SALT treaty if Congress approved new strategic systems. This was, in effect, a quid pro quo: Pentagon opposition to arms-control limitations and restrictions on its strategic forces would only be overcome by a new package of strategic systems. The rationale for these new programs involved matching Soviet research and development (R&D) efforts, providing an incentive to the Soviets and bargaining leverage to the United States in future negotiations, and serving as a hedge in case SALT failed to yield results.5

The treaty signed by President Nixon and Chairman Brezhnev in May 1972 in Moscow consisted of two major parts. The first, and the only part of the deal that was a legally binding international treaty, was the Treaty on the Limitation of Anti-Ballistic Missile Systems, commonly known as the ABM Treaty. This was quickly ratified by the US Senate. It limited both parties to 100 ABM launchers at each of two sites (later changed to one site by the 1974 ABM Treaty Protocol),
separated by 1,300 kilometers and defending only the national capitals and one region of strategic value (such as an ICBM field). It also limited the ability of either side to pursue research and development efforts in ABM technology. The United States chose to locate its one ABM system at Grand Forks, North Dakota; the Soviets kept their operational site near Moscow.

The second part of the treaty was an Interim Agreement on Certain Measures with Respect to the Limitation of Strategic Offensive Arms. This was the heart of the SALT I treaty, but it was, in fact, an executive agreement that required no legislative concurrence during its five-year life. Both sides ostensibly expected it to be formalized in a follow-on SALT II treaty before the five years expired. The Interim Agreement limited the number of missile silos and submarine missile tubes to the levels each side maintained in the summer of 1972, and prevented either side from increasing its totals beyond those levels: 1,054 land-based silos and 710 SLBMs for the United States; and 1,618 and 740 respectively for the USSR. The treaty also restricted the total number of Soviet heavy ICBMs. The United States was willing to accept this obvious numerical discrepancy between the two states because of its lead in MIRV technology, and because it wanted to stop further Soviet deployments. The treaty formalized the principle of verifying compliance using national technical means (optical, thermal, and electronic sensors on aircraft and satellites) and banned either side from deliberately interfering with the other’s systems, or of attempting concealment. This proved to be a real milestone in arms-control agreements that reverberate to this day.

The US Air Force had little direct involvement in the SALT I negotiations. With no previous arms-control experience upon which to base its policy, the Air Force was generally content to react to higher-level guidance from the political leadership. The one key player was Maj Gen Royal Allison, USAF, who represented the Joint Chiefs of Staff on the SALT negotiating team. But anecdotal evidence suggests that General Allison was not particularly liked within the senior officer corps, and that the Air Force may have sent him to the negotiations to “get rid of him.” Later he was considered disloyal to his service
for having “given too much away” while serving as JCS representative to the SALT I negotiations.\textsuperscript{7} If the first part were true, this would certainly indicate the low level of concern granted the arms-control process by the corporate Air Force in this first strategic session. And the second quote shows how dangerous an arms-control assignment can be for one’s career, which in turn may have deterred other bright officers from providing their expertise to this field.

In the early 1970s, the Air Force was not organized with any thought given to the central role that arms control would take in the years ahead. What little thinking was being done on arms-control issues took place in a couple of key offices. In 1971, for example, the Secretary of the Air Force had an office of Deputy Under Secretary for International Affairs—a likely place, one would think, for arms-control policy to be designed. But the secretary was not involved in arms control during SALT.\textsuperscript{8} In fact, that office was eliminated the next year. Under the Chief of Staff Gen John Ryan, Maj Gen Glenn Kent was the assistant chief for Studies and Analysis from 1971–73, and Lt Gen George Eade was deputy chief for Plans and Operations. Most arms-control-related issues fell within the purview of Plans and Operations. General Kent, called in one book a “maverick general,” was doing personal studies of strategic exchanges and the impact of arms-control limits on force structure, but these were not officially Air Force-assigned tasks.\textsuperscript{9} According to General Kent, nobody ever officially asked him for any studies to support Air Force positions on SALT I.\textsuperscript{10} Presumably there were some Air Force positions, but those were blended with the other services’ desires at the Joint Staff level and presented to the OSD SALT committee as generic “uniformed military” inputs.

The bottom line, according to those who remember the SALT I years, was that the Air Force was uncertain what this new concept of arms control meant to them, and as such was not particularly involved in helping establish the US negotiating position. It was reactive, rather than proactive. The Air Force’s only real interest seemed to be in protecting its force structure at the highest possible levels so it could support Strategic Air Command in achieving the Single Integrated Operations Plan.
In this regard the Air Force had the support of Secretary of Defense Melvin Laird and the joint chiefs. In 1972 they presented to Congress the quid pro quo of arms control: unless strategic modernization (in the form of the Trident submarine and the B-1 bomber) was approved, they could not support the SALT agreement. Not building these weapons, said Laird, would “raise the white flag of surrender” to the Soviets. As the chief SALT negotiator at the time has written about the military’s opposition to MIRV limits, “while the military generally supported the arms-control process as represented by SALT, they drew the line at setting qualitative as opposed to quantitative limits on U.S. forces. They made this position clear within the bureaucracy early on.”

Strategic Acquisition Programs of Interest to the Air Force in the 1970s

The United States was pursuing a number of strategic systems during the 1970s, most of which were of particular interest to the Air Force. We now review four of the largest and most contentious programs, in terms of arms-control restrictions and limits.

The B-1 Bomber

The goal of the B-1 program was to develop a manned strategic bomber that could do everything: high and low altitude, supersonic and subsonic speeds, conventional and nuclear weapons. It first flew in 1974, but was cancelled by President Carter in 1977 when he selected B-52s with air-launched cruise missiles as the preferred future air-delivery method.

The program remained in minimal R&D status until it was restored by President Reagan in 1981. A 1976 Air Force Impact Statement submitted to ACDA said that the B-1 was simply force modernization, rather than a new system, and as such was fully permitted under the SALT I Interim Agreement. SALT I did not limit bombers in any case, but the Air Force promised that the B-1 fleet would fall within the aggregate ceilings of the proposed SALT II.
The MX Missile

Studies began on a follow-on ICBM for the Minuteman force in 1973. The MX program raced toward development in the 1970s because some believed it could serve as a bargaining chip in the SALT negotiations. This belief was held even among members of the Air Staff, although as the program developed, the Air Force decided it wanted the MX and needed to protect it from arms-control restrictions.15

The MX posed a real arms-control dilemma: fixed silos would make verification easier, but also increased its vulnerability; a mobile MX, on the other hand, while having enhanced survivability, would create verification issues that might irreparably harm the SALT II process. The 1976 Air Force Impact Statement claimed that MX was consistent with SALT I, which allowed R&D and technological improvements to the missile force. It would also be designed to comply with SALT II limits and restrictions on weight, size, and sublimit numbers.

The Air-Launched Cruise Missile

The ALCM program began in 1973, with a first air-launch test in 1976. The Air Force had never much liked the concept of cruise missiles. They seemed to pose a threat to the organizational essence of the service by potentially eliminating the need for a manned bomber. Yet paradoxically the Air Force eventually came to accept and embrace ALCMs as one means of ensuring the survival of the bomber fleet as a strategic stand-off delivery platform for ALCMs.16

This turnaround in Air Force interest in ALCMs came as a bit of a surprise to the political leadership. In January 1976, for example, Secretary of State Henry Kissinger went to Moscow for what was hoped would be the final negotiations leading to a SALT II agreement, but the talks were scuttled by Soviet opposition to the Pentagon's new-found love for cruise missiles.17 The 1976 Impact Statement to ACDA claimed that ALCMs were allowed under SALT I, and that while SALT II was actively considering ALCM limits, the missile development program would proceed anyway "with full cognizance of any agreement reached in SALT II." President Carter assured
Congress that bombers armed with cruise missiles would not be considered MIRVed systems under SALT.

**Trident Submarines**

A Navy program, the Trident was of considerable interest to the Air Force senior leadership because of its potential for usurping what they considered to be a role rightfully theirs: the delivery of strategic weapons to an enemy’s homeland. At a minimum Trident’s cost could negatively impact the ongoing Air Force programs outlined above. The first Ohio-class Trident boat was launched in 1979, seven years after the program was approved.

In its 1976 Impact Statement to ACDA, the Navy pointed out that while modernized submarines were limited by the SALT I Interim Agreement, that agreement would expire in 1977, thereby making the Trident’s first sea trials legal when they happened in 1979. Furthermore, SSBN limits would be included in the proposed SALT II aggregate ceiling.

**SALT II Negotiations and Treaty Details**

Strategic arms limitations reached a high-water mark in 1972 with the signing of SALT I. For several years the arms-control process served as the focus and centerpiece of US-Soviet relations. By the end of the decade, however, arms control would find itself relegated to the political sidelines as political and technological trends led to the abandonment of SALT II. But we are getting ahead of our story.

Negotiations on a second SALT treaty to replace and formalize the interim agreement began almost immediately after SALT I was signed in November 1972. This time the venue for negotiations was Geneva. Negotiations got off to a slow start, however, as the Soviets appeared unmotivated to continue the SALT process and the United States administration was distracted by the Watergate scandal and the final years of the Vietnam War. It took seven long years of arduous debate to reach an agreement, but the SALT II Treaty was finally signed in June 1979 by President Carter and Chairman Brezhnev. The final treaty was based closely on an agreed framework.
signed by President Ford and Brezhnev in 1974 during their Vladivostok summit and affirmed at a 1977 meeting between Secretary of State Cyrus Vance and Ambassador Andrei Gromyko in Washington.

The SALT II Treaty limited strategic delivery vehicles. It included sublimits on various system types. The treaty was never ratified by the US Senate. After heated debate in late 1979 that raised questions over whether it could ever be ratified, Carter withdrew the treaty from consideration in January 1980 to protest the Soviet invasion of Afghanistan. But there were additional factors that suggested difficulties in achieving Senate confirmation: technical issues and verification problems; differing definitions of détente given Soviet adventurism in Africa; growing US ICBM vulnerability as a result of Soviet military growth during the 1970s; and the fact that the US administration was distracted from arms-control issues by the Iranian hostage crisis. Nevertheless, both sides continued to abide by the treaty limits through reciprocal unilateral statements until 1986, when the strategic buildup under President Reagan surpassed one of the warhead sublimits.

The SALT II Treaty created an overall ceiling for strategic delivery systems and sublimits on specific delivery types. The overall ceiling was 2,400 delivery systems (to be reduced to 2,250 within a couple of years). There were several nested sublimits: 1,320 total MIRVed ICBMs, SLBMs, and cruise-missile carrying bombers; 1,200 ICBMs and SLBMs; and 820 ICBMs. These sublimits gave some flexibility to each side as to how they would structure their forces. One new type of ICBM was allowed, with a maximum of 10 MIRVed warheads; the counting would be based on the maximum number of warheads tested for each missile type. No new heavy ICBMs were allowed. New SLBMs were limited to 14 MIRVed warheads. The Soviet heavy SS-18 was limited to 10 MIRVed warheads. The maximum number of ALCMs allowed on a bomber was 20. No new missile silos could be built. The treaty would be in force through 1985, and national technical means were still considered sacrosanct for verification of the other side’s compliance with the treaty provisions. Encryption of test results was banned to enhance verification. Both sides agreed to contribute
to a database that would be kept at the Standing Consultative Committee (SCC) and updated regularly. Finally, the two parties issued a joint statement that they were deferring several difficult questions involving mobile systems, cruise missile ranges, and future force reductions.21

US Air Force Role in SALT II

The Air Force was considerably more involved in SALT II than it was in SALT I. By the mid-1970s Headquarters USAF had established an office that dealt with arms-control-related issues. In 1976 the director of Air Force Studies and Analysis (AFSAA) was Maj Gen Jasper Welch. Though sometimes at the request of XO, the only organization doing any significant studies on arms-control-related issues was AFSAA. These included reviews of missile throw weight, the effect of arms-control limits on first-strike survivability, the impact on US forces of Soviet MIRVs, MX basing options, and so on.22

In 1978 the Air Staff underwent a major reorganization.23 Gen Lew Allen replaced David Jones as chief of staff; Jones moved on to become chairman of the Joint Chiefs (CJCS). For a few months he held both posts simultaneously, during which time one of his staff officers for arms control remembers receiving Air Staff papers on SALT and handing them directly to General Jones for his consideration. Jones believed he was representing the Air Force when he made a decision or took a position as CJCS.24 The new Air Staff organization included a deputy chief of staff (DCS) for Programs and Analysis, beneath which sat General Welch’s Concepts and Analysis office. In mid-1978 the executive secretary of the SALT delegation was replaced on an interim basis by Air Force Maj Gen John Ralph; at the same time, the deputy commissioner of the US component of the Special Consultative Commission was Air Force Brig Gen Harry Goodall.25 Within XO there was a small office dealing with International Affairs (AF/XOXXI, the forerunner of today’s AF/XONP), headed up by Col Frank Jenkins, which dealt with arms-control matters. According to Jenkins, there were only three officers in his shop authorized to see the compartmentalized SALT papers; one of those was Maj (future Gen and CINCSAC) Lee Butler.26 Within the chief’s staff group
Lt Col (future assistant secretary of defense for policy) Ted Warner handled SALT papers and issues for General Allen.

The Joint Chiefs of Staff realized that they had to walk a fine line when dealing with the military services. It used the offices of J-5 (and later, during the START era, the newly created J-8) to develop trusting relationships with the services, including the Air Force, by conducting studies such as military sufficiency analyses with service inputs. This allowed the JCS staff to create better rapport with its service counterparts, which in turn led to closer agreement in other arenas, including arms-control negotiating positions.27

In the final SALT year, 1979, the Air Staff made a few additional minor organizational changes. Studies and Analysis, still under the direction of General Welch, was restored to its former level of assistant to the chief of staff, thus symbolically elevating the importance of arms control within the Air Staff.

The military SALT apparatus was two sided, as figure 1 shows.28 “Pentagon” policy was developed in parallel by the joint chiefs and the secretary of defense. Air Force inputs nominally went up the chain through the JCS and eventually became JCS inputs to its representative on the negotiating team. But this was just one of many such representatives, and the chief negotiator had multiple such inputs to consider as he developed America’s position in the talks. During SALT I the JCS focal point for arms control, the SALT office, reported directly to the chairman. But after 1973 that office was moved to the J-5 Directorate, where its voice was muted by the time it got to the chairman. Examples of personnel in these offices include Paul Nitze, who was the OSD representative to the SALT Delegation during the Nixon years, Michael May, who replaced him under President Ford, and Walter Slocombe during the Carter presidency. Major General Allison, USAF, held the JCS representative’s slot for SALT I, and Lt Gen Edward Rowney, US Army, during SALT II.29 Air Force Brig Gen William Georgi served as the chief of the international negotiations branch of J5 from 1972–75. That position was again held by the Air Force when Brig Gen Harry Goodall took over in April 1978.30
Rather than providing a united Pentagon front to the inter-agency process, occasionally the two views that came out of these parallel processes were at odds with one another, particularly during SALT I when the process shown in figure 1 was still under development. The establishment of the formal approach shown above did dampen such differences during the SALT II negotiations.31

According to Air Force Lt Gen Brent Scowcroft, who served as national security advisor to President Gerald Ford, it was hard to separate the Air Force’s position from the consolidated Department of Defense position that he saw when it came to the White House. As an example, he relates that the two key issues that took up most of his time during his tenure in the National Security Council (NSC) involved the role of cruise missiles and the Soviet Backfire bomber. Despite the amount of time he spent on these military topics, he had no idea what the corporate Air Force thought of either one of them.32

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Figure 1. US Military SALT Apparatus, 1976–78

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Given renewed fears of Soviet capabilities and attitudes in the late 1970s, as evidenced by the Soviet invasion of
Afghanistan in 1979, several strategic systems were saved from extermination in the early 1980s under Presidents Carter and Reagan. These included the MX and the B-1, which returned from purgatory to full development, and the beginnings of two new stealth programs that would eventually lead to the B-2 bomber and advanced cruise missile. Even Gen David Jones, who supported the SALT concept in general and President Jimmy Carter’s agenda in particular, expressed “deep reservations” about supporting SALT without a mobile MX system. Arms control also became more important during the Reagan years as a counter to the arms buildup; as such, the role of arms-control policy making within the Air Staff grew, as did the number of trusted agents.

Arms Control and the US Air Force: Themes from the SALT Era

Most observers of the SALT era believe that to the Air Force arms control did not involve an arms-control process, per se—rather, it was a process of protecting the Air Force from arms control. That attitude underlies most of the themes that follow as we analyze how the Air Force reacted to the new concept of negotiated arms limitations, and then adapted to the realization that it needed to be more proactive in the process that was developing despite its wishes.

SALT I was a new game. The SALT process that began in the late 1960s seems to have caught the Air Force off guard. There was little corporate Air Force involvement in SALT I, and what little there was took place at the highest levels, behind tight security and with a close-hold mentality regarding the positions that were developed.

Since SALT I did not address strategic bombers, and since ICBM deployments had been halted by Secretary of Defense Robert McNamara in the mid-1960s, the Air Force had little concern or interest in the negotiations. Certain individuals were interested in the process and doing personal studies, but there was little corporate attention given to SALT.

SALT II included a broader cast of characters. With SALT I completed, and SALT II taking a more comprehensive approach to strategic systems, the Air Force became more
interested and involved. The process was still compartmentalized, close-hold, and involved only a few trusted agents on the Air Staff, but the planning and policy papers were being developed at a deeper level within the Air Force bureaucracy than was the case in SALT I. The work done in XOXXI, for example, was accomplished by the three approved “SALTers” who dealt directly with the chief of staff; there were no two or three star intermediaries unless they were personally approved by the chief as trusted agents.\textsuperscript{35} The process fell outside of the normal staff officer chain of command.

The chief’s staff group also had a key role in developing the Air Force position on SALT issues. The final “Air Force” position was personally made by the chief of staff, with inputs from a small group of advisors. Both General Jones and General Allen believed that SALT II was the right thing for the country to do, so the Air Force officially supported the negotiations and treaty outcomes, despite a widespread concern with arms control among the officer corps.\textsuperscript{36}

The Air Force’s goal in both negotiations was to protect the existing and planned force structure. “Protect ours, limit theirs” went the mantra. The Air Force seemed to go along for the ride when it came to arms control, never taking the lead within the interagency process, or even within JCS, on SALT I or II. As one participant from the era put it, “The Air Force only got involved when it had an ox about to be gored.”\textsuperscript{37}

The corporate position was to prevent any agreement that impinged on the Air Force’s ability to fight or deter—which meant most arms-control deals. It also wanted to protect its share of the strategic Triad, and keep those capabilities from moving into the Navy’s hands.

The Air Force was juggling multiple concerns, of which arms control was just one. Echoing the previous theme, the Air Staff was indeed busy during this period. It was trying to keep enough MIRVs for the ICBM force and develop the B-1 bomber, and to protect MX basing plans.

The Air Force always wanted a new heavy bomber and land-based ICBMs, so it was willing to fight to protect those against either enemy—arms-control negotiations or the US Navy. This meant occasionally going against the political desires of the

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JCS and higher levels, some of whom wanted to reach an agreement with the Soviet Union despite any Air Force concerns or position.

The Air Force worked the unofficial interagency process more than it does today to protect its systems. Otherwise known as lobbying, whether legal or not, this was commonly done in the 1970s. The military services were not directly involved in the interagency policy-making process. Their inputs were supposed to be incorporated into a common Defense Department position.

That process often meant that the Air Force’s specific concerns were lost or watered down to the point of inconsequence. As a result, for example, to protect the MX missile during SALT II, senior Air Force leaders held regular informative meetings with Congressional members, National Security Council staffers, ACDA, and the State Department. These were all quiet, behind-the-scenes get-togethers. Such meetings allowed the Air Force to get its positions considered via back doors to these agencies, rather than solely through a consensual compromise JCS joint position paper. Such a system required senior officers who understood how the process worked and were willing to allow their staffs to do this sort of outreach.

There was no coordinated Air Force input to the arms-control process in the 1970s. Particularly during the late 1960s and early 1970s, the Air Force did not fight very strongly for its beliefs, because it had not identified what those beliefs or equities were. There was no real policy focus within the Air Staff that could effectively deal with such issues, and no section or division within the Air Staff devoted to arms control. The responsibility for dealing with arms control fell within the strategic planning or acquisition directorates, rather than programs or operations. As a result, the Air Force’s inputs to the JCS were “not all that important,” according to a former executive officer to a JCS chairman—at a time when both were Air Force general officers. And this was during SALT II, when the Air Force was more motivated than it had been in SALT I, yet it still did not have an organized process to get its core interests in front of the negotiating team. Instead, whatever
papers it wrote ended up going through the joint process and lost whatever service-specific focus they may have had.

The Air Force ended up reacting to arms-control initiatives, rather than developing them. According to another participant, the Air Force’s attitude seemed to be characterized by the belief that “we’ve got enough to worry about without worrying about arms control, too—it may be important, but it’s not our job; let someone else think about that and we’ll accept the decisions and then react to them at a later time.”42 Or as one participant put it, in those days the attitude was that “real men don’t eat quiche—or do arms control.”43

**Air Force arms-control policy was developed by a small group of analysts reporting to the chief of staff.** The nexus of arms-control thinking and policy development in the 1970s can be located in a few specific offices. These included

- Air Force Studies and Analysis (AFSAA);
- Air Force International Affairs (AF/XOXXI);
- Air Force Concepts (AF/XOC);
- Air Force Intelligence (AF/IN);
- Air Force Chief of Staff’s Staff Group; and
- (sometimes) Air Force research, development, and engineering (DDRE), and acquisition (AF/AQ).

The Secretary of the Air Force had little involvement in arms-control matters, preferring to leave those to the JCS and OSD.44 Nor was Strategic Air Command involved in the SALT years. It left the studies and negotiations to the joint chiefs, and in the late 1970s, at least, the commander in chief, Strategic Air Command (CINCSAC) was receiving quarterly update briefings from XOXXI. SAC simply wanted to have enough bombers and missiles to accomplish the SIOP; it didn’t have to worry directly about acquiring those forces—that was the service’s responsibility. The Air Force recognized those needs and agreed with them, so it took the lead (such as it was) for SAC in the arms-control realm. As Forrest Waller points out in chapter 7, that role changed dramatically during the START talks in the 1980s, as SAC became much more invigorated and involved in the development of American arms-control policy.
Conclusion

The Air Force role in arms-control policy development grew during the 1970s along with its enhanced recognition of the importance of that process and the potential consequences of a reactive posture. Whereas there was very little involvement by the corporate Air Force during SALT I negotiations, and that only at the very highest levels, by START II the increasingly widespread role for Air Staff officers hinted at the degree to which the Air Force would eventually make arms-control policy development, negotiating strategy, and treaty implementation a central focus of its operations. But that perspective was still to come in the late 1960s and 1970s when the organization found itself facing a new “enemy”: political leaders of its own country who were voluntarily negotiating away Air Force strategic forces in a conference room in Europe. The Air Force’s strategic culture, its view of self, had difficulty accepting that premise, and it took years before coming to grips with it and establishing the necessary structure to best deal with this new process.

Notes

2. Ibid., 170.
9. Hampson. An example of these studies can be found in a paper published after General Kent retired. See Glenn A. Kent with Randall J. DeValk and Edward L. Warner III, *A New Approach to Arms Control* (Santa Monica, Calif.: RAND Corp., June 1984).
10. Kent interview. General Kent did special studies on alternative missile limit scenarios for Paul Nitze, but in doing these he was not representing the Air Force. General Kent admits that his primary agenda as director of AFSAA during SALT I was to point out that arms control was wrong if it limited the number of ICBM launchers but not the size of the missiles.


18. Hampson, 192.


20. Smith, Talbott.


27. Wheeler interview.

28. Chart recreated from Wolfe, chap. 2, “Institutional Setting of the SALT Process: The U.S. Side,” 41. It is representative of how the process was organized within the Defense Department in the later SALT period. Notice how small the Air Force input appears—it is lumped under “Service Inputs” in the bottom box on the JCS side.

29. Wolfe, 306. Interviews with participants of that period pointed out that General Rowney’s reputation among those who worked with him during SALT II was much like General Allison’s in SALT I: poor.

30. Wolfe, 35.

31. Ibid., 42.

32. Scowcroft interview.

33. Hampson, 127.

34. Wheeler interview.
35. Jenkins interview. Later, of course, that situation changed. As the corporate Air Force became more interested and involved with the development of US arms-control policy in the 1980s, more of the intermediate three-star directors became engrossed in the details of arms control, as well.


37. Kent interview.

38. A good example of this type of lobbying can be found in the discussion over Gen James McCarthy’s role in persuading congressmen of the B-1’s value to their districts in Kotz, *Wild Blue Yonder*, 20–22.


40. Kent interview. Others interviewed for this chapter believed that there “must have been” some process or paper flow up through AF/XO to the JCS for SALT I, but no one could recall any specifics that would verify that process until XOXXI was created in the early 1970s for SALT II.


42. Warner interview.

43. Dellerman interview.

44. Multiple interviews, including Warner and Todd.
PART III
The Reagan Years, 1981–88
Chapter 5

Arms Control during
the Reagan Administration

Charles D. Dusch Jr.

Ronald Wilson Reagan became the 40th president of the United States at one of the more dangerous periods in American-Soviet relations. The nation faced an aggressive Soviet Union with an increasingly lethal strategic nuclear arsenal. But Reagan’s optimism in the inevitable triumph of democracy over an inherently evil and corrupt empire was unflagging. His was a vision for America that reflected his confidence in her people and his abhorrence of nuclear war, which would come to be reflected in his approach to arms control. One of Reagan’s major foreign policy themes of the 1980 presidential campaign would directly influence US arms-control efforts—the consequences of losing military superiority to the Soviet Union.

The chief defense issue for Reagan was his conviction that the United States had lost military superiority to the Soviet Union. The new president felt that Moscow had used détente to advance its global strategic interests while America unilaterally disarmed. His major strategic focus would be to reverse this perceived “window of vulnerability” that characterized US-Soviet relations, and move the United States from a position of weakness to strength. In August 1980, Reagan summarized his approach to arms-control talks with the Soviet Union:

I think continued negotiation with the Soviet Union is essential. We need never be afraid to negotiate as long as we keep our long-term objectives (the pursuit of peace for one) clearly in mind and don’t seek agreements just for the sake of having an agreement. It is important, also, that the Soviets know we are going about the business of building up our defense capability pending an agreement by both sides to limit various kinds of weapons.¹

The purpose of this chapter is to review the strategic context and the arms-control climate of the day, appraising the threat
the Soviet Union posed, their approach to arms control, and the Reagan Administration’s strategy in dealing with them. It examines the Reagan Administration’s approach to arms control and its desired objectives. Although there were many talks with the Soviets at that time, from space to conventional forces, our primary focus is on the Strategic Arms Reduction Treaty (START) and Intermediate-Range Nuclear Forces (INF) discussions. These two areas are central to the principal concern of the period—imminent nuclear war between the superpowers—that was perceived to be a very real and plausible threat in the early 1980s. It also examines the negotiating strategy of the US negotiating team and the difficulties and solutions encountered by them. Finally, it sums up the achievements and consequences from those negotiations.

The Threat: The Union of Soviet Socialist Republics

When President Reagan took the oath of office on 20 January 1981, General Secretary Leonid Brezhnev had led the Soviet Union since 1964. In his 18 years of power, Brezhnev had driven the Soviet Union to accumulate an enormous nuclear arsenal. The USSR had surpassed the United States in both steel output and oil production. The living standards of the Soviet people had actually improved in his first 12 years of power. Under the guise of the Brezhnev Doctrine, the Soviet Union was expanding its influence around the world. Although initially applicable only to Eastern Europe, the Brezhnev Doctrine claimed the right to expand Soviet influence of “national liberation” while simultaneously claiming the right to keep what they had gained. Essentially, it stated that communism was irreversible, and once a nation had become socialist, it was not again to be surrendered to “counterrevolution.”

In the 1970s, the global situation had begun to change. Détente marked the relationship between the superpowers. According to John L. Gaddis, the 1970s witnessed “the most substantial reduction in American military capabilities relative to those of the Soviet Union in the entire postwar period.”

While the United States exercised unilateral restraint over its strategic forces under détente, the USSR had continued
producing new generations of missiles, bombers, and submarines, outspending the Americans two-to-one overall, and seven-to-one on ballistic missiles. These included two new ICBMs built in violation of the Strategic Arms Limitation Talks II (SALT II), the mobile SS-24 ICBM with 10 warheads and the “heavy” SS-25, also mobile. A steady increase in the numbers of Soviet MIRVs (by a factor of four) and in missile capability (with the SS-18 Mod 5 and 6) continued. The Soviets developed new supersonic Blackjack and Backfire strategic bombers. A large, phased-array radar constructed at Krasnoyarsk, coupled with ABM-related tests of surface-to-air missile components, revealed the Soviets were developing a national ABM defense in violation of the ABM Treaty, a violation they would later admit. It was also revealed that the Soviets were building their own Strategic Defense Initiative (SDI) program.

More alarmingly, the Soviets appeared to be preparing to fight and win a nuclear war. In speeches to the Russian people, Secretary Brezhnev and members of the Soviet military leadership spoke of nuclear war in terms of “victory will be on the side of world socialism” and “the attainment of victory.” In a meeting of communist leaders in 1973, Brezhnev declared that détente was a stratagem to allow the USSR to strengthen its military so that by 1985 they could exert their will on a global stage. With a superiority of strategic nuclear weapons, the Soviet Union would never again be faced down by the Americans as they were in the Cuban Missile Crisis. The Soviet approach to arms-control negotiations unquestionably reflected this growing confidence.

**The Initial Soviet Approach to Arms Control**

The Soviet approach to arms control was designed to achieve both general national and specific objectives. These general national objectives included

1. legitimacy for the Soviet political system and rule by the Communist Party—including the recognition of the partition of Europe,
2. expansion and enhancement of Soviet global influence,
3. defense of the Soviet Union,
4. domination of the land and sea adjacent to Soviet borders,
5. protection of planned Soviet force modernization and developments,
6. constraint and reduction of US and Western forces,
7. fragmentation of NATO and separation of the United States from its global friends and allies, and
8. undermining support in the West for defense and hamstringing Western military programs.12

The more specific objectives included
1. stability and parity in the US-Soviet military competition at the strategic nuclear level,
2. Soviet hegemony in Europe at the theater level,
3. preventing the United States from acquiring unilateral strategic advantages over the Soviet Union, and
4. preserving as much of the SALT II framework as possible.13

Later, in the course of negotiations with the United States, additional objectives would be inserted into Soviet arms-control strategy and would achieve more prominence. In particular, a key Soviet objective in 1984 became the prevention of an arms race in space (or more accurately, preventing the United States from joining the Soviet arms race in space with their own SDI program).14

Noticeable by its absence in the list of Soviet priorities is the reduction in militarily significant numbers of nuclear weapons. In fact, early Soviet proposals allowed an increase in the number of Soviet weapons (but not in the number of US weapons). Not until Gorbachev came to power would the Soviets accept the principle of deep cuts in strategic weapons in response to President Reagan’s SDI program and policy of seeking deep cuts. Numbers of weapons were not related to strategic stability.

One should note that the Soviet view of stability was associated primarily along political lines. The Soviets believed that a situation was stable when their own military had confidence in its ability to execute assigned functions and could compensate for external or internal factors that might affect war plans. Arms control could therefore make significant contributions to stabilizing the threat environment for planning purposes. A threat constrained by arms-control agreement was more
predictable and considered more stable. Any change in the strategic environment, and especially changes in the threat, compromised Soviet abilities to plan with confidence and therefore was inherently destabilizing. Although the Soviets never published a list of destabilizing weapons, one can reconstruct a list of those weapon systems based on public statements defending Moscow's positions. According to those statements, the following features characterized destabilizing weapons:

1. Their approach could not be detected with adequate warning time.
2. They could hit targets with great precision (ergo, hardened targets).
3. There were few countermeasures against them and they were difficult to defend against.
4. The Soviet military could not easily preempt them (they had highly inherent pre-launch survivability).
5. They lacked secure central control and hence were prone to accidents or unauthorized use.
6. The United States was ahead of the USSR technologically in a given weapon system development.

This view labels as destabilizing precisely those weapons the United States considered as stabilizing—for instance bomber-delivered weapons such as cruise missiles. The Americans did not consider them as first-strike weapons since their time of flight was so long, they had to penetrate sophisticated Soviet air defenses, and their launch platforms could be recalled in flight. But as Soviet negotiators insisted, "The cruise missile is a very tricky weapon. I would even say it is the most destabilizing weapon . . . because it is low-flying. It cannot be seen by radar. It can hit the target with great accuracy."15

The Soviets had no formally developed theory of arms control or a bureaucracy whose sole purpose was advocating arms control as an adjunct to its foreign and defense policies, as did the United States and its Arms Control and Disarmament Agency (ACDA). Consequently, Soviet arms-control objectives were not as conceptually elaborate or as well articulated as were US arms-control priorities.16 On top of this
fact, the deaths of four Soviet leaders in rapid succession, and
the political impact that had on the Soviet bureaucracy, made
meaningful arms-control negotiations difficult for the first
term of the Reagan Administration.

Two dimensions of the Soviet approach to arms control—the
political and the military—were especially crucial to under-
standing Soviet arms-control policy, and START in particular.
At least three basic considerations probably influenced Soviet
political assessments of arms control: the traditional function
of arms-control diplomacy in Soviet foreign policy, the Soviet
concept of strategic stability, and the Soviet attitude toward
international treaty commitments. The latter Soviet attitude
was influenced by at least three factors. In terms of interna-
tional law, the Soviets were strict constructionists who
believed that whatever was not specifically prohibited by the
agreement was allowed. Depending on the needs of the
moment, the “spirit” of the agreement would be short-lived. In
addition, a major asymmetry existed between the United
States and the Soviet Union in that there was no internal con-
stituency within the USSR to ensure compliance. The Soviet
bureaucracy, not accountable to the electorate for their
actions, assigned arms-control compliance a low priority.
Finally, the Soviets approached each agreement with an eye
toward “options for evasive compliance.”17 Because of this atti-
tude of using arms control as a means to gain an advantage,
the Soviets made sure that the text accurately reflected the
negotiation record.18

The Soviet military factor included three aspects in arms-
control compliance; first, Soviet political-military doctrine
which called for deterring war by being prepared to wage it
successfully at all levels of conflict; second, Soviet operational
targeting requirements to ensure they could preemptively
destroy an adversary’s nuclear forces; third, to sustain the
momentum of the Soviet nuclear force modernization pro-
grams. Therefore, the Soviet military played a central role in
Soviet negotiating policy.19 As Secretary of State George P.
Shultz pointed out, when Marshal Sergei Akhromeyev, the
equivalent of our chairman of the Joint Chiefs of Staff, showed
up at the negotiations, the American delegation knew the
Soviets were “serious and whatever we agree to, that’s going to stick because the military is clearly represented.”

From the earliest days of the Reagan Administration, the Soviets waged a vitriolic propaganda campaign against several key policies in an effort to justify the existing balance of forces, as well as Moscow’s own peculiar perspective on the meaning of strategic parity. This campaign was in response to the Reagan Administration’s Four-Part Agenda, discussed in the next section. The propaganda campaign intended to bring maximum pressure to bear against the US strategic modernization program and to fragment and weaken the moral and political resolve of the NATO alliance, especially the deployment of Pershing II and ground-launched cruise missiles (GLCM) to Europe. A growing nuclear freeze movement was gaining momentum in the West as expectations and fears of a nuclear war increased. By portraying President Reagan’s policies as destabilizing and leading the superpowers toward nuclear war, the Soviet propaganda machine hoped to derail Reagan’s key programs. Underlying much of the Soviet attack was the fear that the strategic modernization program would lead to a leap in technological superiority by the United States. The degree to which Soviet actions in START were motivated by Soviet fear of perceived American technological superiority should not be underestimated, although they were always careful to avoid explicitly acknowledging this superiority.

Secretary Shultz played on this fear by detailing for General Secretary Gorbachev how the world was about to radically change with computer and information technology. If the Soviet Union did not also change, it would be left far behind.

**The Reagan Strategy: Beyond Containment**

Throughout President Reagan’s speeches and writings, he reiterated that the main goal of the US Cold War policy should be to expedite the fall of communism. Because communism suppressed economic, political, and social freedoms contrary to the needs and desires of mankind, he argued, communism had laid the groundwork for its own destruction and could not possibly survive. Reagan saw the first step toward accelerating the fall of the Soviet Union as distinguishing the symptoms of
the Cold War from its sources. In this respect, Reagan viewed the arms race as a symptom of the Cold War, and thus concluded that arms-control negotiations would neither end the Cold War nor improve relations with the Soviet Union. The only reason to sign an arms-control treaty would be if the treaty enhanced the security interests of the United States. Reagan also believed that after a treaty was signed, the United States needed to increase its vigilance because the causes of the Cold War, the policies of the Soviet Union, remained.25

One might conclude that because communism was flawed, the West merely had to “hang on” throughout the Cold War and watch communism collapse. Although Reagan did think communism would not survive, he did not think Cold War victory inevitable in the short-term. Reagan believed American leaders had failed to properly situate the arms race into the overall context of the Cold War. They had ignored the Soviet buildup and aggression, and there were only two choices for the superpowers in the Cold War: surrender or victory. For America to achieve victory, her leaders had to understand what was required to achieve it as well as have the courage to do whatever was necessary for the United States to emerge victorious.26

Reagan’s strategy, therefore, was to move the United States beyond the old Cold War policy of containment. His was an aggressive plan to roll back the gains the USSR made during the 1970s. Reagan was convinced that a stratagem of strategic defense modernization—backed by US resolve—would lead the Soviet hierarchy to conclude that it had no alternative but to come to terms with the United States.27

On the political front, the Reagan Administration developed what came to be known as the “Four-Part Agenda.” This outlined a broad agenda that confronted the USSR where it was most vulnerable and put the initiative back into the hands of the United States. The Four-Part Agenda addressed human rights, regional issues, arms control, as well as bilateral issues. This agenda allowed the Reagan Administration to meet the Soviets head-on without increasing the risk of war and acted as an assertive counterbalance to the strategic modernization program. Positive movement by the Soviets in these four areas would be an indicator that they were serious about meaningful
contacts with the United States. That is why the Reagan Administration gave priority to Soviet behavior, focusing on regional conflicts rather than arms control.28

A popular misconception in the West was that Reagan was recklessly leading the country down the path toward nuclear war. This was based in part on Reagan’s insistence on rebuilding America’s strategic arsenal as well as his straightforward rhetoric towards Soviet aggression. Nuclear war was in the forefront of popular culture, portraying the president as a cowboy ready to push the nuclear “button.” Scientists asserted that “nuclear winter,” meaning the end of life on earth, could result from even a small-scale nuclear attack.29 The risk of nuclear war was perceived as more serious than ever before, and Soviet propaganda preyed upon this fear.30

Of course, the irony of this image of Ronald Reagan as a maverick ready to hurl nukes at a moment’s notice is the fact that Reagan was a nuclear abolitionist. On many occasions—with the summit in Reykjavik as the most remembered—Reagan stated that the world would be better off without nuclear weapons. In his famous “Star Wars” speech of 23 March 1983, he publicly declared that the ultimate goal of the SDI program towards nuclear weapons would be “to eliminate the weapons themselves.”31

But Reagan was also very pragmatic in his approach to strategic forces and arms control. He was well aware that the United States would only be able to successfully turn back the Soviet Union when US forces were again a credible deterrent. Reagan firmly believed that “Peace is purchased by making yourself stronger than your adversary,” and that “Nations that place their faith in treaties and fail to keep their hardware up don’t stick around long enough to write many pages in history.”32

The first order of business was to remedy the “window of vulnerability” that had opened during the 1970s. The most pressing initiatives concerned comprehensive increases in ongoing defense programs. Rather than change American strategy, Reagan’s initiatives focused on obtaining the resources needed to implement existing strategic goals successfully. In addition to continuing the Carter programs such as air-launched and sea-launched cruise missiles (ALCMs and
SLCMs), force modernization involved procurement of the cancelled B-1 bomber, deployment of the MX (Peacekeeper) and Trident D5 missiles, research and development of the single warhead missile (Midgetman), and acquiring the “Advanced Technology Bomber,” now the B-2 Spirit.

Of equal importance, but less well known, the Reagan Administration gave top priority to improving strategic command and control systems. The destructiveness of nuclear weapons, along with the electromagnetic pulse (EMP) inherent to a nuclear detonation, threatened the coherence of communications networks. An estimate in 1982 concluded that less than one percent of Soviet warheads of the period could destroy the US military command, control, communication, and intelligence (C3I) that connected the National Command Authorities (NCA) with fielded strategic forces. It was concluded that destroying C3I in a first strike was the single most effective target to reduce American strategic power.

A final pillar of Reagan’s strategic modernization program was to stay on schedule with the deployment of the INF missiles in Europe begun by the Carter Administration. This deployment was seen as being key to demonstrating NATO Alliance unity and resolve in the face of Soviet expansionism. A successful deployment of these systems would be a major setback to Soviet aims in Europe and could potentially force them into serious arms-control discussions with the United States, the ultimate goal being Reagan’s “zero option,” elimination of all superpower nuclear missiles in Europe. Such an achievement might lead to a more stable superpower environment.

The US Approach to Arms Control

The paramount US arms-control objective since 1958 had been strategic stability. The Reagan Administration’s new conception of the proper role of arms control in US security policy was that arms control should complement, not substitute for, strategy. The administration set forth these strategic principles in the 1980 Republican Party platform.

1. Negotiate from a position of strength.
2. Negotiate on the basis of reciprocal benefits from the Soviet Union.
3. Unilateral restraint by the United States had failed to bring corresponding reductions by the Soviets during the 1970s.
4. Arms-control negotiations represent an important political and military undertaking that cannot be divorced from the broader political and military behavior of the negotiating parties.\[^{37}\]

Critics of the administration cited the strategic modernization program and INF deployment as an indication it was not serious about negotiations with the Soviets, and would term these principles as “voodoo arms control.”\[^{38}\] Despite the criticism, Reagan was eager to engage with the Soviets, and knew he could be extremely effective if he could meet with Soviet leaders face-to-face.\[^{39}\] With Soviet leadership changing so rapidly during his first term, this desire could not be fulfilled. Nonetheless, the Reagan Administration derived an approach to arms-control negotiations from these strategic principles that would eventually become START. This approach was based on four basic premises, or operating assumptions.

1. The Soviets had, or would soon acquire, a destabilizing first-strike capability.
2. The SALT approach to arms control had failed to restrain the Soviet threat and had decreased stability and US national security.
3. US strength was the best assurance of peace and stability.
4. The United States must attempt to restore its negotiating capital.

The first premise addressed the “window of vulnerability” resulting from the deterioration of US forces and Soviet buildup in the 1970s. It also addressed Brezhnev’s goal of a USSR with global dominance and influence.\[^{40}\] The second premise was no surprise, for like détente, Reagan believed SALT only had “meaning if both sides take positive actions to relax the tensions.”\[^{41}\] Both of the first two premises described the circumstances existing at the beginning of the 1980s as Reagan and his advisors saw them. The second two premises
formed a prescriptive basis for an alternative approach to US national security. Mindful of the limitations of negotiating with the Soviet Union, they prescribed a new and subordinate role for arms control.42

The fourth premise recognized that serious negotiating asymmetries had been allowed to fester, leaving the United States at a disadvantage at the negotiating table. Unless the United States could restore its negotiating capital, there would be no incentive for the USSR to modify its stand or curb its expansion. Short-term attempts to restore it included changing ICBM alert postures from the Carter Administration’s “launch under attack” to “launch on warning,” proceeding with the INF deployment on schedule, and keeping pressure on the Soviets through rhetoric and the Four-Part Agenda.43 Long-term attempts included Reagan’s strategic modernization and eventually SDI.

SDI would ultimately become the single most important element in the conduct of negotiations with the Soviet Union. Of all the US modernization programs, it would inflame Soviet fears of a US technological leap and a new arms race in space. Much of this Soviet fear was based on their own SDI research.44 US negotiators would skillfully use SDI and America’s restored negotiating capital to meet the overarching arms-control goals of preventing war, limiting the damages if war occurs, and lowering the costs of preparing for war. During the Reagan Administration, these would be manifested through four major objectives.

The four major objectives that emerged in the arms-control process of the Reagan Administration included enhanced stability, militarily significant reductions, equality of rights and limits, and effective verification. These objectives materialized from a presidential request to review both US security and arms-control policies shortly after he took office in 1981.

The American objectives in the arms-control negotiations process sought to translate these premises into explicit priorities. One can clearly see in them an attempt to correct what the administration perceived were flaws in the later SALT II agreement. Many in the Reagan Administration felt that the communists always won negotiations and treaties like SALT II...
were the result. Reagan certainly expressed this view in his pre-presidential radio broadcasts when he stated, “we are still being out-traded by the Soviets.”

Reagan believed that, unlike his predecessors, he would change the focus of the arms-control process to make it work for American interests. Reagan’s team would attack the existing negotiating asymmetries that had favored the Soviets by attempting to match, neutralize, or compensate for them. He set forth his arms-control agenda in his speech to the National Press Club on 18 November 1981, when he called for talks that would bring meaningful reductions in strategic arms, as opposed to SALT’s purpose of mere limitations. Reagan also reiterated his campaign theme of making reductions both equal and verifiable, which remained a cornerstone of US strategic arms-control agreements.

Although a desired goal, strategic stability was not the pre-eminent goal. The United States recognized that other objectives would help to clarify and substantiate the overall goal of enhancing stability. Therefore, achieving militarily significant reductions, equality of rights and limits, and verification were also interwoven into the fabric of arms-control negotiations to achieve strategic stability. Since increases in weapons, throw weight, and first-strike capability were considered by the United States to be destabilizing, reductions in these capabilities were necessary for the agreement to be a success.

Arms race stability was a condition where neither side felt pressured to respond to the other’s military programs by investing in weapon developments it would otherwise forego. To maintain this stability, both sides assumed that both US and Soviet weapons procurement processes were driven by an action-reaction dynamic, and further, that both sides were determined to maintain fixed and finite mutually assured destruction capability for inflicting unacceptable damage upon the other. Both sides would also respond to any effort by the opposition to diminish the potential effectiveness of that capability. Therefore, both sides assumed that if neither side engaged in those efforts, neither side would feel prompted to accumulate nuclear weapons beyond those required for MAD.
The second major US objective, achieving militarily significant reductions, reflected Reagan’s belief that arms control should go beyond mere limitations to achieve meaningful reductions, thus distinguishing his approach from that of his predecessor. Reagan wanted to avoid the trap of conducting arms control for its own sake, which he believed had corrupted the SALT process. The focus on reductions would correct the errors of the past and make a substantive commitment to ensure that arms control actually served US national security interests. Reagan wanted his negotiators to use arms control to constrain military capability and potential instead of legitimizing buildups or freezing weapons at levels, he held, that were already too high. Consequently, US negotiators would concentrate on reducing the actual destructive potential of forces, specifically numbers of warheads, launchers, and throw weight. As we have discussed, stability required that these reductions set forth lower numbers of forces at equal levels. Domestically, this approach sought to appeal to popular sentiment to end the arms race as well as deflect criticism from the nuclear freeze movement.

Equality of rights and limits, often referred to as parity, sought to bring about mutual reductions to equal levels in the most important measures of military capability. This was an important element of the US pursuit for stability. An unequal agreement that established or prolonged an unequal balance could only result in instability. According to the State Department, “equality is an essential condition if arms-control agreements are to fulfill the requirements of strengthening stability and maintaining effective deterrence at reduced levels.” Parity is considered the only dependable basis for mutual arms race stability and has been a traditional objective and prerequisite for arms-control agreements. But Reagan differed from previous administrations in two ways: First, his team interpreted this objective as applying to equality of limits as well as equality of rights. Equal limits referred to numbers parity and is the conventional meaning of the word. Equal rights meant that neither side would have a unilateral or uncompensated right to one type of system (for instance, heavy ICBMs). Second, the Reagan Administration intended
that equality be achieved in overall destructive capability of US and Soviet forces—not just numbers of weapons. This is why throw weight and warhead numbers were so important, since Soviet warheads were about twice as destructive as US warheads.52

This objective of equal rights and limits was of such importance to US thinking that Congress had passed the Jackson-Vanik amendment in 1972. This amendment urged the president to ensure that future arms-control agreements would not place US strategic forces at a disadvantage to Soviet forces, thus making parity a part of public law (Public Law 92-448). Critics of the final SALT II Treaty cited a Senate Armed Services Committee report that concluded, “The treaty is unequal in favor of the Soviet Union and, thus, is inconsistent with Public Law 98-448.”53 As Dr. Kartchner points out, “parity is the sine qua non of strategic arms control.” Conventional wisdom held that the strategic balance could only achieve stability in conditions of strict parity; hence strategic parity became the “holy grail” of strategic stability. The resulting inequalities promoted the incentives for an arms race, as one side tried to counter or neutralize perceived advantages by the other side, to achieve equality. The question is, how does one measure equality?54

The Jackson-Vanik amendment attempted to measure equality in terms of destructive capability. Because US strategic doctrine required an “essential equivalence” between United States and Soviet strategic force capability, a US arms-control objective of equality in destructive might would align arms-control policy with US nuclear strategic doctrine, and hence deterrence.

Nonetheless, the United States had traded strict equality of rights for concessions in other areas, as was the case when the United States agreed to halve the expected deployment of US ALCMs (a weapon the Soviets saw as destabilizing) in return for Soviet agreement to reduce heavy ICBMs by half (a weapon the United States regarded as destabilizing).55 As US negotiators to the START process discovered, it is imperative to document what trades and concessions in these areas were related to, because after a time the Soviets would return to the
negotiating table requesting to change the deal hoping to dupe new American negotiators who were unaware of the reasons for the earlier concession. Recognition of this potential trap led Forrest Waller from OSD to write an internal paper entitled “Policy Advisor’s Guide to the START Treaty” in order to protect future negotiators.\textsuperscript{56}

ACDA, too, noted from its experience in arms negotiations that accords that lacked adequate provision for verification and compliance became a source of suspicion, tension, and distrust, rather than a source of international stability.\textsuperscript{57} Verification was the fourth major US arms-control objective. The Reagan approach to verification provisions was revolutionary, and one of the most important contributions his administration made to the theory and practice of arms control. Verification was a constant theme in his criticism of the final SALT II Treaty as well as in his summit meetings with General Secretary Gorbachev. To Reagan, the use of national technical means was never enough verification upon which to base US security. Reagan demanded intrusive, on-site verifications that would serve as an incentive for the Soviets to comply with any agreement.

As we saw with SALT II, the accepted attitude towards verification was that each side maintained the “adequacy” of monitoring compliance. It assumed the agreement clearly demarcated what actions complied with the agreement and which ones did not. If a party were accused of noncompliance, it could respond in a timely and militarily effective manner to answer the accusation. This traditional approach assumed that all parties signed the agreement in good faith—never intending to violate the treaty—that made the treaty self-enforcing.\textsuperscript{58} The administration contended that SALT had finally renounced this approach. The Soviets were accused of intentionally wording treaties to be ambiguous in an attempt to deceive US intelligence, and of cheating on occasion, such as the Krasnoyarsk radar site that violated the ABM Treaty.\textsuperscript{59}

The Reagan Administration’s approach to verification differed from the traditional approach in several key areas. First of all, rather than make concessions to secure verification provisions, which the administration believed was done under the
Carter Administration, US negotiators would take the position that verification would benefit all parties to an agreement. Verification, to Reagan, was essential to the viability of the arms-control process itself and therefore the United States would not concede anything to achieve it. Second, to detect violations in a timely manner, deter noncompliance, and provide an adequate evidential base upon which to determine the severity of the violations and formulate proportional responses, agreements would have to be “effectively” verifiable. In the words of Ambassador Eugene Rostow: “We shall not confine ourselves to negotiating only about aspects of the problem which can be detected by national technical means. We shall begin by devising substantive limitations that are strategically significant, and then construct the set of measures necessary to ensure verifiability.” The administration knew that more intrusive means of verification were essential. Reagan himself had said about SALT, “there is no way without on site inspection . . . to verify whether the Soviets are indeed complying with the treaty.”

The second aspect of the administration’s new verification policy required greater clarity and precision in the negotiated treaty language and closing loopholes that could later lead to differences of opinion regarding standards of compliance. Ambassador Rostow called for a treaty text that would “limit the likelihood of ambiguous situations developing.” By the time the START I Treaty was signed by the first Bush Administration, the substance of the treaty text was reasonably unambiguous and error-free, which is a tribute to the attorneys who supported the delegation.

To promote effective verification procedures, the administration made a distinction of just what comprised compliance. The approach they took distinguished between monitoring compliance, or observing treaty-constrained activities, and verifying compliance, which was assessing the legalities of those activities.

Monitoring compliance used NTM to gather raw intelligence data from the other party’s military activities, but did not involve any judgment regarding whether those activities fulfilled or transgressed international obligations. NTM included
photographic, radar, electronic surveillance, seismic instrumentation, and atmospheric sampling. Under President Reagan’s guidance, the INF and START treaties would require augmentation by various types of on-site inspections, and include cooperative measures such as exchanges of data and open displays of mobile missiles for NTM collection purposes.

Monitoring treaty-constrained activities and assessing the degree of compliance may be thought of as two phases in an effective verification process. The first phase is the technical and analytical process, where data is collected and studied. The second phase, which addresses whether verification is effective, is the process of actually verifying compliance. It involves the political process of passing judgment on the evidence collected in the first phase. It also involves deciding on an appropriate response after considering the importance and severity of any violated provisions, and most importantly the associated risk posed by the violation to the nation’s security.64

In past administrations, “adequate” verification was generally regarded as meaning “a level of verification which would assure with high confidence that compliance could be determined to the extent necessary to safeguard national security.” It also assumed that noncompliance could be detected in a timely manner so that an appropriate response could follow.65 Deterring violations rested upon detecting them and not through evidence to assess compliance.

Under the Reagan Administration, this traditional approach applied only to the first phase (the monitoring phase). Reagan’s team knew that effective verification had to be supplemented by an effective compliance policy. Its standards of effective verification involved precise treaty language, cooperative and intrusive measures to assist monitoring compliance, and the political will to respond to detected violations. This approach to verification was revolutionary in that it framed future arms-control agreements to both reduce treaty language ambiguity and enhance the quality of compliance evidence through intrusive, on-site inspections. Thus, for the first time the Soviet bureaucracy had hard incentives to comply with negotiated agreements. The first Bush Administration would endorse and perpetuate these objectives in their START

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negotiations, providing a solid degree of continuity designed to ensure a timely conclusion to START.  

**Negotiations: US Negotiating Strategy**

Ideology and pragmatism struggled with each other in the Reagan Administration’s negotiating strategy. Although Reagan fervently desired meaningful negotiations and real arms reductions, he rejected the thesis that arms-control negotiations were the most important step toward cooling off the Cold War and thus could not be jeopardized. Soviet aggression, beginning with Afghanistan and continuing through Reagan’s first term, such as the shootdown of Korean Airlines flight 007 by the Soviet air defense and the murder of Arthur Nicholson, a US Army major, by a Soviet sentry in East Germany, kept pressure on the president to denounce the Soviets and avoid all talks.

Reagan’s condemnation of the Soviets during this period was not mere rhetoric of the president’s personal ideology. It served two specific purposes. First, it was intended to remobilize American public opinion after years of détente. Second, it was meant to send the Soviet leaders a message, especially at such an unstable time when Brezhnev, Yuri V. Andropov, and Konstatin U. Chernenko died in rapid succession. Reagan’s blunt declarations signaled that America had the will to resist Soviet expansion and left no doubt that it would respond to new Soviet aggression. Despite his “cowboy” reputation, Reagan’s actions were operationally more cautious and careful. His rhetoric, coupled with military actions against Soviet proxies like Libya and Grenada, served to avoid confrontation and possible military clashes between the superpowers.

Public pressure for arms control and talks with the Soviets, however, mounted throughout Reagan’s first term. Public opinion equated arms control with a sincere search for peace. Even had Reagan placed arms-control negotiations at the top of his priorities, however, the rapid deaths of three Soviet leaders made meaningful negotiations virtually impossible. As former Secretary of State Shultz pointed out, “the Soviet Union was mired in a protracted and so far inconclusive process of succession in leadership and in the difficulties of a stagnant and foundering economy.” He recognized that the role of the
Soviet military was prominent, as “transitional periods in Soviet history had always witnessed an increase in the military’s influence” and hence, less interest in arms-control negotiations.68

The US negotiating strategy would thus proceed cautiously, with negotiators available for talks in Geneva if the Soviets desired to resume them. More importantly, the strategic modernization program would continue while US foreign policy centered on Reagan’s Four-Part Agenda. He rejected the Nixon-Kissinger idea of “linkage.” Rather, he recognized an intrinsic link among all issues in superpower relations: human rights, regional crises, arms control, and bilateral contacts. The United States would try to act with strength in each area.69

A firm believer in the United States acting from strength, Ambassador Edward Rowny, spent six and one half years at the negotiating table with the Soviets during the SALT II and START talks. The former head of ACDA used his experience to compile what he called “Ten Commandments for Negotiating with the Soviets” for future arms-control negotiators. These were

1. thou shalt remember above all thine objective;
2. thou shalt be patient;
3. thou shalt keep secrets;
4. thou shalt bear in mind the differences in political structures;
5. thou shalt beware of Greeks bearing gifts;
6. thou shalt remember that in the Soviet view, form is substance;
7. thou shalt not be deceived by the Soviet “fear of being invaded”;
8. thou shalt beware of negotiating in the eleventh hour;
9. thou shalt not be deceived by the Soviets’ words; and
10. thou shalt not misinterpret the human element.

Each of these commandments was the result of a hard lesson learned by US negotiators throughout the SALT II process, often resulting in a Soviet advantage. Ambassador Rowny was painfully aware that the US imperative in arms-control policy was and is to enhance our national security interests.70

During the START talks, he admonished US negotiators not to be “soft” on the Soviets.71
President Reagan, who considered himself a tough and experienced negotiator from his labor union days, also wanted someone who could be tough with the Soviets—and who had experience negotiating with them—in charge of his foreign policy and overseeing the negotiating process. That job eventually fell upon Secretary of State George P. Shultz, who had cut his teeth in Soviet negotiations during the Nixon Administration when he was secretary of labor, and where he earned a reputation for integrity, tenacity, and effectiveness. As secretary of state, he would be responsible for keeping US foreign policy—as well as US arms-control negotiations—aligned with the Four-Part Agenda. Shultz, considered by most accounts a pragmatist, inherited an arms-control institution that would peak during this period. Shultz was also seen as a political conservative in the usual meaning of the term, staunchly anti-Soviet, and firmly behind the strategic modernization program that was considered an essential precondition of successful diplomacy.

For the negotiating team to succeed in any negotiations with the Soviets, Shultz believed that the United States must accomplish two prerequisites for success: first, the national-level initiatives of the Reagan Administration, and second, a unified composition and position of the US negotiating team itself. Shultz regarded national-level initiatives, such as the strategic modernization program and the INF deployment, as essential for motivating the Soviets to negotiate, because they signaled political will and solid alliance relationships. Also, the will to use that force, such as in Grenada, did “more than the MX will do to make US power credible and peace secure.” Shultz believed that improved economic growth, together with a steady and consistent foreign policy, would benefit the United States over the long haul, would indicate to our allies and the American people that it was the Reagan Administration and not the Soviets who were interested in serious arms-control discussions, and would undermine Soviet foreign policy and propaganda.

One of the most important and difficult tasks that the leader of the US negotiation team had was developing a unified composition and position of the negotiating team itself. Because
the negotiations process was designed to be adversarial, the trick for the negotiator was to flesh out a consistent position—a “unified front”—within his team’s own constituency. What people “usually call ‘the negotiation’ is in a sense the tip of the iceberg.” The real negotiations occur within one’s own constituency, where representatives from different agencies hash out an agenda based upon the president’s guidelines. The theory behind this process was that each agency would forward different ideas on how to proceed, and the best ideas on a position would emerge. Preparation was about internal issues, with each agency trying to “win” against the others. Based on his many years as a negotiator, Shultz saw this competitive relationship on tough issues as normal and healthy. Though some aspects of these arguments and leaks to the press were counterproductive, Reagan’s team had identified a process through which people expressed honest and divergent views. Shultz “would worry far more about an administration whose members agreed on every subject.” Such a process seemed to work best as long as arguments were direct and substantive, as decisions needed to be timely and intelligent. When the arguments turned personal, it could have a debilitating effect on the process.

Presenting a “unified front” was crucial when confronting the Soviets at the negotiating table, as Soviet negotiators were often more experienced than their US counterparts and would exploit any division on the US side. This was considered one of the major problems with the SALT II.

Once the head of the negotiating team unified his own constituency, the next task was to constantly assess how well his Soviet opponent had done this appraisal within the Soviet constituency. In this way, the US side could exploit any fissures among the Soviet delegation’s position that presented themselves and use those opportunities to further US positions. In addition, by appraising the unity of the Soviet team, the US team leader could evaluate the likelihood that any position the Soviets agreed to would stick.

As the Reagan Administration’s first term came to its end, the strategic modernization program and INF deployments were solidly on track. The US economy was strong. Reagan’s
Four-Part Agenda provided clear foreign policy guidance, and the secretary of state was focused both on solidifying his constituency and the direction in which the US negotiating team was to proceed. There was only one obstacle to the Reagan Administration’s goal of achieving credible strategic arms reductions: Just what were the Soviets up to?

Developing a US Position on Arms Control?

As we’ve noted before, there were plenty of problems on the Soviet side concerning their approach to serious strategic arms negotiations during Reagan’s first term. Soviet reluctance was coupled with overtly aggressive conduct upon the world stage. In Reagan’s State of the Union address in January, 1983, he reasserted that he was still prepared for a positive relationship with the Soviets, but “the Soviet Union must show by deeds as well as words a sincere commitment to respect the rights and sovereignty of the family of nations.”82 Soviet deeds were alienating them from the world community at large and had sparked a heated debate within the administration on the wisdom of engaging them in arms-control talks.

Such Soviet conduct had inflamed the visceral hatred of communism harbored by many in the administration. Debate ranged from the pragmatic “how should the administration proceed” to the ideological “whether the administration should proceed at all.” Negotiations were still seen as dangerous, and the “fatally flawed” SALT II remained a sore spot. The “evil empire” appeared inflexible and imperturbable in its brutality. During Reagan’s first term, the struggle between ideology and pragmatism within the administration was at its height.83

Inside the administration, divergent views on US-Soviet relations emerged along pragmatist and conservative lines even though the Reagan cabinet consisted of conservatives in the conventional sense of the word. The pragmatists included George Schultz at state, Vice President George Bush, National Security Advisor Bud McFarlane, Chief of Staff James Baker, presidential assistant Michael Deaver, and first lady Nancy Reagan. Those more ideologically conservative included Secretary of Defense Caspar “Cap” Weinberger, former
National Security Advisor Judge William Clark, CIA Chief William Casey, and UN ambassador Jean Kirkpatrick.

One of the main distinctions between these positions in the arms-control arena was that the pragmatists saw the strategic modernization program and Reagan’s rhetoric as an opportunity to drive hard bargains with the Soviets at the negotiating table, while the conservatives believed that the Soviets only responded to military power. The pragmatists did not believe the force modernization would last after Reagan and sought to use it to achieve the president’s goal of reducing strategic arms between the superpowers, which required negotiations with the Soviets. The conservatives, especially Secretary of Defense Weinberger, perceived a similarity in aggressive Soviet conduct with that of Nazi Germany before World War II. Hence, the conservatives were preparing to fight World War III and saw the force modernization as their means to credibly achieve military victory. Naturally, these views would clash, competing for preeminence in US-Soviet relations.

Shultz saw the arms-control process as part of state’s jurisdiction within the context of US foreign policy. He believed he had President Reagan’s support to pursue contacts with the Soviets within the framework of the Four-Part Agenda. He, like Reagan, wanted to engage the Soviets in discussions, which Shultz believed would best serve US interests. However, following the president’s lead, any discussions must result from a Soviet “deed” that clearly indicated they were moving toward a US position in the Four-Part Agenda. Reagan, and ergo Shultz, would undertake negotiations when “they are called for.” Shultz also believed that a steady, patient, and tough US foreign policy that was consistent and predictable would reassure the American constituency and our allies, while forcing the Soviets to conclude they had no choice but to meet the United States on Reagan’s terms. By making human rights a central issue in his Four-Part Agenda, Reagan had targeted one of the more vulnerable areas of Soviet policy. The Soviets, who signed the 1975 Helsinki Accords on human rights, were behind the brutal crackdown of the Solidarity movement in Poland, maintained the “gulag” of political prisoners, and were openly committing other human rights violations. Shultz’s job
was to exploit that vulnerability and use it to drive the hardest bargain he could. He would begin every meeting with the Soviets discussing human rights issues.86

Weinberger worried that a successful engagement with the Soviets by the State Department would lead to a premature return to the days of détente. Without the perceived danger of war with the Soviet Union, Congress would be less willing to keep the strategic modernization on track. The Soviets could then achieve a political victory, continue negotiating from a position of strength, and likely be able to defeat any US opposition by force of arms. Weinberger, a student of Winston Churchill, saw parallels between Churchill’s unheeded warnings about the Nazi military buildup in the 1930s and his own dire forecasts of Soviet military superiority. In the Pentagon behind Weinberger’s desk hung a framed Churchill quotation: “Never give in, never give in, never, never, never, never; in nothing great or small, large or petty, never give in.”87 This position served him well during Reagan’s first term in office. Later in Reagan’s second term, as world events changed and the Soviet Union began to shift its positions due to the success of the Four-Part Agenda, the effectiveness of that position waned and he became a more marginal figure in the debate over arms control. In October 1987, he would resign as secretary of defense.88

During Reagan’s first term, however, Weinberger kept the Department of Defense on a steady course of preparing for global war with the Soviets. Weinberger saw his responsibility as dispassionately assessing the threat and recommending to the Congress and the president a course of action to counter that threat.89 With his ally at CIA, William Casey, Weinberger planned to confront the Soviets in asymmetric forms of warfare to undermine Soviet power. They authored National Security Decision Directive (NSDD) 66, which sought to wage protracted economic warfare, psychological warfare, and sabotage of Western goods headed for the USSR, with the intent of crippling the Soviet economy.90 Weinberger saw these measures as substantive ones, which would force the Soviets to change their positions, whereas to engage in arms-control talks was in his mind the more risky course. OSD wanted to
reduce Soviet nuclear capability and change the nuclear balance to favor the United States.\textsuperscript{91}

Considering the different viewpoints at defense and state, one should certainly not be surprised that there would be a conflict in their respective approaches to relations with the Soviet Union. Unfortunately, much was leaked to the press, which portrayed the administration as in a state of disarray for its deep internal divisions and debates. The press had described the conflict between state and defense in terms of “a battle between the two Richards”: Richard Perle, the assistant secretary of defense for international security, and Richard Burt at state, who was director of the Bureau for Political-Military Affairs.\textsuperscript{92} Both assistants were deeply involved in the arms-control process. Despite colliding on arms-control issues, they achieved substantive movement early on with the INF talks.

It should not be surprising that these differences rippled down to the working groups who were “in the trenches,” hammering out the US position on arms control for the negotiating team. One can sum up the divergent positions that permeated the team, as “one group believed they were saving the world, and the other believed they were saving the country.”\textsuperscript{93} At the worst, the action officers often reflected the personalities of their superiors in the meetings, which resulted in extreme passions, laborious negotiations, and great delay in the arms-control process. Four-letter words were exchanged, friendships were ruined, and grudges were held.\textsuperscript{94} Under these circumstances came the leaks to the press and disruption of the process. At best, the team sculpted a firm US negotiating position and successfully fronted the Soviets. Their timing and content, according to Shultz, was “just about right.” The US position was gradually solidifying.\textsuperscript{95}

At the highest level in the arms-control policy process was the National Security Council, but the national security advisor position changed so often during the Reagan Administration that it lacked the clout or staying power of Shultz and Weinberger.\textsuperscript{96} While Bud McFarlane was the national security advisor, he favored private channels with the Soviets. Such contacts usually proved unsuccessful and clashed with
Shultz’s efforts to conduct arms-control discussions as part of the broader US foreign policy run by state. McFarlane also lobbied for an arms-control “czar” to oversee all strategic talks. Eventually, the idea was adopted, with Max Kampelman filling that role under the auspices of the Nuclear and Space Talks (NST), which set forth an agenda to cover strategic nuclear arms, intermediate-range forces, and defense and space.97

Another policy maker in the discussion of whether or not the administration should proceed with negotiations, ACDA, was designed to represent the arms-control viewpoint in discussions. However, Reagan conservatives ran it during this period and it leaned along those conservative lines. Its level of influence in the arms-control process was often a reflection of the stature of the head of the agency. At the working group level, ACDA had within it staff capabilities and corporate knowledge that were very useful to everyone concerned with arms control.98

Although the CIA was not a policy maker on arms-control policy issues, Weinberger could rely on their assessments of Soviet military strength to support his objectives and position. CIA was ideologically aligned with OSD.

Within the Department of Defense, the Joint Staff, supported by the services, also had a role to play in arms-control negotiations. Although not a policymaker, the Joint Staff had at its disposal experts in the various weapon systems of interest to the negotiators. Surprisingly, the Joint Staff would sometimes take a position contrary to that of OSD during the Reagan Administration. The Joint Staff was not ideologically motivated. They understood what they wanted to preserve and were not necessarily interested in using arms control to weaken the Soviet Union. They wanted to make sure that the arms-control agreements did not likewise injure US strategic forces.99 This internal division sometimes hurt the OSD position.

One problem area between the Joint Staff and OSD regarded program cuts. Sometimes the services would go overboard protecting pet programs after OSD had targeted them for cuts. Members of the Joint Staff would rally support from program allies in Congress in an effort to “backdoor” the OSD, putting OSD in a position of constant negotiations with the services.100
**Resolving the Division**

One of the first overtures from the Soviet Union that suggested talks could proceed occurred in 1983. A group of Soviet Pentecostal Christians had entered the US embassy in Moscow and refused to leave. They were seeking religious freedom and the right to emigrate from the USSR and were allowed to live in the embassy basement. On President Reagan’s initiative, the State Department worked a deal with the Soviets: they would release the Pentecostals and President Reagan would not turn the issue into a propaganda event.

The Pentecostals were freed and Reagan kept his word. This issue was, in a sense, the first successful negotiation with the Soviets in the Reagan Administration. He had demonstrated to the Soviets that here was a president that could be trusted in negotiations. Secretary Shultz credits this trust as essential for successful negotiations. Slight progress was at last being made in US-Soviet relations along the guidance of the Four-Part Agenda.

Progress was being made within the administration’s own constituency. National Security Advisor Bud McFarlane, Secretary of State Shultz, Secretary of Defense Weinberger, and CIA Director William Casey had begun the initial “Family Group” luncheons to try to arrive at a common position on foreign policy issues. Although the atmosphere was somewhat confrontational, these weekly luncheons were a team-building attempt at the cabinet level in which big issues, such as arms control with the Soviets, could be discussed freely.

The makeup of the US negotiating team was changing, however. The president had agreed to an idea that the United States would go to Geneva with a large delegation representing all the different points of view. Although the actual team to sit at the table would be small, they would be supported by a large delegation with broad expertise that would be available to address any issue on the spot. Besides being an opportunity to pull people together, it also would mean speeding up the negotiations process on the US side, and would potentially keep the Soviets off balance and responding to US initiatives. Periodically, results and issues would be brought to President Reagan and his top advisors. Every member of the delegation would be
included in the process of arriving at a position, solidifying ownership in the negotiating process. Shultz believed, based on his previous negotiating experiences in the world of labor-management talks, that once the US team arrived at a position, everyone would have been involved and therefore would more likely support it. Each session involved a close “wringing out,” but Shultz cited such involvement, as well as selecting good people, as crucial to successful negotiations.

Once the delegation arrived in Geneva, all bickering was over. In an effort to eliminate leaks to the press or parties trying to negotiate through the press, a blackout was imposed on the delegation forbidding anyone from talking to members of the media. To do so meant expulsion from the team.

For high-level talks with the Soviets, a senior US official, someone of the status of Ambassador Paul Nitze or Ed Rowny, would lead the team. Once the NST discussions began, the arms-control “czar,” Max Kampelman, would head the US delegation. On other occasions, such as summits, Secretary of State Shultz would lead the delegation. In Geneva, for instance, National Security Advisor Bud McFarlane and Ambassadors Paul Nitze and Art Hartman accompanied Shultz at the table. Jack Matlock, ambassador to the USSR, would be there to take notes. Fluent in Russian language and culture, Matlock was equally expert in US-Soviet relations.

A senior official, usually from the State Department, such as Richard Burt or Roz Ridgeway, chaired the working group that supported the team of negotiators. The State Department was in charge of the policy process and they had a “long arm” on the actual negotiations process. In a typical meeting on policy matters, there would be several other State Department representatives, from either the office of Strategic Nuclear Policy or the Bureau of Political-Military Affairs. A representative from the State Department’s General Council would also usually be there, as would someone from the regional bureau that dealt with Soviet matters. One advocate, such as Richard Perle, usually represented OSD. ACDA, the Joint Staff, and the intelligence community also had one representative. Beneath this tier of delegates would be experts from the various agencies who could quickly address the details on key issues.
The makeup of the Soviet delegation had traditionally been under the leadership of the Foreign Ministry, which would reflect the position of the general secretary and the Politburo at the negotiating table. During Reagan’s first term that was Andrei Gromyko. With the success of the large US negotiating team, the Soviet delegation likewise changed about the time of the Geneva summit to more closely mirror the makeup of the US delegation. General Secretary Gorbachev created a special Politburo commission with the task of coordinating the decision-making process. The head of the commission, Lev Zaikov, was a secretary of the Central Committee on the Politburo. His delegation consisted of members of the Foreign Ministry, Ministry of Defense, scientific institutes, Gosplan, the military-industrial committee of the Council of Ministers, and experts in various technical fields, similar to the US delegation. During high-level discussions, Foreign Minister Eduard Shevardnadze would head the delegation and speak directly with Shultz. With the changes in Soviet leadership and the depth of experience of the early Soviet negotiating delegation, the difficulty for the US team was twofold: keeping the Soviet delegation at the table and moving the Soviets toward the Reagan position.

**Dealing with the Soviets**

With the release of the Soviet Pentecostals, the Reagan Administration saw a glimmer of hope that the Soviets could move forward on a point of the Four-Part Agenda. Yet the reality was that the Soviets still approached the US negotiators as they had during the Carter Administration and expected to get their way. As the deployment date for the Pershing II and GLCM INF missiles to NATO neared, Soviet propaganda increased, hoping to fan the flames of the peace movement and force a political delay. The Soviets saw this deployment as the most severe threat to their strategic stability to date. They threatened to pull out of all talks then under way if the deployment continued on schedule and hyped the imminence of nuclear war. From their perspective, this same tactic had worked with the neutron bomb during the Carter Administration. Should it work again, it would weaken
Reagan’s bid for reelection in 1984 and could potentially mean the end of the strategic modernization program.\footnote{111}

Fortunately for President Reagan, world public opinion was changing. His “zero option” of INF in Europe was seen by the world, and especially NATO and Japan, as moving forward on the issue of arms control, and hence the cause of peace. The Soviet position was seen for what it was, obstructionist. The shoot-down of KAL-007 was fresh in the minds of many, further isolating the Soviets. One democrat wrote Sen. Howard Baker that he was furious because Ronald Reagan had been right about the Russians all along!\footnote{112} The Soviets pulled out of all talks as the deployment of the INF missiles continued. Reagan had found an issue that credibly restored US negotiating capitol. If the Soviets wanted our missiles out of Europe—and they did—they would have to come back to the table and talk about it. The United States now had another ace in the deck.

But Reagan wasn’t satisfied with that. His announcement in the spring of 1983 that the United States was going forward with SDI further pressured the Soviets. Now the Soviets were faced with an arms race on earth and in space. The Soviets were also looking over their shoulder at Japan’s economic power and the dawn of the information age. Their economy was already in trouble. Based on their own SDI research, the Soviets feared that SDI signaled a US technological leap. SDI had the potential to give the United States overwhelming first-strike capability. The Soviets also saw in it blackmail potential. Strategic modernization continued under Weinberger’s guiding hand. How could the Soviet Union compete?\footnote{113}

Not only was the Reagan Administration going forward on SDI, it was attempting to change the paradigm. NSDD 153 was issued making SDI central to US strategy.\footnote{114} Fred Ikle told Congress “the Strategic Defense Initiative is not an optional program at the margin of our defense effort. It is central.”\footnote{115} This change to US strategy, coming on the heels of the deployment of INF missiles to Europe, had suddenly given the Soviets a strong incentive to talk with the Americans. More importantly, it gave the Soviets motivation to approach the American position. SDI gave American diplomacy a new
potency. Stubbornly, the Soviets clung to the position that what was needed was brand new negotiations before they could return to the table.

President Reagan’s offer to the Soviets in his 24 September 1984 address to the United Nations General Assembly, where he proposed umbrella talks that would include INF, START, space, and SDI, seemed to offer just that. Using a time-honored negotiating technique, especially in the realm of arms-control negotiations, Reagan adopted the form but not the substance of the opponent’s position. The Soviets wanted new negotiations, so the United States adopted “new” negotiations. Max Kampelman was the “new” head of the umbrella talks in his role as arms-control “czar.” The reality, however, for the American delegation was simply the resumption of the original START and INF talks with the addition of the new space and SDI talks.

The Soviets returned to the negotiating table under Gorbachev without the United States making any concessions. A strong America, bolstered by the strategic modernization program, the INF deployment, and now SDI, had restored negotiating capital in spades. In a Congressional hearing, the director of ACDA, Ken Adelman testified, “SDI helped bring the Soviets back to the negotiating table and has proven to be the engine driving them to make proposals for reductions.”

The new Soviet General Secretary, Mikhail Sergeyevich Gorbachev, was well aware of the weakness of the Soviet economy and its new untenable position vis-à-vis the United States. He had no choice but to acknowledge what Marxists have traditionally prided themselves in recognizing objective reality. That reality demanded rapprochement with the United States. Although Gorbachev launched an immediate public-relations campaign to arrest the blackened image of the Soviet Union, knowledgeable observers detected he had a strong desire for an end to the Cold War. Against this background, the Soviets eagerly responded to the US invitation for a superpower summit between Reagan and Gorbachev in Geneva in late 1985.

**Geneva**

Gorbachev accepted the invitation to Geneva without “grand expectations.” By his own admission, he merely sought to lay
the foundations for serious future dialogue between the leaders of the superpowers. True to Soviet fashion, Gorbachev initially took a tough approach with Reagan, telling him that the United States should have no illusions about being able to “bankrupt” the USSR, as called for in NSDD-66. Gorbachev firmly added “we can match you, whatever you do.” Yet Max Kampelman could see through the tough talk. In his sessions with his Soviet counterpart, Yuli Kvitsinsky, Kampelman detected an almost plaintive effort by the Soviets to at least appear to make progress, especially over SDI. As recently as October 1985, Kampelman had identified an evident split in the Soviet delegation whose members had begun to criticize each other in private statements to the ambassador. The American delegation’s solidarity was having an effect on the Soviets, who let both Shultz and Kampelman know that they wanted to conclude the summit with an agreed statement—something to show for their efforts.

The US position was still solidly anchored in the Four-Part Agenda. Along with Kampelman was Mike Glitman on INF and John Tower on START. Other members of the delegation included Roz Ridgeway from state in charge of the working group, and Richard Perle, Don Regan, Bud McFarlane, Paul Nitze, Art Hartman, Mark Palmer, and Col Bob Linhard, USAF. Ridgeway and her charges deftly maneuvered the Soviets. At one point, when her Soviet counterpart Georgi Kornienko tried to use the “old style” Soviet negotiating technique of using negotiations with linkage (contrary to a position Gorbachev had agreed to earlier with Reagan), she snapped her briefing book shut, stated “we aren’t going to negotiate that way,” and walked out of the negotiations. The Soviets, eager for an agreed statement, then requested that negotiations resume, and inched closer toward the American position.

The shining star of the talks, however, was Ronald Reagan himself. Reagan and his wife, Nancy, acted as gracious hosts to the Soviets and did their best to set a cordial and productive atmosphere for the delegations. Even so, on the second morning of the talks, when General Secretary Gorbachev began to berate the president’s SDI program, Reagan exploded into an ardent debate with Gorbachev. Reagan took command
of the floor, speaking with genuine passion about his vision of a world without nuclear weapons. The old nuclear abolitionist intensely expressed his abhorrence that the superpowers relied on the ability to “wipe each other out” as the only means of keeping the peace. “We must do better—and we can,” Reagan exclaimed. The depth of President Reagan’s belief in missile defense was vividly apparent to all present. He was at his best, speaking from the heart with conviction. With the simultaneous translation, Gorbachev could easily connect with Reagan’s expressions, body language, and words. Silence filled the room as Reagan concluded his discourse.

After what must have seemed an interminably long time, Gorbachev said, “Mr. President, I don’t agree with you, but I can see that you really mean what you say.” Reagan had made a firm impression on the general secretary, who realized that Reagan would not be swayed, intimidated, conned, or negotiated away from his position on a missile defense. Secretary Shultz summed up the event as, “Reagan had personally nailed into place an essential plank in our negotiating platform.”

At the end of the summit, the United States had made no concessions. In a sense, the Soviets garnered some success in that they got the agreed statement they were looking for, but to get it they moved much closer to the US position on INF and the Four-Part Agenda. The American delegation had gotten the Soviets to agree to the principle of a 50 percent reduction in nuclear arms, “appropriately applied.” They also agreed to commit, along with the United States, to early progress at the Nuclear and Space Talks, and to focus on areas where there “is common ground.”

Agreements were reached on ensuring air safety in the northern Pacific, on negotiations for the resumption of air services, the opening of consulates in Kiev and New York, people-to-people exchange programs, and cooperation on fusion research. Nuclear and chemical nonproliferation, the conventional arms reductions talks, and agreements to begin confidence-building efforts in Stockholm were all positive. The joint statement issued from Geneva was right out of one of Reagan’s early speeches, “The sides . . . agreed that a nuclear war cannot
be won and must never be fought.” The statement also called for progress toward “an interim agreement on medium-range missiles in Europe,” as well as a new dialogue process, regular meetings between the foreign ministers, and periodic discussions on regional issues—a crucial pillar of the Four-Part Agenda. A foundation was laid on the issue of human rights, where the Soviets agreed “on the importance of resolving humanitarian cases in the spirit of cooperation.”

Reagan realized he shared a kind of chemistry with Gorbachev. Beyond the movement of the Soviets toward the US position, Shultz believed that “the big story was that they had hit it off as human beings,” which meant that future summits were likely.

Although the leaders had established this foundation for a personal relationship, Gorbachev had failed to make progress on his principal goal of halting SDI. Gorbachev knew that he would have to try and reclaim the initiative from the Americans by putting forward sweeping arms-control proposals, which included discarding the age-old Soviet insistence of including British and French nuclear weapons in the count of Western missiles. This proposal was politically designed to again try to divide NATO. If Gorbachev could not make progress on SDI, perhaps he could re-attack NATO unity and disrupt INF.

Reykjavik

In the aftermath of Geneva, many around the world were looking to the talks at Reykjavik for substantial progress in arms control. There was an optimistic belief that this summit, held 11–12 October 1986, would lead to real strategic arms reductions. Those who were close to the discussions had a much more guarded opinion, as the discussions between summits saw quite a few proposals, but only modest progress. Secretary Weinberger thought the United States would be
severely tested at Reykjavik, as the Soviets had launched a set of preliminary public relations thrusts directed at the Strategic Defense Initiative. The Soviets held out the prospect that they would eliminate all nuclear weapons if Reagan would only give up strategic defense.\(^{130}\)

Secretary Shultz likewise cautioned that the desire for peace could lead to unwise compromises, as had happened before with the SALT II.\(^{131}\) In an effort to break the “logjam” in thinking about strategic issues in the administration as well as to “call” the Soviets on their offer of eliminating nuclear weapons, Weinberger surprised everyone with a dramatic and radical proposal. He suggested that the United States put forward an offer to eliminate all ballistic missiles. Dr. Fred Ikle, undersecretary of defense, had earlier pointed out the special dangers unique to fast-flying ballistic missiles, such as the inability to be recalled once launched. Weinberger’s proposal would eliminate this threat that the United States saw as the most destabilizing weapon system. It would also test how serious the Soviets were about eliminating nuclear weapons.\(^{132}\) Finally, it would pressure the Soviets’ public relations campaign while indicating just how far the Reagan Administration was willing to go.

Gorbachev hoped that Reykjavik would improve the USSR’s blackened image in the eyes of the world and would demonstrate his determination to “prevent a new arms race.”\(^{133}\) The explosion at the Chernobyl nuclear power station in the Ukraine on 26 April 1986 transformed Europe’s remaining uncertainty about Soviet intentions into anger and fear. Gorbachev, the proponent of *glasnost*, or openness, stonewalled information on the catastrophe, much to the aversion of the West.\(^{134}\) He badly needed success at Reykjavik to restore his image.

To that end, Gorbachev tried to exploit the Reagan Administration’s decision to scrap US adherence to SALT II in May of 1986. Hyping the propaganda war, the Soviets announced on 1 June that they would not consider themselves bound by any provision of the treaty once the United States exceeded the weapons ceiling limits.\(^{135}\) By calling for an elimination of all nuclear weapons, Gorbachev was not just trying to win the propaganda war. Elimination of all nuclear
weapons by the superpowers would give the Soviet Union the following advantages:

- The Soviets had overwhelming superiority in conventional forces, which would change the balance of power in Europe.
- Without nuclear weapons, the United States would have no valid reason to develop its SDI and would leave the Soviets free to develop their own clandestine space weapons program.
- This agreement could answer the US proposal to eliminate all ballistic missiles and would help restore the image of the Soviet Union.\(^{136}\)

Defeat of SDI was the overarching concern for the Soviets; hence they began trying to link all US actions, such as departure from SALT II, with a concession on SDI. Having failed at Geneva, Gorbachev tried several different approaches to derail the program up to and including the summit of Reykjavik.

Based upon their own SDI research, the Soviets knew that at some point the United States would have to abrogate the 1972 ABM Treaty to achieve a credible research program. If they could keep the United States strictly tied to the treaty, then SDI would eventually die a natural death. A debate was already in progress in the United States as to whether or not SDI research was permitted under the provisions of the ABM Treaty. The treaty had traditionally been interpreted in America so as to forbid the development of antimissile systems, especially space-based systems, but would permit laboratory research.\(^{137}\) This interpretation of the ABM Treaty came to be referred to as the “narrow interpretation.”

To resolve the debate in the United States as well as counter the Soviet negotiating position, Secretary of State George Shultz tasked state’s legal advisor, Abraham Sofaer, to study the ABM Treaty text and interpret it from a precise legal perspective. What Sofaer discovered was that the text, as written in “Agreed Statement D,” permitted research, development, and testing of “other physical principles.” Because SDI was based on new ideas (other physical principles) not in place in 1972, the broader scope indicated in “Agreed Statement D”
would therefore be applicable. This interpretation of the treaty came to be known as the “broad interpretation.”

During the 1972 ABM Treaty negotiations, the Soviets, ever mindful of ways to word treaties so that they could have a legalistic future advantage, purposely worded the ABM Treaty to give them options to develop a new ABM system. “Agreed Statement D” in the treaty was their means to do that. The broad interpretation was the original Soviet interpretation of the ABM Treaty. The American negotiators in 1972, knowing the ABM systems technology of the day, accepted the narrow interpretation position, and indeed it was this interpretation that was briefed to the Senate prior to the treaty ratification. Until SDI came along, the Soviets adhered to the broad and the United States the narrow interpretation. When the two heads of state met at Reykjavik, these positions were reversed.\(^\text{138}\)

Interpretation of the ABM Treaty was a central issue of contention in talks between the United States and the USSR and would remain so beyond the Reykjavik summit. In Reykjavik, the Soviets expectedly held firm to the narrow interpretation. They tried to get an agreement from the United States as part of the START talks that the Americans would not withdraw from the narrow interpretation of the ABM Treaty for a period of first 20, then 15, and finally 10 years. This was of such importance to the Soviet position that they were prepared to offer these concessions in return.

1. They would accept 50 percent cuts in heavy ICBMs.
2. They removed the demand that INF missiles be defined as strategic systems.
3. They would drop the linkage position of British and French nuclear weapons with US INF systems.
4. They would accept the “zero option” of SS-20 missiles in Europe; and would reduce SS-20 systems in Asia to one hundred.\(^\text{139}\)

Having ascertained that the treaty text permitted the broader interpretation, the United States aggressively pursued this position. They challenged the Soviet construction of the Krasnoyarsk radar site in clear violation of the ABM Treaty and insisted on its dismantling. At home, support for SDI was
growing. The public reaction to Gorbachev’s proposals was “if Gorbachev is so concerned about SDI, then there must be something to it.”

President Reagan was so persuaded that the broad interpretation of ABM was the correct interpretation that he would make no concessions on SDI. Instead, he offered to conduct all testing in the presence of Soviet observers and stated that if tests showed that SDI worked, the United States would be obligated to share SDI with the Soviet Union. Furthermore, an agreement could be negotiated on the elimination of all ballistic missiles prior to the deployment of SDI.

While this conversation between the heads of state was going on, Richard Perle and Ben Linhard were hard at work on a way to break the impasse. Their proposal would break the ten-year period of compliance with the ABM Treaty that Gorbachev had proposed into two parts. In the first five years, strategic nuclear arsenals would be reduced by half. Both sides would then abide by the treaty for another five years if all ballistic missiles were eliminated during that time. After 10 years each side would be free to deploy a strategic defense system. Reagan thought the proposal was “imaginative.” Reagan’s only concern was the practicality of eliminating all ballistic missiles in 10 years. Perle assured him that with the advent of “stealth” technology, the United States would maintain an effective deterrent force in both bombers and cruise missiles.

The debate between the heads of state became heated. Reagan stood his ground effectively in the face of fantastic Soviet offers. Reagan was serious and determined. So was Gorbachev. At one point during the debate over the term strategic versus ballistic, Reagan remarked, “It would be fine with me if we eliminated all nuclear weapons.” Gorbachev retorted, “We can do that. Let’s eliminate them. We can eliminate them.” This famous exchange was reported in the press, and many around the world thought it heralded the end of the Cold War. But Gorbachev added a caveat. He had made many concessions. He only wanted one in return: SDI. Without SDI as an ongoing propellant, Soviet concessions could wither away over the 10-year nonwithdrawal period from the ABM Treaty. The superpowers had reached virtual agreement on
INF and had set out the guidelines for START. Reagan knew SDI was his "ace in the hole." It was nonnegotiable.\textsuperscript{142}

Such a leap to total nuclear disarmament was of course much too idealistic. Both the Soviet and US Joint Staffs would respond to the "no nukes" exchange with documentation explaining why neither superpower could totally eliminate nuclear weapons.\textsuperscript{143} NATO, staring across the Iron Curtain at scores of Soviet divisions, breathed a collective sigh of relief. Roz Ridgeway commented, "A love affair with the status quo has started. A lot of people are starting to love the bomb." Reagan had been bold at Reykjavik. The world was not yet ready for such boldness.\textsuperscript{144}

Although total elimination of nuclear weapons was not achieved, the Reykjavik summit was still a watershed event in the history of negotiations. In the START talks, both sides made extraordinary progress completing details on weapon ceilings, warhead sublimits, and counting rules agreements. Each side agreed to limits of 1,600 delivery vehicles and 6,000 warheads on all missile systems. The Soviets accepted a 50 percent reduction in heavy ICBMs. The Soviets no longer insisted British and French INF systems be included as part of the INF discussions. The counting rules on bombers favored the United States, and the discussions on SLCMs were postponed.\textsuperscript{145}

Reagan and Gorbachev had created a format for negotiations about space and defense involving a nonwithdrawal period from the ABM Treaty. It included talks on what could be done at the end of that period and discussion over research, development, and testing allowed under the ABM Treaty. Reykjavik would come to be seen as the definition of the term \textit{summit}. The INF Treaty was virtually complete. Gorbachev had linked its completion to US concessions on SDI, something Reagan refused to accept. That issue awaited resolution in Geneva before the INF Treaty would be signed by both of these leaders at the next summit meeting in Washington.\textsuperscript{146}

\textbf{Washington}

In the year between the Reykjavik and Washington summits, both heads of state had strong motivation to conclude an arms-control agreement by 1987. Gorbachev recognized that if he did
not give the whole disarmament process a new lease on life, the Soviets might miss an opportunity to make any headway against SDI. With the 1988 presidential elections approaching, Reagan’s presidency might be unable to conclude any agreements unless the Soviets acted soon. Ambassador Dobrynin told Secretary of State Shultz that the Soviet goal was to sign INF before the end of 1987. Reagan, of course, wanted a treaty as a means to solidify his successes vis-à-vis the Soviets, but he was unwilling to back away from the formula that was successfully moving them toward the US position.

In February 1987 Gorbachev took the bold step of unlinking the INF Treaty from SDI and the ABM Treaty. Gorbachev hoped this move would give “positive impetus” to a full range of arms-control negotiations. More importantly, the Soviets were concerned that a new US administration might not pursue Reagan’s “zero option” proposal, and they would lose the opportunity to get rid of the US Pershing II missiles in Germany. Reagan quickly took up the Soviet offer, insisting that any INF agreement “must be effectively verifiable” as a hedge against Soviet cheating.

Secretary Shultz and Foreign Minister Shevardnadze began a series of meetings to iron out some of the remaining issues on INF. The Soviets had traditionally resisted any attempts at intrusive verification procedures to determine treaty compliance. Now however, Gorbachev changed tactics to try and force US negotiators to contemplate the consequences of the verification policies they had routinely advanced. The Soviets announced that upon completion of INF they would dismantle their short-range SS-12 and SS-23 missiles, counterparts of the West German Pershing I-A missile, putting the ball into the American court. The Soviets also seemed interested in intrusive verification measures. The intrusive verification plan discussed in Moscow in April 1987 would have placed US and Soviet inspectors in each other’s factories to count missiles as they came off the production line. Faced with this prospect, the CIA and National Security Agency objected. The US intelligence agencies made it clear to the White House that the Soviets might gather some very valuable technical information from this arrangement. On the issue of verification, the
Soviet and US Joint Staffs had much more in common than they had separating them in the talks. Both militaries resisted the idea of having their opponents enter and inspect sensitive security areas. On several occasions, neither staff supported a position agreed to by the negotiators and were relieved when their counterparts rejected it.\textsuperscript{151}

In this case, Chancellor Helmut Kohl of West Germany came to the aid of his American ally, when in August he announced that the Germans would dismantle their Pershing I-A missiles in response to the Soviet move. The Joint Staff and intelligence community alike welcomed this agreement, which came to be known as “double global zero,” as factory inspectors would no longer be needed because there would be no new missiles to count. US negotiators at Geneva now presented a revised verification proposal doing away with factory inspection. Soviet acceptance of the “double global zero” formula led to swift resolution of the remaining issues.\textsuperscript{152}

Still, Shultz had the impression after meeting with Gorbachev that “this boxer has been hit.” Gorbachev had been severely criticized in a Central Committee session that had taken place just before Shultz arrived in Moscow. Boris Yeltsin had confronted Gorbachev that reforms were not proceeding quickly enough, and hard-line Communist Ygor Ligachev attacked Gorbachev from the right, claiming reforms were proceeding too quickly. This political infighting, combined with the strains on the Soviet economy, were beginning to take their toll on the once self-sure general secretary.\textsuperscript{153}

In June, President Reagan toured Europe. The highlight of the visit was a stop in West Berlin, where Reagan gave one of his most celebrated presidential speeches. With the Brandenburg Gate as a backdrop, Reagan challenged Gorbachev to “tear down this wall.” His words resonated throughout the world. On 30 October, Shevardinadze arrived in Washington for another meeting with Shultz and announced that Gorbachev would come to Washington for a summit. The Soviets were ready to sign the INF Treaty.\textsuperscript{154}

At the Washington summit, ceremony and substance were woven together. The main event was the signing of the INF Treaty. The two leaders signed the treaty in the East Room of
the White House. Significantly, the Soviets had changed from their immovable position to accepting Reagan’s “zero option” of eliminating the entire class of intermediate-range ballistic missiles. The Soviets would eliminate approximately 1,500 deployed warheads, and the United States about 350. The treaty also included the most comprehensive verification measures ever agreed to up to that time. Those measures included enhanced national technical means as well as pioneering on-site inspection provisions, such as baseline data inspections, inspections of closed facilities, and short-notice inspections of declared sites. The teams would also observe the elimination of missile systems. Gorbachev saw the INF Treaty as a step out of Cold War and a precursor to success with START.

Yet as Reagan declared at the signing ceremony, the real importance of the INF Treaty transcended numbers. While only eliminating about four percent of the superpowers’ nuclear arsenals, it was the first superpower treaty of any kind to provide for the destruction of an entire class of nuclear weapons and to provide for on-site monitoring of that destruction. Over a three-year period, 859 US and 1,836 Soviet nuclear missiles would be eliminated.

Although the capstone event of the Washington summit was the signing of the INF Treaty, in the trenches work continued on strategic arms limitations. Eduard Shevardnadze told Shultz: “The INF negotiations are a kind of academy, preparing the two sides for more difficult verification problems in START.” Agreements were reached on guidelines for effective verification of the START Treaty by building upon verification provisions of the INF Treaty. However, each side disagreed on the issue of weapons sublimits. The original numbers from Reykjavik of 1,600 delivery vehicles and 6,000 warheads were still accepted, but neither side could agree on the sub-limit of the total number of ballistic missile warheads.

In the final meeting of the summit, the new Secretary of Defense Frank Carlucci, and new National Security Advisor Gen Colin Powell, joined Secretary of State Shultz in talks with the Soviets. Marshal Akhromeyev greatly appreciated seeing fellow military men, especially another general, in the talks.
For the Soviets too, having the US military represented seemed to indicate a new level of seriousness in the discussions. At one point Carlucci, seeing an opportunity to make progress with the Soviets, whispered to Shultz to suggest 4,900 warheads as the sublimit on ballistic missile warheads. Shultz, who knew Marshal Akhromeyev well by now, recommended to Carlucci “You do it as secretary of defense and look right at Marshal Akhromeyev when you speak.” Akhromeyev quickly agreed to this proposal. The importance of having the right people make proposals in negotiations is often as essential as the proposals themselves.159

Progress had now been made on START with the agreements on weapons ceilings, warhead sublimits, and guidelines for verification. Disagreement still remained on ABM issues. Both sides concluded the Washington summit by “agreeing to disagree” over ABM. They agreed to observe the ABM Treaty “as signed in 1972.” The Soviets interpreted this agreement as giving them the freedom to develop their own SDI program while restricting the United States to the narrow interpretation of the ABM Treaty. The United States, however, would stand firm on its understanding of the broad interpretation.160 Both sides also agreed to meet in Moscow in 1988.

Judged in political terms, the Washington summit was, as Reagan called it, a “clear success.” Progress had been made on START, the INF Treaty had been signed, and slight movement had been made on ABM issues. But while the summit was hailed as a step toward peace by the world in general and the populations of the United States and Soviet Union in particular, many conservatives were concerned that the INF Treaty would lead to an imbalance in the East-West balance of power. Many European conservatives were concerned that the United States was distancing itself from Europe.161 Reagan and Shultz tried to reassure allies that with over 4,000 tactical nuclear weapons remaining in Europe, US commitments there were still strong and the balance of power still favored NATO.162 Nonetheless, ratification of the INF Treaty would be a tough battle for the Reagan Administration before its final summit in Moscow.
Moscow

By the spring of 1988, global expectations toward arms control and peace were still climbing. The continuation of executive-level dialogues between the superpowers was certainly encouraging. Global tensions seemed to be easing. There was a sense that the Cold War itself might be coming to an end. The Soviets had moved towards the American position in arms-control negotiations.

There were still differences remaining between the superpowers, and it became evident before the Moscow summit that there would be no START treaty for Reagan and Gorbachev to sign. Although Paul Nitze and his Soviet counterparts at Geneva had both put forward a number of innovative proposals, the underlying gap over SDI was too great a chasm to bridge. Reagan realized this early in 1988. He would not use SDI as “a bargaining chip.” He saw the summit in Moscow—the heart of Soviet soil—as a golden opportunity to make a case for democracy and freedom. Although restrained on human rights issues at Geneva, Reagan had marched steadily forward on this issue at each subsequent summit meeting. Therefore, Reagan gave the Soviets advance notice that he intended to make human rights issues the focus of the Moscow summit.\footnote{163}

In the same way General Secretary Gorbachev did not expect to sign a strategic arms reduction agreement at the summit meeting. After his April meeting with Secretary Shultz, he was hopeful that the US Senate would ratify the INF Treaty “in compensation” before Reagan’s arrival in the USSR. Gorbachev knew that Reagan’s term was ending and that Moscow would have to deal with a new administration.

In January 1988, the Soviets had tabled a new draft defense and space agreement as a protocol to the draft START text. The Soviets mainly wanted some accord on space weapons that would have the legal impact as the START or ABM treaties. This protocol declared that the agreements would “cease to be in force if either party proceeded with practical development and deployment of an ABM system beyond the provisions of the ABM Treaty.” At the Moscow summit, Gorbachev reiterated this condition, insisting that a START
agreement could not be concluded unless the narrow interpretation of the ABM Treaty was upheld.\textsuperscript{164}

Despite the low expectations, Gorbachev did expect agreement on a ballistic missile launch notification (BMLN) accord. Progress had also been made on the conventional forces discussions in Vienna and the Soviets were hoping to continue moving forward in Moscow. The Soviets wanted to again address the issue of SLCMs, but realistically anticipated that most of the work would be done with the new administration.

Although US expectations of the summit were also guarded, the American delegation similarly hoped to make some progress on arms control in Moscow. The delegation expected to sign the BMLN accord and reach agreement on road/rail-mobile ICBMs. Although the talks in Vienna were seen as promising, the Americans were convinced that the Soviets were only willing to continue discussing further cuts as another avenue to stall or derail SDI. The US delegation saw any linkage to SDI as a dangerous hook that should be avoided.

The Moscow summit concluded with the signing of two modest arms-control agreements. Each side agreed that mobile ICBMs would be confined to restricted areas with right of dispersal for occasional operations and exercises. They also agreed to notify one another once dispersal began. They also agreed on the BMLN accord, designed to reduce the risk of nuclear war. This agreement required each side to notify the other at least 24 hours in advance of all ICBM and SLBM test launches.\textsuperscript{165} Neither side pretended that these accords were important.

The Moscow summit symbolized that the superpowers were at last rising from the grips of the Cold War. Speaking at Guildhall in London on 3 June, Reagan hailed it as a turning point in East-West relations that was ushering in “an era of peace and freedom for all.”\textsuperscript{166} While both sides still maintained formidable nuclear arsenals, they had turned the corner in superpower relations. Reagan had restored American might and credibility and laid a firm foundation in the arena of arms control for the Bush Administration to build upon. The world had changed considerably from the dark shadows of the early 1980s.
Conclusions

As President Reagan left office, US-Soviet relations were better than they had been since World War II. This change is all the more remarkable when one contrasts these results with the situation Reagan faced when he took office. The 1970s had been a dismal period for America that had seen defeat in Vietnam and a foreign policy marked by uncertainty and confusion. Soviet policy was at its zenith during the period, achieving a perceived strategic weapons superiority and an “irreversible” geopolitical advantage through the Brezhnev Doctrine.

By answering the Soviets with the Four-Part Agenda, Reagan laid out a plan to move beyond containment and reverse the “window of vulnerability” that resulted from the policies of the 1970s. His strategic modernization program rejuvenated US strategic capabilities so that the United States could confront the Soviet Union from a renewed position of strength. By insisting that NATO adhere to the INF deployment schedule, Reagan helped to solidify the resolve of the Alliance and restored US negotiating capital. For the Soviets, his Strategic Defense Initiative spearheaded the information/technology revolution they feared, and confronted them with a costly arms race at a time when the Soviet economy needed huge capital investments at home. SDI kept the Soviets at the table, willing to make concessions.

Reagan’s priorities and policies did more than simply “bankrupt” the Soviet Union. Fundamentally, they rebuilt American power and created incentives for the Soviets to negotiate on US terms. US strategy dictated that the focal point of arms-control policy was to ensure US security. Within that context, American arms-control negotiators were free to use arms control to complement and not substitute for US strategy. In this way, US arms-control policy under Reagan was focused on the three objectives of arms control—preventing war, limiting damages if war occurs, and lowering costs of preparing for war.

By reducing destabilizing systems like ICBMs, in which the Soviets had so heavily invested, the American delegation sought to restore stability and prevent war. Indeed it can be argued that by achieving arms reductions, such as in START
and the INF Treaty, Reagan sought to both prevent war and lower the costs of preparing for war. As Reagan envisioned his SDI program, war would be prevented by changing the paradigm from offense to defense.167 As the limited capabilities of SDI technologies became better known, SDI came to be seen as a means to limit the damages to the United States if nuclear war were to occur. By emphasizing precise treaty language and intrusive verification procedures, Reagan had rewritten the traditional approach to arms control and gave his successor a solid foundation upon which to complete the START accords.

Many believe that the Cold War ended with the Reagan Administration. But in 1988, the Berlin Wall still divided Europe. The Soviet’s Eastern European block would not collapse until 1989. The disintegration of communism in the USSR would not occur until 1990. It would be left to the Bush Administration to complete the START Treaty and proclaim “a new world order.”

The Reagan Administration’s approach to arms control was in a sense a litmus test for determining the true value of arms control in relation to first-strike stability. Despite the Soviet Union’s best efforts to preserve first-strike counterforce dominance, Reagan’s negotiating team stayed focused on his major foreign policy theme of denying the Soviets a first-strike capability. The American delegation reflected Reagan’s optimism and confidence that a strong America and her people would ultimately triumph over a corrupt and evil empire. Reagan’s firm belief in negotiating from a position of strength and his refusal to compromise SDI undermined Soviet strategy. Although Reagan may not have ended the Cold War, when he left office the end was in sight.

Notes


6. Kerry M. Kartchner, *Negotiating START: Strategic Arms Reduction Talks and the Quest for Strategic Stability* (New Brunswick, N.J.: Transaction Publishers, 1992), 24 and 65–66. The Soviets maintained that the SS-25 was an improvement of the existing, silo-based, SS-13. However, the SS-25 was not only mobile, but also was larger, carried twice the throw weight, and was more sophisticated. Dr. Kartchner’s work is an excellent source on the START negotiations. My thanks go to Dr. Kartchner for his help and insights on this project.


10. Ibid., 84.


13. Ibid., 57.


15. Kartchner, 8–9.

16. Ibid., 56–57.


20. George P. Shultz, telephone interview with author, 13 June 2001. My sincere thanks go to Secretary Shultz for his invaluable assistance and insight.


22. Edward M. Kennedy and Mark O. Hatfield, *Freeze! How You Can Help Prevent Nuclear War* (New York: Bantam Books, 1982), 79. The Kennedy-Hatfield resolution called for an immediate freeze of nuclear weapons, with the goal of an eventual build-down to arrest the arms race. The Jackson-Warner resolution, although similarly calling for a freeze, allowed the United States to catch up to the USSR before the freeze would go into effect.

23. Kartchner, 63–64.

25. Ibid., 23–24.
26. Ibid., 24.
27. Shultz, *Turmoil*, 266.
28. Spanier, 278.
30. Kennedy, 144.
38. Kennedy, 146.
39. Shultz interview.
41. Skinner, 484.
42. Kartchner, 20–21.
43. Blair, 6–7.
46. Kartchner, 32.
47. Ibid., 32.
48. Waller interview.
50. Ibid., 36–37.
53. Spanier, 209. See also Kartchner, 38.
54. Kartchner, 38.
55. Ibid., 39.
56. Waller interview.

58. Kartchner, 40.


60. Kartchner, 41.


63. Waller interview.

64. Kartchner, 42–43. See also ACDA, 49–50.

65. Kartchner, 43.

66. Ibid., 43–44.

67. Spanier, 266–70.


70. Kartchner, xiii–xv.


72. Shultz interview.


74. Ibid., 306.


78. Shultz interview.

79. Waller interview.


81. Skinner, 78.


83. Spanier, 271.


88. Shultz, *Turmoil*, 144 and 990. Also Waller interview.


91. Waller interview.
MILESTONES IN STRATEGIC ARMS CONTROL

92. Ibid.
93. Ibid.
94. Ibid.
96. Scowcroft interview.
97. Shultz interview.
98. Ibid.; also Scowcroft, telephone interview; and Waller interview.
99. Waller interview.
102. Shultz interview.
104. Ibid., 504–5.
105. Shultz interview.
106. Ibid.
107. Shultz, *Turmoil*, 510–14. Matlock played much more of a key role in the Geneva summit than this. He was commissioned to prepare 25 papers for the president to get ready for the summit. These papers would explain the Soviet objectives, strategy, and negotiating tactics as well as Russian culture and history. Matlock was ideally suited for this task. In addition to his knowledge of Russian culture, Matlock understood that Reagan learned by relating information to his own experiences. Thus he was able to engross the president in these materials. Cannon, 748–49.
108. Waller interview.
110. Kartchner, 69.
111. Spanier, 290–91.
114. Simpson, 469.
115. Fred Ikle, *Congressional Record*, 19174.
117. Waller interview.
119. Ibid., 348.
120. Gorbachev, 401–5.
121. Yuli Kvitsinsky had jostled with Paul Nitze during “the walk in the woods” negotiations early in the administration. Kampelman described Kvitsinsky as being “imaginative, a doer; he tries.” Shultz, *Turmoil*, 583, 596, and 599–601.
122. Ibid., 604–5.
125. Shultz, Turnoll, 605-6. Also see Cannon, 754-55.
127. Shultz, Turnoll, 602.
129. Gorbachev, 405.
130. Weinberger, Fighting For Peace, 323.
131. Shultz, Turnoll, 753.
132. Ibid., 719-20.
133. Gorbachev, 414.
134. Cannon, 756.
135. Ibid., 758-59.
136. Shultz, Turnoll, 704.
137. Cannon, 759.
138. There are several excellent, detailed explanations of the changing interpretations of the ABM Treaty. For detail of this impact during the Reagan administration, see Shultz, Turnoll, 578-80, 591-93, 883-84, and 876. Also cited in Cannon, 758-60, and House, Hearings Before the Strategic Defense Initiative Panel, 464-70. To review the ABM Treaty text, see http://www.fas.org/nuke/control/abmt/text/abm2.htm.
139. Kartchner, 241-42. Also cited in Gorbachev, 416-18. On this last concession, Shultz believed that Gorbachev was willing to eliminate all SS-20s, but was testing Reagan to see how the president would respond if he could not completely achieve a “zero option” on this issue. For more on this, see Shultz, Turnoll, 776.
140. Shultz, Turnoll, 776.
141. Cannon, 767.
142. Ibid., 762-77.
143. Waller interview.
144. Shultz, Turnoll, 777.
146. Shultz, Turnoll, 776.
150. Ibid., 772-73.
151. Waller interview.
152. Cannon, 772-73.
156. Gorbachev, 442-43.
157. Cannon, 774-75.
MILESTONES IN STRATEGIC ARMS CONTROL

158. Shultz, Turmoil, 1005.
159. Ibid., 1014.
160. Kartchner, 244–45.
161. Cannon, 778–79.
162. Shultz, Turmoil, 1082.
166. Cannon, 790.
The Reagan Administration took office in 1981 having made arms control a national issue during the presidential campaign of the preceding year. President Reagan believed that the US-Soviet SALT II Treaty sacrificed important American strategic interests and presented to the Soviet Union unilateral strategic advantages. Reagan objected to the treaty on four grounds. First, SALT II did not address the most pressing strategic nuclear issue facing both sides—the potential growth in deployed nuclear weapons. SALT II capped deployed delivery systems, but it did not limit growth in deployed warheads. The United States and Soviet Union had begun to deploy multiple independently targetable reentry vehicles (MIRV) aboard strategic ballistic missiles in the mid/late 1970s. MIRV technology caused deployed warhead numbers to grow geometrically. The United States deployed MIRVs first and enjoyed an initial advantage. However, the Soviet Union had made a larger investment in ballistic missile forces than the United States, and Soviet missiles carried larger payloads. The combination of more missiles and greater missile throw weight meant that the Soviet Union had the ability to deploy significantly more nuclear weapons than the United States unless Washington chose to expand its retaliatory force. An expansion of the nuclear arms race did not promise to contribute to US security, and in Reagan’s view, neither did a nuclear arms-control treaty that failed to reduce warhead numbers.

Second, Reagan believed that SALT II failed to contribute to nuclear stability. The treaty allowed only the Soviet Union to have heavy ICBMs. Soviet heavy ICBMs armed with MIRVs
had the combination of warhead yield, warhead numbers, and missile accuracy to carry out a devastating first strike on American land-based nuclear forces and their command and control systems. Many defense analysts feared that Soviet heavy ICBMs had inherent combat characteristics that would lead to early use of nuclear weapons in a crisis; exactly the situation all analysts believed must be avoided. Reagan did not want an equal US right to deploy heavy ICBMs. He wanted an arms-control agreement that preferentially reduced destabilizing weapon systems, particularly heavy ICBMs.

Third, Reagan agreed with many other US political figures (e.g., Sen. Henry "Scoop" Jackson, D-Wash.) that bilateral arms-control agreements should be equal agreements. Arms-control treaties must not grant special privileges or advantages to one side or the other. The Carter Administration had violated this principle when it granted Moscow the unilateral right to possess heavy ICBMs.

Last, Reagan believed, as a matter of principle, that arms-control agreements must be verifiable. The Islamic Revolution in Iran had resulted in loss of important US technical intelligence collection capabilities needed to verify Soviet strategic nuclear programs. Many defense analysts doubted whether the United States could verify SALT II effectively without some form of on-site inspection. Since SALT II had no provision for inspections, Reagan believed the treaty failed to meet a fundamental arms-control requirement. For all these reasons, the Reagan Administration concluded that SALT II was fatally flawed. The administration did not pursue the treaty or attempt to secure the Senate’s advice and consent to ratification, although Reagan did not formally abandon SALT II until well into his second term. Reagan replaced the failed Strategic Arms Limitation Talks with a more ambitious effort, the Strategic Arms Reduction Treaty (START). The objectives of START were a 50 percent reduction in strategic nuclear warheads, selective emphasis on the most destabilizing nuclear systems (ICBM), equality between the parties, and effective verification.

During the Reagan years, United States arms-control institutions reached their evolutionary peak. These institutions
were found in the bureaus of the Arms Control and Disarmament Agency, bureaus of the Department of State, Directorate for International Negotiations of the Joint Staff, Office of the Undersecretary of Defense for Policy, Office of the Undersecretary of Defense for Acquisition, Directorate for National Security Programs of the Department of Energy, and Arms Control Intelligence Staff of the director of Central Intelligence. In addition, each of the armed services had arms-control staffs at their headquarters in Washington and also in their major commands. During this period, the United States government arms-control effort employed an estimated 2,500–3,000 civilian and military personnel. Many of these people had supported, or negotiated, arms-control treaties for more than 20 years.

Similarly, the Air Force organizations responsible for arms-control matters were at their evolutionary peak. They included the International Negotiations Division of Headquarters Air Force, Air Force Studies and Analysis, Directorate for Intelligence Estimates of Air Force Intelligence, and Directorate for Plans at Strategic Air Command (SAC). The burden of arms-control policy, negotiation support, treaty implementation, and compliance fell to the Air Staff’s International Negotiations Division. Although it began as a small staff in the early 1980s, it had grown to become one of the largest divisions in Headquarters Air Force by the late 1980s. More than two dozen officers were assigned to the division.

The Challenge

Within the US national security community, there was general agreement on the nature of the arms-control challenge facing the United States, particularly in the nuclear arena. The National Intelligence Officer for Strategic Programs during this period, Dr. Lawrence Gershwin, completed annually a National Intelligence Estimate (NIE 11-3/8) entitled *Soviet Forces and Capabilities for Intercontinental Nuclear Conflict*. The estimate projected Soviet strategic nuclear force growth for the next 10 years. Even at the lower end of the projections, the estimate forecast that Soviet strategic nuclear forces would reach numerical and technological equality with the United States
no later than the late 1990s. At the higher end of the projections, the estimate forecast Soviet levels of deployed warheads that would have required the United States to undertake expensive modernization programs just to stay even. Gershwin’s NIE findings informed two other important studies of US-Soviet nuclear forces: the Joint Staff’s *Red Integrated Strategic Offensive Plan (RISOP)* and the Office of Net Assessment’s judgments about the relative strengths of Soviet and US strategic nuclear forces. The former evaluated how well US forces could achieve their wartime objectives. The latter assessed whether trends in the respective strategic forces resulted in net advantages for one side or the other. Each of these efforts underscored the need for strategic nuclear arms control, because additional strategic nuclear weapons appeared to add nothing to US and allied security, nuclear stability, or the predictability of the US-Soviet strategic relationship.

American allies strongly supported strategic nuclear arms control as a means of improving security, stability, and predictability with the Eastern Bloc. Allied public support for nuclear arms reductions was very strong, as was public opposition to the deployment of new nuclear systems. One of the great challenges to NATO solidarity during the Reagan years was the deployment of intermediate nuclear forces in Western Europe as part of the dual-track decision. Public demonstrations against deployment of US Pershing IIs and ground-launched cruise missiles in Europe occurred in nearly every NATO country. Public support for nuclear arms control was strong in the United States, too. American Catholic bishops issued a pastoral letter condemning the nuclear arms race and US nuclear deterrence policies. Large demonstrations occurred at US nuclear weapon development facilities. Many in the US Congress supported the Zablocki Amendment, legislation requiring a moratorium on nuclear testing. Western publics looked to arms control to moderate the arms race, establish a nuclear balance of power, and improve mutual confidence. Essentially, the Western publics expected successful nuclear arms-control efforts to lead to “normal” political relations between the United States and Soviet Union.
Most arms-control professionals were less optimistic about the contribution they thought arms control could make.

**Arms-Control Efforts**

The Reagan years were a period of intense arms-control activity. Much of that activity succeeded, although not during his time in office. So successful were the efforts Reagan began that the Department of Defense feared in the early 1990s that it might be required to implement simultaneously the Conventional Forces in Europe (CFE) Treaty, Intermediate-Range Nuclear Forces (INF) Treaty, Chemical Weapons Convention, and Strategic Arms Reduction Treaty. In addition, four utilitarian arms-control arrangements either were signed or entered into force during the Reagan years. These included the Convention on Conventional Weapons (Land Mine Protocol), Commission on Security and Cooperation in Europe (CSCE) Stockholm Document, Missile Technology Control Regime, and Ballistic Missile Launch Notification Agreement.

Arms-control activities during the Reagan years set the stage for the unsurpassed successes that occurred during “Reagan III” the administration of President George Bush. More than a dozen treaties were signed or entered into force during his administration. The Reagan years set the stage for arms-control policy to become one of the most successful policy arenas in which the United States government operated.

The United States Air Force, like the other armed services, routinely supported US national arms-control objectives. In general, Air Force senior staff understood the impact arms control could have on shaping the threat environment and adding predictability to it. Air Force senior staff also appreciated that Congress liked to see progress in arms control before agreeing to nuclear modernization programs. The Air Force had been a strong supporter of SALT II. Among the Joint Chiefs of Staff, only Gen Lew Allen, chief of staff of the Air Force, had strayed beyond the weak JCS characterization, “a modest but useful step,” in describing the SALT II Treaty. The Air Force supported SALT II, because it contributed to concrete Air Force objectives and strategic force modernization.
The Air Force’s primary arms-control objective during the late Cold War period was force structure preservation. Many of the arms-control initiatives of the period had arms reduction as a goal. The Air Staff division responsible for arms control coordinated closely with the Air Force major commands (MAJCOM) most affected by these initiatives: Strategic Air Command, Tactical Air Command, and US Air Forces Europe. Long arms-control negotiations, which were the rule, facilitated internal Air Force coordination. The joint organizational arrangements and authorities in effect at the time maximized Air Force influence in its areas of responsibility. The Air Staff’s relationship with Strategic Air Command was particularly close and institutionally significant for the Air Force arms-control effort.

Headquarters SAC was unique in the Department of Defense (DOD) and in the Air Force. As the only specified command (a single-service combat command controlled by the National Command Authorities) and an Air Force major command, SAC was the United States’ principal nuclear war fighter. With its commanding sense of institutional identity and operational focus, SAC was older than the US Air Force and without peer within it. And in the Department of Defense, only one institution, the United States Marine Corps, was its analog. Strategic Air Command was the training ground for virtually all Air Force staff officers assigned to arms-control positions in DOD. Assignment to influential arms-control billets on the Air Staff or elsewhere came at the approval or with the recommendation of SAC’s senior staff.

Preservation of operational flexibility was another Air Force arms-control objective. Arms-control negotiations during this period increasingly ventured beyond limiting numbers of “things” to restricting production, testing, research and development, training, and deployment of forces. Air Force doctrine was undergoing a rebirth during the late Cold War period owing to the rapid expansion in precision-munitions technology. Arms-control agreements potentially prohibited the Air Force from waging the kind of air warfare that its advanced technology permitted and its modern doctrine demanded.
The Link between National and Air Force Arms-Control Objectives

In general, the United States government sought three objectives in its arms-control initiatives: security, stability, and predictability. Most administrations defined security as preserving the peace by reducing the likelihood of war, improving relations with adversaries, and strengthening alliances. Arms control was said to contribute directly to the first two and indirectly, through allied consultation, with the last.

Security

The Air Force defined security in concrete terms. Arms control advanced US security when it allowed the Air Force to meet commander in chief (CINC) requirements and support the war-fighter’s objectives.

In the strategic arms-control arena, the requirements of the Single Integrated Operations Plan (SIOP) dominated all other considerations. Air Force arms-control staffs paid close attention to force structure objectives, modernization requirements, war plans, mission needs statements, and operational requirements documents in their analysis of arms-control positions. In particular, they paid attention to SAC. Arms control contributed to the Air Force objectives by shaping the threat environment and protecting Air Force operational preferences.

Stability

The US government tended to define stability in terms of the arms race, crisis management, intra-war deterrence, and escalation control. Arms control contributed to these by reducing incentives the forces themselves may have added to unwanted escalation.

The Air Force defined stability as numerical balance between opposing forces. In so doing, the Air Force sought to protect the qualitative advantages resident in its own forces and in Air Force operational practices. The Air Force and Strategic Air Command were persuaded that—weapon-for-weapon and man-for-man—SAC combat crews, US technology,
and Air Force operational practices were far superior to their Soviet adversary.

**Predictability**

The US government defined predictability as a process resulting in increased defense planning certainty, confidence in arms-control compliance, and ability to take corrective steps to restore stability. Arms control contributed to predictability by creating regimes for verification, confidence building, and transparency. The Air Force wanted to be certain that arms-control agreements would permit it to operate its forces according to its preferred operational style.

The Air Force clearly had a narrower perspective, operated at a different level of detail, and spoke a different arms-control dialect than the national government. These differences are illustrated most clearly in the Strategic Arms Reduction Treaty. Prior to the START negotiations, Strategic Air Command and the Joint Staff completed a deterrence study identifying a requirement for many thousands of warheads to carry out the SIOP with a responsible degree of risk. The Reagan Administration had settled on a 50 percent reduction in strategic nuclear warheads, and then specified a ceiling of 6,000 warheads. The 6,000-warhead ceiling was thousands of warheads lower than the SIOP requirement. The administration’s 50 percent/6,000-warhead decision set the Air Force’s nuclear arms-control agenda for the next nine years. Fundamentally, the disconnection between the arms-control objective and the war-fighting objective required something to “give.” The Air Force’s goal was to make sure that the administration’s 6,000-warhead ceiling literally did not mean what it said.

The Air Force was most concerned about its heavy bomber force structure. Heavy bombers carried more warheads than the other legs of the triad under some conditions, and their value was constantly being questioned due to the strength of Soviet air defenses. A 6,000-warhead limit promised to cut the bomber force significantly. Over a period of eight years, the Air Staff, SAC, and Joint Staff supported a series of arms-control positions that effectively discounted the number of weapons attributed to heavy bombers. These positions included
• **Attributing no nuclear weapons to heavy bombers.** Heavy bombers had not been included in SALT II limits, and the Air Force tried to continue the practice. The argument for overlooking heavy bombers was that they contributed to nuclear stability. That is, they were incapable of carrying out a first strike and were ideally suited to retaliation. The US government argued this position in presidential summits and in Geneva negotiations for two years. Eventually, the United States had to discard the position. Frankly, it was preposterous to exclude all heavy bomber weapons from accountability, particularly as the United States and Soviet Union were deploying air-launched cruise missiles on a larger fraction of their respective bomber forces.

• **Attributing only one warhead to each heavy bomber.** This position was just as unacceptable as attributing no weapons to heavy bombers for exactly the same reasons.

• **Attributing one warhead to each penetrating heavy bomber and 10 warheads to each bomber equipped for cruise missiles.** This position was known as the bomber discount rule, and eventually both sides accepted it. Although it substantially increased the number of warheads attributed to the US heavy bomber force, it allowed the Air Force to preserve the bomber force structure called for in its programmatic plans at the time. The Soviets also received favorable treatment for its heavy bombers. Soviet long-range naval aviation flew heavy bombers for anti-submarine warfare, surface strike, and reconnaissance purposes. All these were excluded from the count, even though the majority of them were capable of delivering nuclear weapons against targets in US territory. All Soviet Backfire bombers, a nuclear-armed intermediate-range bomber whose range allowed it to strike targets across the United States from bases in the northern USSR, were ignored.

• **Changing the range criterion in the definition of a long-range nuclear air-launched cruise missile (ALCM).** The effect of this definitional change was to redefine most US ALCM-equipped heavy bombers as penetrating heavy
bombers. With more headroom on the overall warhead ceiling, the United States could have kept more platforms (bombers or ICBMs) in its inventory. In the end, the Soviets rejected this position and said that it would have to reopen the entire discount rule (then agreed) if the United States were serious about redefining the term, air-launched cruise missile.

The net effect of all the bomber discounting was that each party actually deployed about 9,000 strategic nuclear weapons while attributing to themselves only 6,000. Throughout the nine-year START negotiation, none of the military organizations arguing for the discount rule ever worried about the threat environment that discounting created.

Strategic ballistic missiles posed few force structure problems. The United States and Soviet Union had tested specific missiles with more reentry vehicles (RV) than were later deployed. The Minuteman III had been tested with seven RVs, but deployed with three. The Poseidon SLBM had been tested with 13 RVs, but deployed with 10. And the Soviets had tested one of their SLBMs with more RVs than they deployed. So, it was mutually convenient for each side to overlook such tests of unusual numbers of RVs, provided that the tests were never repeated and the testing practice stopped.

Although ballistic missile warhead accountability issues were among the easiest to resolve, overall force structure management required more flexibility than the treaty allowed. Rather late in the START negotiations, the Air Force, Strategic Air Command, and the Navy discovered that it would be convenient from the perspective of force structure preservation to be able to download US ballistic missiles and claim lower warhead attribution numbers. Originally, the US arms-control interagency opposed the idea. It was late in the game to negotiate downloading rules. It looked like a loophole or a device for cheating. It inevitably conferred breakout advantages to the Soviets, because their missiles had larger payload potential. When it was eventually presented to the Soviets, they opposed the idea vigorously, until Soviet force structure managers saw the advantages it conferred. In the end, downloading was
accepted, and it is one of the most useful tools in START for force structure management.

The arms-control interagency objective of predictability also posed risks for the Air Force. The United States wanted overlapping regimes of verification, notification, and cooperative measures to provide a degree of compliance confidence unattainable through national technical means alone. Soviet negotiators had a low opinion of most of these except where they could be applied to heavy bombers, and there the Soviets applied them with energy. The Soviets wanted to restrict US heavy bomber operations outside US borders, restrict overseas deployments, and limit employment of US bombers on conventional missions abroad. Had the United States accepted these positions, the effect on heavy bomber operations would have been profound. The Soviets wanted advance notification of bomber deployments, heavy bombers to return to their bases when their bases were inspected, and cooperative measures following large bomber exercises or deployments. The Air Force, SAC, Joint Staff, and theater CINCs opposed such limitations. The Air Force-SAC objective was to be able to support the regional CINCs’ war plans. As the 1980s drew to a close, those plans increasingly called for precision-guided heavy bomber weapons, particularly conventional air-launched cruise missiles, a Black World program that START negotiators knew nothing about until just before Desert Storm. Exaggerated predictability measures would have undercut the utility of heavy bombers at precisely the moment when they were about to enjoy a nonnuclear renaissance.

Air Force arms-control issues were among the most bitter negotiating disagreements in START. In February 1991, just a few months before treaty signature, the START Joint Draft Text contained about 150 bracketed provisions (provisions on which the two sides could not agree) down from several thousands of brackets one year earlier. Of the remaining bracketed text, virtually all were associated with heavy bombers and ALCMs. The head of the START delegation believed the United States had negotiating leverage to get the US position (the position of the US Air Force) accepted on only 10 percent of the bracketed provisions. Maj Gen Gary Curtain, a former ICBM
wing commander and career SAC officer, was the representative
of the chairman of the Joint Chiefs of Staff to the START Talks
and the US cochairman of the START Heavy Bomber-ALCM
Working Group. He developed a strategy to dismantle the
Soviet negotiating strategy on bomber-ALCM issues and gave
the United States the negotiating leverage it needed. As the
text was agreed, the sides adopted the US language on 60 per-
cent of the brackets, almost 100 provisions. START would
have been a much different treaty for the Air Force had it not
been for Curtain.

**Evolutionary Changes**
in Defense Organization

During the Reagan years, a significant change in defense
organization occurred. Although its impact was not felt imme-
diately, the Air Force’s role in arms control eventually changed
significantly. The change was the Goldwater-Nichols Act.

Goldwater-Nichols expanded the role of the chairman of the
Joint Chiefs of Staff and the regional and functional CINCs at
the expense of the armed services. The Joint Staff was subor-
dinated to the chairman for the first time. The chairman also
received more authority in resource allocation decisions. The
CINCs received more responsibility for stating requirements.
Prior to Goldwater-Nichols, Joint Staff deference to service
positions was automatic unless the services could not agree
among themselves. Then, the Joint Staff performed the role of
honest broker. Goldwater-Nichols made the Joint Staff an
independent actor and first among equals with the service
staffs. It created the foundation of a general staff system by
inventing a joint career field, establishing a credential system
for it, and implying extravagant rewards for entering the joint
service specialty. This occurred in 1986 during Adm William
Crowe’s tenure as chairman of the Joint Chiefs of Staff.
Admiral Crowe chose not to impose his full statutory author-
ity, inasmuch as he regarded himself as a transition figure.
His successor, Gen Colin Powell, implemented Goldwater-
Nichols completely.

Under General Powell, the Joint Staff began to exercise its
statutory independence. Air Force positions on arms control
were not often overruled, but the chairman and his joint staff made clear in a variety of ways that new rules were in place. The full effect of these changes was not felt until the early 1990s when the Strategic Air Command was dissolved. With the elimination of the only specified command and its replacement with a joint command, United States Strategic Command (USSTRATCOM), the special relationship between the Air Force and the nuclear war fighter ended. It did not end all at once, and the ghost of its former self materializes on occasion. However, the special relationship is between STRATCOM and the Joint Staff, not STRATCOM and the Air Staff.

After some initial fumbling, SAC’s assets and responsibilities were transferred to two other Air Force MAJCOMs, Air Combat Command and Space Command. Arguably, the strategic nuclear mission is foreign to each and contributes to neither command’s vision of the future. SAC’s institutional identity and operational focus built over half a century had been lost, and nothing like it has emerged to replace it.

**Air Force Arms-Control Accomplishments**

Participants in the Air Force arms-control process during the late Cold War period are understandably proud of their achievements. Universally, they contend that they achieved all the institutional objectives they were asked to secure. As a participant in the arms-control process outside the Air Force during much of the period, I agree with them. Few participants in the arms-control process can match the Air Force’s string of arms-control achievements. Why was the Air Force so successful?

Participants in the process repeatedly point to the role played by Air Force senior leadership as the most important factor in their success. Action officers and division chiefs in the relevant organizations frequently were surprised at how sophisticated was the senior staff’s understanding of the arms-control process and its impact on airpower, particularly strategic airpower. The Air Force senior staff during these years tended to have broad experience in strategic force operations, plans, programs, and studies and analysis. They also had prolonged exposure of the course of their careers with the Washington policy/legislative affairs community. As they rose
to prominence in the Air Force, their careers exposed them to many of the same issues again-and-again, but from different perspectives. First, they saw it as operators, then as Air Force planners, then as programmers. Finally, they saw it as joint policymakers. It was particularly important for strategic arms control that Air Force chiefs of staff frequently had been the commander in chief of Strategic Air Command.

The second most important factor was the special relationship between the Air Staff arms-control staff and the nuclear war fighter. The relationship was unimaginably close by today’s standard. For a period of nearly 15 years, Air Staff and joint arms-control positions were filled selectively by officers who had risen in responsibility and rank in Strategic Air Command. The personal and organizational connections between the Air Staff and appropriate SAC staffs cannot be overemphasized. They occurred at the personal, analytic, organizational, and command levels and bestowed a degree of trust, confidence, and unity that is not duplicable today.

In this period, the Air Staff and SAC had respected analytic capabilities. Air Force Studies and Analysis had the ability to conduct quantitative analyses independent of the Joint Staff or Office of the Secretary of Defense. That analysis gave Air Staff positions considerable impact on strategic nuclear matters.

The Air Force also went to great trouble to fill influential arms-control positions with outstanding Air Force colonels with strong operational and policy backgrounds. The list includes Col Robert Linhard (National Security Council staff), Col Michael Wheeler (special assistant to the chairman of JCS), Col Richard Wallace (special assistant to the chairman of the Joint Chiefs of Staff), Col John Eller (Joint Staff/DDIN), Col Philip “Tony” Foley (Office of Strategic Nuclear Affairs, Arms Control and Disarmament Agency), Col William “Gary” Richardson (special assistant to Ambassador Edward Rowny, Arms Control and Disarmament Agency), and Col Frank Dellerman (deputy director, Office of START Policy, Office of the Secretary of Defense). The practical experience and judgment of these officers helped shape issues in ways that contributed to Air Force interests.
In retrospect, the only shortcoming of this period was the failure of all Air Force personnel involved to foresee the ultimate impact of organizational change in the Department of Defense. The combined effect of Goldwater-Nichols and the creation of US Strategic Command eroded the role the Air Force was to play in arms control and nuclear matters generally. Although participants in the arms-control process during the late Cold War period believed they were protecting Air Force interests with each success, they never believed it possible for the United States to contemplate nuclear reductions on today’s scale. As a result, the victories on which they congratulated themselves accelerated the effects they were hoping to avoid. Yet, if this criticism is valid, it is also academic. It is not clear what the Air Force could have done to mitigate the impact of organizational change in DOD, or change in the international security environment, had they foreseen the future perfectly. In the end, the Air Force is an armed service, not an invisible government.

Conclusion

The influence of the Air Force in arms control reached its apex in the 1980s and early 1990s. The conditions and circumstances that allowed the Air Staff and Strategic Air Command to have such impact are now history. In all likelihood, they will never be duplicated. Gone are Strategic Air Command, its institutional identity, and its operational focus. Gone are the days in which a large number of the Air Force senior staff can claim to have risen to high position in the nuclear force. Gone is the special relationship between the Air Staff and the nuclear war fighter. Gone is the Air Staff’s respected, independent analytic capability in nuclear matters. As a result of these changes, arms control may pose today an immediate institutional threat to the Air Force that it never posed before.
PART IV

Strategic Arms Reductions,
1989–2000
Arms Control after the Cold War

Thomas S. Mowle

The years from 1989 to 2000 saw many changes in American defense and strategic posture. During this time, the Soviet Union disintegrated, ending the bipolar era that had so clarified the international environment. This made arms control much more complex.

Technology diffusion continued, so it became more realistic to be concerned about a missile attack from many states around the world. Worse than mere missiles, nuclear weapons technology diffused as well. Both India and Pakistan revealed their nuclear weapons, the advanced state of a secret Iraqi program became apparent after their defeat in 1991, and concerns remained about North Korean and Iranian nuclear progress.

Themes

This chapter, and the previous one by Forrest Waller, describes the major arms-control themes of the George Bush and Bill Clinton presidencies. The first theme is strategic arms reductions. This continues the story Charles Dusch began in chapter 5, as Ronald Reagan began negotiations on a Strategic Arms Reduction Treaty (START). By the end of the Bush presidency, both a START and START II agreement had been signed—although eight years after that, START II was not in effect.

The second theme, and the one that runs most steadily throughout the period, is missile defense. Bush made a strong effort to modify the Anti-Ballistic Missile (ABM) Treaty before he left office, so defenses could be built to meet the threats of a nonbipolar world. The Clinton Administration, operating under the premise that theater defense was both more urgent and more feasible than strategic defense, spent its first term and part of its second trying to distinguish between strategic and theater defense. The results of this effort, which have not
been ratified, were minimal. This second theme began to be transformed at the end of the Clinton presidency, as the launch of longer-range missiles by both North Korea and Iran increased the rationale for national missile defense.

The third theme during this period, and the major focus of the Clinton presidency in particular, was nonproliferation. Nonproliferation included a variety of programs designed to safeguard the Russian nuclear arsenal and prevent the spread of its technology. Even theater missile defense was seen as contributing to this goal. Nonproliferation efforts also included multilateral restrictions on weapons of mass destruction. The Nuclear Nonproliferation Treaty (NPT) was indefinitely extended. A Comprehensive Test Ban Treaty (CTBT) for nuclear weapons was signed. The Chemical Weapons Convention (CWC), signed in the last week of the Bush presidency, received Senate consent. The Clinton team also worked on compliance provisions to the 1975 Biological and Toxin Weapons Convention (BWC).

Once again, however—and this is the highest-level theme we find throughout this chapter—many of these agreements languish, along with START II and the ABM demarcations. CTBT was rejected by the Senate and no compliance protocol has been completed for the BWC. Of all the negotiations and agreements since the end of the Cold War, only START I, Conventional Forces in Europe (CFE), the NPT extension, and the CWC have been ratified and put in force. Most of these were achievements of the Bush years—the Clinton Administration negotiated only the NPT extension.

Before moving on to a chronological review of arms-control activity, which sets the stage for the topical treatment, here is a note about methods and sources for this chapter. To a much greater extent than in prior chapters, the interviewees continue to work for the US government. Many of these interviewees, as the price for candor, did not wish to have their names associated with specific comments in this chapter. So each section begins with a citation of the people who contributed information, but no statements of opinion are cited specifically in the text. The narrative combines the results of all these interviews into what the author considers the most persuasive version of events.
Arms-Control Environment I: Decline of the Cold War

For one year, 1989, the Bush Administration faced the same external environment as its predecessors, and arms control proceeded as it had before. The focus was on a single adversary, the Soviet Union. And “adversary” is the correct word—despite glasnost and perestroika, there was little trust between the sides, especially with respect to Soviet intentions. President Mikhail Gorbachev used the rhetoric of peace, yet his military continued to modernize its air and strategic forces. Regional concerns, at this time, did not make it onto the agenda.

In 1989 the START talks continued, at the same slow pace they had under Reagan. The negotiators continued to search for ways to enhance stability by minimizing the attractiveness of a first strike. Both sides sought to build up their own forces while negotiating and to find ways to lock in their own advantages. In parallel, the Bush Administration tried without success to get the Soviets to accept its broad interpretation of the ABM Treaty, which would allow space-based interceptors.

Arms-Control Environment II: End of the Cold War, 1990–92

By 1992 the bilateral relationship had changed dramatically. In late 1989 all the Soviet satellite regimes of Eastern Europe fell, as did Berlin’s concrete symbol of bipolarity. Germany reunified, the Warsaw Treaty Organization was dissolved, and Soviet/Russian forces began to withdraw from their foreign bases. Gorbachev’s posture during the Gulf War, abandoning his Iraqi client, demonstrated the potential for what Bush called a “new world order.” The Gulf War also demonstrated that regional threats must be addressed. While Saddam Hussein’s forces were defeated with relative ease, the danger posed by even his primitive ballistic missiles was sobering to defense planners. Subsequent revelations about Iraqi nuclear, biological, and chemical weapons programs would broaden the focus of arms control.

For the meantime, the Bush Administration worked to codify the new reality, and the new sense of cooperation with the
Soviets. The first breakthrough was the CFE Treaty, signed during Operation Desert Shield on 19 November 1990. CFE will not be described in detail later in this chapter, since it is nonstrategic and has been mostly overtaken by subsequent events. It created limits on numbers of tanks, artillery, armored combat vehicles, combat helicopters, and attack aircraft within countries and subregions. A later protocol, signed in July 1992, set limits on personnel. CFE entered into force in November 1992. The CFE Treaty did serve the purpose of arms control by allowing both sides to reduce their defense expenditures, making war less likely through transparency and inspections, and reducing the destructiveness of a conventional war. While the agreement seems less urgent after the Cold War than it had previously, it did provide a way to lock in the reductions that had been made, and to ensure that they would be reciprocal. The same rationale would underlie the START II agreement.

CFE was paired with the Open Skies verification agreement, signed on 24 March 1992, which also largely falls outside the scope of this book. Open Skies required its adherents to "permit frequent, unrestricted overflights of their national territories by foreign aircraft for the purpose of increasing confidence about military intentions and capabilities."

START I was signed on 31 July 1991, and arms control began to accelerate. Within a few months, both Bush and Gorbachev announced unilateral steps to reduce nuclear tensions. When the Soviet Union collapsed at the end of the year, Russian president Boris Yeltsin proved to be an even more willing partner in arms control. Less than 18 months after START I was signed, it had been amended on 3 January 1993 by the deeper reductions of START II, in which the United States achieved much of what it had failed to achieve in the first agreement. START I was also amended by the Lisbon Protocol of 23 May 1992, which planned for the nuclear disarmament of the former Soviet republics that found themselves in possession of part of the former Soviet arsenal. By the end of Bush’s term, the United States, Russia, and Kazakhstan had ratified START I.
Arms-Control Environment III: Adjusting to the New World, 1993–97

Significant political changes affected arms control in 1993. Bill Clinton, whose team brought a different emphasis on arms control, succeeded President Bush. While President Yeltsin remained in office, parties opposed to him, including former Communists, would now dominate the Russian parliament, the Duma. The Russian approach to arms control returned to more suspicion and hard bargaining, as they regarded recent agreements as very unfavorable to them. President Clinton, on the other hand, changed the focus to nonproliferation and regional issues now that the strategic problems seemed to be resolved.

Nevertheless, work continued on many fronts of arms control. START I went into force on 5 December 1994 with Ukraine’s accession to the Lisbon Protocol. As for other legacies of the Bush Administration, the United States ratified Open Skies in 1994 and START II in 1996. On 17 November 1995, the Russians and Americans reached agreement to modify CFE’s flank limits to account for the collapse of the Soviet Union. In the most protracted arms-control initiative of the Clinton years, four years of talks resulted in the New York Agreements of 26 September 1997. These were designed to demark differences between theater and strategic defense systems.

With respect to nonproliferation, the Clinton Administration promoted both bilateral and multilateral measures. The United States worked with the Russians to control their nuclear stockpile via the Nunn-Lugar Cooperative Threat Reduction (CTR) program. In May 1995, an indefinite extension to the NPT was accepted, without weakening its provisions. A CTBT was negotiated in the following year, and signed by the United States on 24 September 1996. While the CWC had been completed on 3 September 1992 and signed on 13 January 1993 under the Bush Administration, the Clinton White House succeeded in winning Senate consent on 25 April 1997.

For all the activity of the first five years of the Clinton presidency, however, the results were superficial. The New York Agreements on missile defense may have been the centerpiece of the efforts on traditional arms control, but they were never sent to the Senate for its consent. The Duma had declined to ratify START II for so long that a START II extension was included in New York. When Russia finally ratified START II in 2000, seven years after its signing and four years after the US Senate had initially consented to it, their approval was conditioned on US ratification of the New York Agreements. In part, this was a tactical ploy to continue to link missile defense to strategic arms reductions, but it also was a necessity: the United States had ratified a treaty whose deadlines had passed, so the Russians needed the United States to ratify the extension as well.

As for nonproliferation, the Clinton years did not produce an acceptable compliance text for the BWC. The Senate rejected the CTBT in 1999, although a testing moratorium remained in place. The Nunn-Lugar CTR program faced continuing budget battles, and its success has been difficult to evaluate. Meanwhile, the Russian war in Chechnya appears to violate the terms of CFE—although CFE was never intended to address a civil war in Russia. While Open Skies verification was ratified by the Duma in 2001, after President Clinton left office, it was by this time no longer clear what that meant.

Nevertheless, there is another side to these perceived “failures” of the Clinton Administration. In a nonbipolar world, the focus of arms control becomes less clear. Arms control may help prevent war in an adversarial relationship, but no major state is clearly an adversary of the United States. With the chance of war with Russia reduced already, there is less incentive for a strategic arms buildup. Thus one can limit defense costs unilaterally. Those states that are adversaries—Iraq, for example—do not appear to be good candidates for traditional arms negotiations. In this situation, ambiguity with regard to limits on missile defense systems may be wise. More typically, arms-control efforts have entered a multilateral
arena. Given the difficulty two states had during the Cold War in assessing what agreements would serve their interests, it is not surprising that progress on multilateral regimes is difficult.

**Strategic Arms Reduction**

Chapter 5 described the basic rationale behind the START talks during the Reagan Administration. For the first time, the goal of arms control was first-strike stability—weapons would survive a first strike but could not themselves disarm the other side. To achieve this goal, ballistic missiles, especially those with multiple independently targetable reentry vehicles (MIRV), should be reduced in favor of slower platforms like cruise missiles and manned bombers. START also sought a more comprehensive verification regime than prior agreements.

While these principles fit a solid, neutral theory of arms control, they also tended to reinforce areas of American superiority and require cuts in areas of Soviet superiority. Thus the two sides remained far from agreement when President Bush took office. The new National Security Advisor Brent Scowcroft called a brief pause for a strategic review in early 1989, before negotiations resumed.

**START I**

The most contentious issue facing the American team in 1989 was whether or not they should continue to demand a ban on mobile missiles. The Office of the Secretary of Defense (OSD) position, backed by the Joint Chiefs of Staff (JCS) and also by the Arms Control and Disarmament Agency (ACDA), was that the United States should press for a ban. Mere limits on such systems would be difficult to verify with certainty, and they had a rapid-reload potential not present in other systems. The State Department, on the other hand, wanted to drop the proposal, since it was becoming apparent that it was a roadblock to reaching any agreement. Bush’s National Security Council (NSC) was less enthusiastic about the ban as well, noting that mobile missiles were not as destabilizing a first-strike weapons as fixed MIRVed intercontinental ballistic
missiles (ICBM). In many ways, they played a similar role to the American submarine-launched ballistic missiles (SLBM).

Along with the overall ban, OSD advanced the strategy used successfully with the ground-launched cruise missile (GLCM) in the Intermediate-Range Nuclear Forces (INF) treaty—continue to build our own mobile systems so as to exercise leverage on the Soviets.\textsuperscript{16} This proved untenable. By late 1989, it became clear that Congress was unwilling to fund American mobile systems if they would only be bargaining chips. Furthermore, the long delay in developing an American counter to the Soviets' development of the mobile SS-24 and SS-25 meant that the Soviets were being asked to actually dismantle a deployed system to offset a potential American system.\textsuperscript{17}

All agencies came to realize that the mobile missile ban must be dropped. The ban was “traded” for a 50 percent cut in deployed Soviet heavy ICBM warheads, to 1,540 (10 MIRVs on 154 missiles), and a limit of 1,100 on deployed mobile ICBM warheads.\textsuperscript{18} This would allow the Soviets to continue deploying mobile ICBMs. The Americans could do so as well, but did not have either mobile or heavy ICBMs deployed. The balancing American advantage was that both sides faced a limit of 4,900 total accountable ICBM and SLBM warheads.

Another obstacle to completing START was how to count bomber weapons. Both sides agreed with the general principle that bombers were less destabilizing than ICBMs, and so the potential weapons load from a bomber should be discounted in arriving at the total of 6,000 accountable warheads. Furthermore, the bombers should be discounted in compensation for Soviet air defenses. This issue can be dealt with briefly, as by 1989 there was no major interagency dispute over bomber discounts. One key sticking point was how one would distinguish between conventional and nuclear-armed bombers; another was the status of the Tacit Rainbow, a conventional air-launched cruise missile (ALCM). In the agreement signed on 31 July 1991, penetrating bombers were counted as a single warhead, and standoff cruise missile bombers were counted as 10 warheads for the United States and eight for the Soviet Union. In each case, this was half of the actual load these aircraft could deliver.\textsuperscript{19}
Unilateral Initiatives

START’s signature was followed in the next month by a failed coup against Gorbachev. With the Cold War clearly collapsing, President Bush announced a series of unilateral initiatives on 27 September 1991. These included withdrawing all naval tactical nuclear weapons and nuclear artillery shells, taking all heavy bombers and 450 Minuteman II ICBMs off alert, and canceling the short-range attack missile (SRAM II), small ICBM mobile basing, and Peacekeeper rail garrison. One week later, on 5 October, Gorbachev matched this unilateral initiative with respect to tactical nuclear weapons. Furthermore, he cancelled equivalent programs for new and modernized mobile ICBMs and the Soviet short-range attack missile. Gorbachev also withdrew nuclear air defense warheads and nuclear mines, took 503 ICBMs and six ballistic missile submarines off alert status, and restricted Soviet rail-mobile ICBMs to garrison.

A second unilateral round occurred in early 1992. During his State of the Union Address on 28 January, Bush limited B-2 production to 20, advanced cruise missiles to 640, cancelled the small ICBM, and stopped production of both the Peacekeeper and Trident II warheads. The next day, Russian President Yeltsin announced accelerated compliance with START cuts, an end to production of the Blackjack and Bear-H heavy bombers, an end to ALCM and sea-launched cruise missile (SLCM) production, and 50 percent cuts in air-launched tactical nuclear weapons. While these initiatives would remain unilateral, additional proposals contained within them would become the basis for START II negotiations.20

START II

Prior to START II talks beginning, loose ends from the Soviet breakup remained to be resolved. Parts of the Soviet arsenal were dispersed in Belarus, Ukraine, and Kazakhstan. On 23 May 1992, the non-Russian republics agreed in the Lisbon Protocol to be parties to START and also to become nonnuclear signatories to the NPT. By the end of the year, all but Ukraine and Belarus had ratified START (the US Senate
Russian ratification was contingent on the others, however, and Ukraine did not agree to the NPT provisions until November 1994. In the interim, they obtained a 14 January 1994 trilateral agreement with the United States and Russia that gave them compensation and security assistance. This allowed START I to enter into force on 5 December 1994.22

With respect to START II itself, the primary arms-control goal was no longer crisis stability. Instead, the goals were economic. The DOD wanted to cut strategic forces if it could, so Bush’s team sought to ensure that the Russians would match these cuts.23 With arms control no longer central to the bilateral relationship, a START II agreement represented an insurance policy against a return to bipolarity.24 As befit such a low-stress diplomatic environment, the basic goals of START II were simply announced at a 17 June 1992 summit. Within six months, a small, high-level group (in contrast to the multitude present at Geneva for START I) had set the stage for Bush and Yeltsin to sign START II on 3 January 1993.25

In START II, the United States achieved most of the goals it had set for the original START. Central to this was a ban on land-based MIRVed ICBMs altogether. START II also lowered the total deployed strategic warhead ceiling to between 3,000 and 3,500 for each side. Cruise missiles would be counted as their actual totals, rather than being discounted 50 percent as in START I. The cuts would occur in two phases: by 2000, total deployed warheads would drop to between 3,800 and 4,250; MIRVs to 1,200; and SLBMs to 2,160. The final phase, by 2003, would eliminate MIRVs and lower the SLBM sublimit to between 1,700 and 1,750. Since START II was simply a modification to START I’s numbers, the verification regime remained unchanged.26 The only major item not written into START II was a mobile ICBM ban, but this was no longer a priority.

Unfortunately, the very speed of the negotiations—one member of the team said that “every word” was written in December 1992—may have contributed to the long delay in ratifying START II. The return of the former Communist Party to control of the Duma was accompanied by suspicions that the United States had forced a bad agreement on a desperate,
or inept, Yeltsin. While the US Senate consented to START II on 26 January 1996, the Duma continued to link START II ratification to side issues like ABM demarcation. The Republican Congress, in response, prohibited the DOD from cutting nuclear forces beyond the START I limits until Russia ratified the treaty, since if US cuts were completed, the Duma would have no incentive to do so.

Despite the delay in ratification, interest in further cuts was maintained. At the Helsinki summit of March 1997, Clinton and Yeltsin set goals for START III of reducing warheads to the 2,000–2,500 range. This position was repeated at Cologne in June 1999. At Helsinki, the two presidents also agreed to stretch out the START II deadlines by four years, to 2007. This modification to START II was rolled into the New York Agreements described in the following section. The Duma finally ratified START II on 14 April 2000, but its ratification was conditioned on the deadline extension from Helsinki. Since the Senate has not consented to this—in fact, has not even been sent the extension for consideration, the eight Clinton years ended with START II still not in force.

**Summary of Strategic Arms Reduction**

The first four years of strategic arms negotiations cannot be considered anything but a success. The Bush Administration completed the tasks left it by the Reagan Administration, and more. Deployed strategic warheads would be reduced by over two-thirds from their 1990 levels, which were in excess of 10,000 on each side. The most destabilizing weapons, the MIRVed ICBMs, would be eliminated by both sides. All development and modernization of new strategic forces had ended, thus fully containing the arms race’s costs.

The following eight years are more difficult to assess, in part because we have no historical perspective on them. Neither the Russians nor the Americans have violated the terms of the unilateral initiatives or START II. On the other hand, either side may renounce the unratified treaty and do so. During the Clinton years, strategic arms control moved from the central current of foreign policy to a side eddy. Duma ratification did not seem to be a priority of the Clinton Administration; on the
other hand, the United States had more important issues against which to exert its minimal leverage. The next two sections of this chapter describe the new arms-control themes, missile defense and nonproliferation.

**Missile Defense**

During the Bush and Clinton administrations, the emphasis placed on missile defense systems and on the ABM Treaty varied over time. During the first years of the Bush Administration, the Reagan-era Strategic Defense Initiative (SDI) continued, as described in chapter 5. This included the so-called broad interpretation of the ABM Treaty, based on the idea that if the treaty did not explicitly prohibit space-based components, then testing and perhaps even deploying them would not violate the treaty.

The Gulf War demonstrated to the United States that other states besides the Soviet Union posed a potential ballistic missile danger. Accordingly, programs were initiated to address theater missile defense (TMD). These programs continued after the inauguration of President Clinton, even after he announced in 1993 that the space-based portion of SDI would be abandoned, and the narrow interpretation of the ABM Treaty followed. Since the treaty did not define “strategic missile,” a four-year set of negotiations followed, resulting in the New York Agreements. These established the successor states to the ABM Treaty, made an initial effort to distinguish between strategic and theater defense systems, and enshrined the “narrow interpretation” by prohibiting space-based interceptors. The Clinton Administration never submitted the New York Agreements to the Senate for its advice and consent.

In the following year, North Korea’s three-stage missile demonstration changed the terms of the debate once again. It became apparent that theater weapons would not be sufficient to meet all short-term threats and that research and development of a National Missile Defense (NMD) system might be appropriate after all. This led to a renewed look at changing the terms of the ABM Treaty, an effort that did not net any progress by the end of the Clinton Administration.
SDI: 1989–93

During 1989, the primary public concern of the Department of Defense (DOD) was its perception of a “gap” in strategic defense efforts by the Soviets and Americans. At the August 1989 ABM Treaty review in Geneva, Americans emphasized the apparent violations to the treaty posed by the phased-array radar at Krasnoyarsk and additional radars at Gomel. These were not directed at the perimeter of the Soviet Union, as required by the ABM Treaty, and thus could become part of a strategic defense targeting system. In parallel to these concerns, the Defense and Space Talks proposed by President Reagan at the Washington Summit began in 1989.31

These talks, like all the missile defense negotiations during the Bush Administration, were conducted outside the ABM Treaty’s Standing Consultative Committee (SCC). Very little was accomplished during the formal Defense and Space Talks. They were initially demanded by the Russians as a way of linking the START and INF negotiations to restrictions on the SDI.32 It remains unclear how much either side expected to gain from the discussions, since neither was open to compromise as long as the Cold War strategic framework remained. In any case, once the START I agreements were signed in 1991, the Soviets ended the parallel Defense and Space Talks.

By this time, however, the Bush Administration’s perception of the threat from ballistic missiles had changed radically. The experience with SCUD-hunting in the Gulf War demonstrated a serious deficiency in American military capabilities. For the first time since the Korean War, an adversary inflicted American casualties via aerial attack. The Patriot missile, originally the SAM-D, could not carry out the antimissile mission adequately because it had been designed specifically to remain compliant to the ABM Treaty. Furthermore, the breakup of the Soviet Bloc and the beginnings of the breakup of the Soviet Union changed the nature of the threat from that source: a massive intentional attack now seemed unlikely, but an accidental or unauthorized one was now a realistic fear. The August 1991 coup attempt in the Soviet Union only added to the fear that the Soviet arsenal was no longer as secure as it had been. Deterrence, after all, was designed to work against
a “rational, unitary actor,” and it was not clear that Iraq, North Korea, or even now the Soviet Union fit that definition. 33

To meet this danger, the Strategic Defense Initiative Office (SDIO) proposed developing and deploying a system called Global Protection Against Limited Strikes (GPALS). The minimal GPALS, intended to comply with the ABM Treaty’s limits, would have used 200 interceptors operating from a single ground base or submarine.34 This size was designed to meet the likely danger from any newly nuclear state, or from a single ballistic missile submarine. A larger version of GPALS was also recommended, which would have increased the system to six bases.35 Both versions envisioned using space-based sensors for early warning and tracking.36

In parallel to this effort, the Bush Administration began a more serious attempt to convince the Soviets to revise the ABM Treaty. On 27 September 1991, President Bush publicly asked the Soviets to “join us in taking immediate, concrete steps to permit the limited deployment of nonnuclear defenses to protect against limited ballistic missile strikes whatever their source.”37 The response from President Gorbachev a week later was very positive—accepting the invitation and suggesting that they investigate developing joint missile warning systems. Six-party discussions began on 27 November 1991, with representatives of the four nuclear-armed Soviet republics sitting with the Soviet and American delegations. The United States proposed a new interim agreement that would have lifted the ABM Treaty’s limits on development and testing and permitted deployment of a small dispersed missile defense system. The new agreement would have still limited the number of sites, interceptors, and number of interceptors at each installation, so as to ensure that it would only be capable of defending against a limited strike.38

While the Soviet Union itself would only survive for another month, this ABM revision was encouraged even more strongly by Russian President Yeltsin. In late January 1992, he called for a Global Protection System (GPS) that would defend against missile strikes worldwide and would integrate Russian, American, and other development efforts. After working to win the acceptance of his NATO allies, Bush agreed to the plan at
his 17 June 1992 summit with Yeltsin. Their joint statement said, “Such cooperation would be a tangible expression of the new relationship that exists between Russia and the United States.” The initial priorities would be to share early warning information via a joint early warning center, to encourage the participation of many states in developing and deploying the technology, and to revise or establish the legal framework governing ballistic missile defense. One of the key treaty revisions would be to lift restrictions on sensors, since no territorial defense could otherwise be successful under the ABM regime.

These talks aimed at moving the Russian-American relationship into one founded on normal interstate relations, rather than one governed by mutually assured destruction. The Americans were hopeful for an agreement, since Russia was geographically more vulnerable to the dangers of ballistic missile proliferation than the United States. While the tone of the negotiations was cooperative, the American position was made clear to the Russians: If an agreement could not be reached on limited defensive systems, then the United States would “consider withdrawal, legally in accordance with the provisions of the Treaty.”

While the Bush Administration pursued these agreements for several months, until his reelection defeat in November 1992, their wisdom was not universally accepted within the government. ACDA was particularly skeptical of the joint aspects of GPS. There would be practical problems with sharing command, control, and communications data as well as technical data with the Russians; in the past the Department of Defense had been reluctant to share such information even with allies. Furthermore, once implemented, it was likely that American systems would be protecting Russia more often than the reverse, creating a built-in burden-sharing problem.

**TMD and ABM Demarcation: 1993–97**

With the inauguration of President Clinton in the United States, and the weakening of Yeltsin’s power in Russia following the Duma elections, the focus on strategic defense ended. The Clinton Administration did not find the need for missile defense to be worth risking START II, which was still being
held up in Russia. On 13 May 1993, the new Secretary of Defense Les Aspin, signaled this new focus on theater missile defense (TMD) by changing the SDI Office (SDIO) into the Ballistic Missile Defense Organization (BMDO), which would focus on TMD. The BMDO was also dropped in the wiring diagrams—rather than reporting directly to the secretary of defense, it would now report to the undersecretary for acquisition and technology. In July the new administration announced that it would hold to the strict interpretation of the ABM Treaty, ending the long-standing Russian objections to space-based systems. Such systems would be researched for their technology, but not tested or deployed. The theater systems would be designed to protect American forces, but also would serve to protect regional noncombatants from the escalatory terrorism practiced by Saddam Hussein in the Gulf War.

This new focus emphasized that the primary concern would be states like North Korea, not Russia; these regional threats could be met, and proliferation even deterred, with only a theater system. TMD would directly support an interventionist US foreign policy by preserving our ability to operate in regions where ballistic missiles had become dangerous. The DOD cited six examples of recent missile use, all in the Middle East: “the Iran-Iraq War, Libyan attacks on Lampedusa Island, Operation Desert Storm, the war in Afghanistan, the Iranian attack against dissident camps, and the recent conflict in Yemen.”

The only major obstacle to proceeding with TMD was a concern within the United States that even TMD might be seen as a violation of the ABM Treaty. Article II of the treaty specified, “an ABM system is a system to counter strategic ballistic missiles or their elements in flight trajectory.” This left unresolved the definition of a strategic ballistic missile. In addition, Article VI (a) bound the signatories “not to give missiles, launchers, or radars, other than ABM interceptor missiles, ABM launchers, or ABM radars, capabilities to counter strategic ballistic missiles or their elements in flight trajectory, and not to test them in an ABM mode.” Once again, the definitions of capabilities and ABM mode were left open. Finally, with the collapse of the Soviet Union itself, the status of the treaty as a whole was in
doubt. One could now view the treaty as defunct, view Russia as the sole inheritor of Soviet obligations, or view each of the now-independent former Soviet republics as a signatory.

The Clinton Administration’s efforts to resolve these questions began with the fourth five-year review of the treaty by the SCC in September 1993; they ended four years later with the signing of a package of documents that came to be known as the New York Agreements. The initial US position on Article II was straightforward. A “strategic ballistic missile” would be one exceeding the capabilities of the Chinese CSS-2: a range in excess of 3,500 km and a maximum speed in excess of 5.0 km/s. This proposal was quickly accepted by the Russians, and was incorporated into the final agreements.

On the question of succession, Russia made it clear that they wanted other republics, particularly Belarus, Ukraine, and Kazakhstan, to participate. This would maintain the parallelism the Russians and Soviets had placed between the START and ABM talks over the years. More importantly, the former Soviet ABM facilities were now dispersed among its neighbors, especially Kazakhstan. The National Security Council, led on this issue by Bob Bell, recommended acceding to this Russian proposal, and also recommended agreeing to “defer indefinitely discussion of amendments to the ABM Treaty that would allow for more robust NMD architectures.” In exchange, in what he called a “grand bargain,” the Russians would need to “agree to TMD clarifications that allow the U.S. to execute those TMD programs . . . essential to U.S. national security requirements.”

The State Department and ACDA supported this position; their position won out over the DOD’s opposition. Officials in the latter saw this as an attempt by both the Clinton Administration and Russia to make future changes to the ABM Treaty more difficult to negotiate. In hindsight, interpretation of the bargain itself is difficult. Gertz’s assessment of it seems to track fairly well with the position of many within the DOD, although few would confirm specific dramatic details of disagreement. In this most negative view, the demarcation negotiations were "a grand scheme . . . a prescription for a national security disaster.” On the other hand, it is difficult
to see what the United States lost in the process. The Clinton Administration had already determined that it would not be actively pursuing any NMD projects that would require amending or ending the ABM Treaty, so the United States was not giving anything up by agreeing to “defer” doing that. Likewise, the Russian insistence on multilateralizing the treaty seemed nonnegotiable on their part. If we wanted to demark TMD once and for all, then the Russians would need to be offered something. While Gertz is correct in pointing out that the Russians had not (yet) raised objections to the TMD systems under development, and so in principle they were given “a blank check to stymie development of American missile defenses,” the result of the negotiations described below was much less dramatic: all US TMD systems ended up being accepted as in compliance, and future, more capable systems were left in a gray area, just as before. Furthermore, the signed agreements never were submitted for the Senate’s consent. While under international law the United States should be behaving as if they were ratified, pending their rejection, the Bush Administration’s high-profile efforts to amend the ABM Treaty have been bilateral with Russia, ignoring the other three successor states.

The most serious question at the demarcation talks was how to define the Article VI(a) provisions. The US proposal was straightforward: “testing in an ABM mode” would be testing a system against targets traveling in excess of the strategic speed of 5.0 km/s. If one does not test the systems in an ABM mode, then one could assume that they would not have “capabilities to counter strategic ballistic missiles,” since no state would depend on such an untested system for its security.

The Russians disagreed with the second half of this argument, and so rejected the proposal. They argued that if one conducted robust tests of a system against nonstrategic targets, one could extrapolate a measure of effectiveness against strategic missiles. Their counterproposal was to limit the speed of the interceptor to 3.0 km/s. This definition would preserve the Army’s Theater High Altitude Area Defense (THAAD) and Patriot Advance Capability (PAC-3), so the
American negotiating team, led by Stan Riveles, was inclined to accept it.

The 3.0 km/s proposal led to intense interagency disagreement. Part of the JCS opposition was on a matter of principle: Setting a capability limit, as opposed to an effectiveness limit, would shackle their ability to develop better (faster) TMD systems. The opposition was also based on programs under development. Both the Navy Upper Tier and the Air Force’s Boost Phase Interceptor (BPI) were planned to have higher interceptor speeds, and would be prohibited under the Russians’ proposal. Both the Air Force and Navy formally opposed the plan; the Army did not join them. For the next several years, Riveles’ team worked to persuade either the Russians to drop their proposal or the Pentagon to drop its opposition.

Ultimately, the specific problem with the Navy and Air Force programs resolved itself. The BPI was cancelled because it did not seem technically feasible. After a congressionally mandated study in 1995, following the transfer of Congress to Republican control, the Navy Upper Tier was declared compliant despite its interceptor speed. Since it was designed to be integrated with the limited-range Aegis system, it would not be able to detect and successfully engage an incoming target moving at strategic speeds.

While the specific practical impact of the 3.0 km/s interceptor speed limit was now moot, the principle remained. Riveles’ team offered two major concessions to the Russians in an attempt to induce compromise from them. Each of these became the focus of further interagency debate.

First, the United States agreed to specifically prohibit all space-based components of an ABM or TMD system. This decision was announced at the April 1996 summit. The JCS in particular had wanted to retain the option, but ultimately they conceded the point as an acceptable trade for lifting the TMD interceptor limit. Some within the DOD were more concerned with style of the announcement itself—since missile defense had not been on the agenda for the summit, no military representative was present when the final decision was reached.
As it turned out, the concession was pocketed without an agreement by the Russians to drop the 3.0 km/s position.

With this as context, the JCS staff also opposed offering the “no plans” statement. In this statement, both the United States and Russia agreed that they were not planning before April 1999 to test systems with interceptor velocities in excess of 3 km/sec, to develop systems with somewhat faster velocities (4.5 km/sec for sea-based, 5.5 km/sec for others), or to test these against MIRVs. In retrospect, JCS opposition was probably ill advised, since they had no firm grounds for it. They had, in fact, no plans for such tests during that time. Furthermore, legally, such a statement is not binding. Once again, however, a principle was involved: The statement would be politically binding in this country, and so it represented a concession without compensation.

In the end, the talks proved anticlimactic. As signed in New York on 26 September 1997, the set of agreements did not represent much progress over where matters stood when President Clinton took office. Most significant was the Memorandum of Understanding on Succession (MOUS), indicating that Belarus, Ukraine, and Kazakhstan had inherited obligations along with Russia. While this did multilateralize the treaty, it also recognized reality; with the old Soviet system dispersed, the ABM Treaty limits would now apply to the same territory. Belarus could not build its own strategic missile defense system unless Russia dismantled the one around Moscow.

The New York Agreements left interceptor velocities unlimited in practice. In the First Agreed Statement (FAS), all parties agreed that a system would be considered a theater system, or more properly would not be considered a strategic system under Article VI(a) of the ABM Treaty, if “the velocity of the interceptor missile does not exceed 3 km/sec over any part of its flight trajectory; the velocity of the ballistic target-missile does not exceed 5 km/sec over any part of its flight trajectory; and the range of the ballistic target-missile does not exceed 3,500 kilometers.”51 The United States stated that the Patriot PAC-3, THAAD, and Navy Area-Wide systems all met these provisions.52

The Second Agreed Statement (SAS) addressed systems with interceptors faster than 3 km/sec. Such interceptors could
not be tested against ballistic missiles whose range or velocity exceeded the limits of the FAS. Beyond that testing limit, review of disputed TMD systems would remain with the SCC. In other words, after four years, no clear demarcation was set forth. The SCC agreed, as part of the Agreement on Confidence Building Measures, to exchange data and test notifications on the THAAD and Navy Theater-Wide (formerly Navy Upper Tier) systems, which the United States asserted were ABM-compliant, even though the latter would exceed the interceptor velocities of the FAS.53

Furthermore, the SAS stated that the signatories would not “develop, test, or deploy space-based interceptor missiles to counter ballistic missiles other than strategic ballistic missiles, or space-based components based on other physical principles.”54 All space-based interceptors were assumed to travel in excess of 3 km/sec in the fourth common understanding attached to the FAS.

The New York Agreements have not been submitted to the Senate for consent, and there is at this writing no indication that the George W. Bush Administration intends to do so. As noted in the first section of this chapter, the Duma made its ratification of START II contingent on the United States’ ratification of the New York Agreements. That, perhaps, is the only real legacy of ABM demarcation: the Russians achieved their long-standing goal of linking arms reduction to missile defense. On the other hand, the United States gave up very little on its part, other than codifying the strict interpretation of space-based systems under the ABM Treaty. Since under Article 18 of the 1969 Vienna Convention on the Law of Treaties, “a State is obliged to refrain from acts which would defeat the object and purpose of a treaty,” the United States is restricted from building space-based systems until and unless the government formally repudiates the agreements.55

**NMD Reemerges: 3+3 and Taepo Dong, 1998–2000**

The focus on TMD under Clinton was based on the belief that a direct threat against the United States was many years away.56 Politically, he could not completely neglect missile defense once the Republicans gained control of both houses of
Congress in 1994. So during the 1996 reelection campaign, he proposed what came to be called the “3+3” program. Three years of development, beginning in 1997, would be followed by three years of deployment, with a minimal ABM-compliant system operational in 2003.\textsuperscript{57}

Once reelected, the program began to slide toward the future. The 1997 DOD report said that a threat to the continental United States was 15 years away, and that even the North Korean Taepo Dong 2 missile was five years from operation (just as it had been the year prior).\textsuperscript{58} By the following year, the threat to the continental United States remained 15 years away, and Taepo Dong 2 was now seven years from operation.\textsuperscript{59} Thus a “national missile defense program” could wait until 2005 to be operational. North Korea’s 31 August 1998 launch of their three-stage missile disrupted these plans.

At their summit in June 1999, Clinton and Yeltsin agreed to reopen discussions on the ABM Treaty, along with START III. NMD remained three years away, and would not be fully operational until 2007, but the DOD recognized now that “NMD deployment would require modifications to the treaty,” and so the United States has “begun to engage the Russians and allies on the need to change the ABM Treaty to permit deployment of a limited NMD system.”\textsuperscript{60} While Clinton remained in office, these discussions did not produce results. In September 2000, Clinton declined to make a decision on NMD deployment, based on the administration’s assessment of the threat, the status of the technology status, and the impact of such a decision on arms-control efforts.\textsuperscript{61}

**Summary of Missile Defense**

While issues relating to missile defense were without a doubt the most active aspect of arms control during the first decade after the Cold War, the activity should not be confused with accomplishment. In 1989, President Bush was working to persuade Moscow that the ABM Treaty should be revised significantly to address the current threats. In 2001, President Bush was working to persuade Moscow that the ABM Treaty should be revised significantly to address the current threats. The only change was that other countries’ missile technology
was 12 years more advanced, and two more states had declared their nuclear capabilities.

Even if the demarcation agreements had been ratified, one cannot see them as significant. The four years of negotiations had left the Russians and Americans where they started on TMD: Below a certain interceptor threshold, a system clearly lacked strategic defense capabilities; anything above that threshold would be subject to review. Even the American concession on space-based interceptors only accepted the treaty interpretation held by the Russians. They would have seen space-based interceptors as a violation of the ABM Treaty in any case. The New York Agreements just clarify that either the Russians must accept them in the future, or the Americans would need to withdraw from the treaty to deploy. The successor states agreement also only recognized that former Soviet assets were dispersed. In principle Belarus, Ukraine, or Kazakhstan could block an American-Russian modification to ABM; the distribution of power among the states, however, suggests that such a gambit would fail. The most significant missile defense decision of these 12 years—and even it has not been ratified—is accepting a common definition of a strategic ballistic missile target.

**Nonproliferation**

As noted in the introduction, nonproliferation efforts were at the center of the Clinton Administration’s arms-control program. Secretary of State Warren Christopher told the North Atlantic Council on 2 December 1993 that the “most urgent [challenge for the Alliance] is curbing the spread of weapons of mass destruction and the means of delivering them. This threat constitutes the arms-control agenda of the 1990s.” In February 1994, the NSC defined *counterproliferation* as a two-step process. First, it included measures designed to prevent proliferation by removing the incentive to do so, and to stop the proliferation if it is not prevented. The second step was to deter all use of weapons of mass destruction, via threats of retaliation if necessary. This section does not look at all aspects of counterproliferation, since clearly not all of them fall into the scope of arms control. Four treaty negotiations
were involved, however, and will be covered below. These included extending the NPT, negotiating a CTBT, and developing verification or compliance procedures for the CWC and BWC. Each of these treaties intends to discourage the development of such weapons, and to detect attempts to do so. They are unusual, compared to the Cold War treaties, in that each of them is multilateral—they required the agreement of many states around the world. As we leave the clarity of the bipolar world, however, such multilateral negotiations are likely to become increasingly common. Even with strategic arms, we are approaching the point where nuclear states other than Russia and the United States will be participating.

Before discussing those four treaties, one other counterproliferation effort is worth mentioning. As the Soviet collapse became imminent, Senators Richard Lugar (R-Ind.) and Sam Nunn (D-Ga.) initiated a program to keep Soviet nuclear weapons “under secure and responsible control” and also reduce the chance that Soviet nuclear scientists and engineers would “seek employment abroad.”65 Of the 30,000 former Soviet weapons, the Nunn-Lugar CTR program was most concerned about the 3,200 outside Russia.66 While the program began in fall 1991, funds were not used until 1993. The Clinton Administration supported it from the beginning—on 22 March 1993, Christopher referred to the $800 million program as “a direct investment in our own security.”67 On October 23 of that year, Christopher told a Moscow audience, “It is in our shared interest to prevent the proliferation of nuclear weapons within the former Soviet Union. Proliferation would increase both the risks and the costs of conflict among the new independent states.”68 Among other things, Nunn-Lugar directly employed former Soviet nuclear scientists, funded disarmament and storage facilities, and bought fissile materials from the former Soviet states.69

**Nuclear Nonproliferation Treaty Extension**

The most straightforward counterproliferation negotiation during this era was the extension of the NPT, mandated for 1995 in the original treaty. Like all other agencies, the DOD was “strongly behind the U.S. position to support indefinite
and unconditional extension of the Treaty.” With the NPT extension, all the action was on the international side of the negotiations. Three alternatives to “indefinite and unconditional extension” were on the table. One was a second 25-year extension, which some feared would end the treaty with its expiration. A second was for there to be multiple extension periods, punctuated by reviews. The third option was that the nuclear states would need to finally take action toward disarmament or the treaty would be void.71

On 11 May 1995, the review conference did, without a formal vote, agree by consensus on the extension. This extension did not require separate Senate consent, since Article X of the original NPT provided for this conference and extension. As a price for agreement, the nonnuclear weapons states called for Israel to be required to join; the United States countered by asking that all Middle Eastern states declare themselves nuclear-free. The NPT extension also called for implementation of a comprehensive test ban. While this provision was nonbinding, it set the stage for somewhat more conflictual interagency diplomacy.72

Comprehensive Test Ban Treaty

Of the nonproliferation efforts, the negotiation of a CTBT prompted the greatest interagency debate. During the bipolar era, the DOD position, supported by the NSC, was simply that testing was needed to maintain a deterrent force. While interested in ratifying both the 1974 Threshold Test Ban Treaty (TTBT) and the 1976 Peaceful Nuclear Explosions Treaty (PNET), the DOD “strenuously opposed congressional efforts to limit further our nuclear weapons testing.” In principle, a comprehensive test ban might be a good idea, “such a ban, however, can be realized only when we do not need to depend on nuclear deterrence to ensure international security and stability.” Negotiation on verification protocols for both the TTBT and PNET were signed at the Washington Summit in June 1990. With September Senate consent, they entered into force on 22 December 1990. With this complete, “The United States has not identified any further restrictions on nuclear testing beyond the TTBT that would be consistent with our
national security requirements to maintain a safe and credible nuclear deterrent.\textsuperscript{75}

The changing strategic environment, however, undermined this long-standing position. In September 1992, Senators Mark O. Hatfield, James Exon, and George J. Mitchell led Congress to impose a testing moratorium through the following July. After that, 15 total tests would be allowed through September 1996, followed by a complete ban “unless another state tests after that date.” The DOD, still under the leadership of Dick Cheney, objected that testing was still needed to “maintain and improve the safety and reliability of our forces.”\textsuperscript{76} President Bush signed this moratorium, however. The Department of Energy disagreed with the extent of needed testing. More significantly, with the sudden end of the Cold War, there were no new weapons in development. With defense policy moving away from reliance on nuclear deterrence, and with nonproliferation receiving more emphasis, a comprehensive test ban seemed more realistic.

President Clinton’s inauguration, and the appointment of Les Aspin to the Pentagon, cemented the shift in viewpoint. Aspin’s department advocated a CTBT to “strengthen the global norm against the proliferation of nuclear weapons and constrain development of nuclear weapons capability in proliferant states and the nuclear weapons states.”\textsuperscript{77} With the administration officially united in favor of a comprehensive ban, the only remaining problem heading into the Conference on Disarmament was defining comprehensive.

The TTBT and PNET had allowed individual tests with a yield under 150 kilotons. Initially, the American position for CTBT was to allow tests with yields under four pounds (1.8 kg). Such “hydronuclear experiments,” in which fissile material was added slowly to the reaction, were a legacy of the Eisenhower Administration’s testing. In practice, such tests would be well under a four-pound yield, but that was the safety limit that would only be violated in one of a million experiments. The other declared nuclear weapons states wanted even higher limits, as high as 300 tons in the French case.\textsuperscript{78}

In the wake of French nuclear tests in 1995, the Interagency Group briefly considered proposing a 500-ton yield. Both JCS
and the State Department argued for this. The advantage would be that very few tests would be required, compared to ones with an even lower threshold. The disadvantage, of the four-pound limit as well, was trying to convince the world that a comprehensive ban had been achieved. OSD, now under William Perry, preferred a true zero-yield option. On 11 August 1995, Clinton adopted that preference, which was shared by ACDA and the NSC, deciding that the United States position would be for zero-yield. This was politically acceptable domestically and internationally—France and the United Kingdom were unwilling to resist the proposal, and China had been calling for it (perhaps insincerely) for some time. Russia finally agreed in May 1996.79

Beyond the politics, which is always a valid negotiating concern, an arms-control rationale could be built for the true zero-yield option. In practice, this meant that no self-sustaining reactions would be permitted. With no positive yield permitted, this would effectively eliminate the breakout potential of a nuclear program. This would counter proliferation more effectively than the higher-yield option. The four-pound experiments would be virtually impossible to detect in isolation, but one could hope to be able to detect the long series of tests needed to gain useful weapons knowledge from such tests.

While all had agreed in May to the zero-yield, bargaining over the inspection regime delayed signing until 24 September 1996—one week before the United States moratorium was set to expire. The Western powers wanted inspections to be allowed based on any relevant intelligence information. Such inspections could be blocked by a “red light” from the CTBT Executive Council. China, on the other hand, wanted inspections only with a supermajority “green light” from the Executive Council. In a compromise, the Chinese accepted the use of national technical measures along with the international monitoring system, and the United States accepted the Chinese “green light” proposal.80

The CTBT would go into force only with the signatures of 44 specific states. Forty-one have signed; India, Pakistan, and North Korea are the holdouts.81 While the United States signed, the Senate rejected the treaty on 13 October 1999.
President Clinton responded by stating that the United States would comply anyway, and a moratorium on testing remained in place for the remainder of his term. Like the New York Agreements, the status of the CTBT for the United States remains indeterminate. While the Senate rejected the treaty, President Clinton’s subsequent reaffirmation may again require the United States to follow the Vienna Convention on the Law of Treaties and not violate the terms of the treaty pending another attempt to persuade the Senate to consent to its ratification.

Chemical and Biological Weapons

On paper, at least, the executive branch has remained united in favor of prohibiting both chemical and biological weapons, in an effort to reduce the risk of proliferation. The DOD was dismantling its systems by 1990, so it was easy to assert that it was “committed to negotiating a comprehensive, effectively verifiable, and truly global ban on chemical weapons at the 40-nation Conference on Disarmament (CD) in Geneva.” The bilateral agreement at the June 1990 Washington summit to reduce stockpiles to 5,000 agent tons by 2002 would be a good example for a comprehensive effort. So when President Bush on 13 May 1991, in the immediate aftermath of the Gulf War, proposed a global CWC to be completed within 12 months, there was little interagency objection. In his proposal, Bush waived even the right to retaliate in kind to a chemical attack. While he missed his 12-month goal, the CWC was completed on 3 September 1992; the United States was an original signatory on 13 January 1993.

CWC was unusual in that it was both multilateral and would require concrete action by the signatories. The multilateral NPT had not required the United States or other nuclear “haves” to do anything with their existing arsenals, other than discuss arms reduction. CWC avoided this dichotomy. While the states without chemical weapons would be obliged to refrain from developing them, those with such weapons would need to dismantle them. Twelve “Schedule A” chemicals, considered “weapons” such as sarins, ricins, and mustards, would be destroyed within 10 years. Three other
lists of chemicals, dangerous but with some legitimate commercial value, would also be subject to controls.87

A complex inspection regime was designed to ensure that the CWC was followed. Challenge inspections could be conducted at any time, but following certain rules at the insistence of DOD. While a challenge team could be in-country within 12 hours, and at the plant in 48 hours after the challenge was issued, inspections inside the plant would not begin until 108 hours (4½ days) after the challenge.88 The inspections would be managed, allowing some control over access to sensitive but nonprohibited activity.

With the agencies solidly behind the CWC, once the use of riot control agents by downed pilots was agreed upon, its ratification seemed assured.89 This was not, however, a priority for the Clinton Administration, and so it was not until 1995—with 47 of the required 65 ratifications made—that the treaty was submitted to the Senate.90 By this time, control of Congress had passed to the opposition Republicans, who were in no hurry to consent to the treaty (even though it was negotiated and signed under Bush). Sen. Bob Dole (R-Kans.) officially came out against the CWC in his 1996 presidential campaign; the vote was delayed until the following Congress.91 In the meantime, Hungary became the 65th ratifier on 29 October 1996—so the CWC, and its commercial penalties against non-ratifiers, would go into force with or without the United States at the end of April 1997.

Ultimately, the Senate consented to the treaty four days prior to its entry into force.92 Part of the delay was partisan—Sen. Jesse Helms of North Carolina, for example, wanted the US Information Agency and ACDA merged into the State Department. Among the greatest concerns against the treaty, which will hold true in future comprehensive arms-control agreements, was its impact on the economy and on the rights of private industry. In this case, the Chemical Manufacturers Association (CMA) supported the ratification. The CMA represented the largest companies and represented about 95 percent of the relevant capacity. It regarded the odds of inspection at any plant as low enough to be acceptable; the many smaller chemical firms disagreed.93 Despite the cost and
inconvenience of inspection, however, the technical risk from it was low. There was relatively little that a foreign inspection team could steal from a chemical plant, since most chemicals are not patented, and the manufacturing process itself would be shielded.

These considerations did not apply to implementing the 1975 BWC. Within the Interagency Group, only the NSC, representing the president’s position, preferred moving ahead on verification. The others were united on the common position that the BWC could not be verifiable. There are just too many small facilities capable of creating toxins, many of which also would have dual uses. At best, the United States could work toward a compliance mechanism. The Commerce Department also weighed in on the debate, reflecting concerns of the pharmaceutical industry. Unlike the chemical industry, this sector was united against BWC inspections. Even familiarization visits could afford the opportunity to steal patented compounds. The majority opinion in this case carried the government position. The United States, unlike the rest of the world, rejected all proposed BWC texts, through the end of the Clinton Administration.94

**Summary of Nonproliferation**

The post–Cold War record with nonproliferation, as with missile defense, is mixed. On paper, a great deal was accomplished. None dissented on the extension of the NPT. None in the executive opposed the CWC. By the time it was signed, all agreed on the zero-yield solution to the CTBT. Even the “failure” to achieve a compliance protocol on the BWC met the Clinton Administration’s position in opposition to all such proposals. The results also appear good. Weapons of mass destruction were not used by states. As far as is publicly known, at least, the dangers of uncontrolled Soviet nuclear weapons also have been averted.

On the other hand, during this time both India and Pakistan announced their nuclear capabilities. Suspicions remain about nuclear programs in both North Korea and Iran. With the expulsion of UN Special Commission (UNSCOM) inspectors,
Iraq also must be viewed as a possible proliferator. And within the United States, the Senate rejected the CTBT.

**Implications for US Policy and Strategy**

The record of these 12 years suggests that arms control met most of its goals. Reductions in strategic arms, renewed regimes against proliferation of weapons of mass destruction, and legitimization of theater missile defenses all contribute to reducing the damage of war if it occurs. By eliminating whole classes of weapons, economic savings were also achieved. In so far as these agreements hold, the chances of war are also reduced somewhat—an adversary equipped with WMD would be more likely to initiate conflict than one that is not.

Even so, it is clear that more could have been achieved. Few agreements were ratified and placed in effect; no agreement was both negotiated and ratified during the Clinton Administration. Repeatedly, the persons involved in these agreements cited a lack of presidential leadership as a major problem.\(^95\) One example of this is the lack of ratifications—Clinton did not move as quickly as Bush did to secure the gains of the early Yeltsin years. By 1995, both he and Yeltsin faced uncooperative and suspicious legislatures. Many of those interviewed noted an additional, more corrosive effect of this lack of leadership. While the NSC typically represents the president’s interests, many came to view the NSC as reflecting the personal preferences of its staff. Whether this sentiment was valid or not, it became difficult for the NSC to play its official role as a broker among the other agencies.

As we move into the George W. Bush Administration, the future of arms control seems likely to be different. He has begun to implement the notion of strategic sufficiency, in which the United States maintains only the number of nuclear weapons it deems necessary. On 13 November 2001, he made a unilateral commitment to reduce nuclear weapons to a total of 1,700–2,200 deployed warheads, “a level,” he said, “fully consistent with American security.”\(^96\) This announcement was followed later that day by a commitment by Russian President Vladimir Putin to cut Russian weapons by two-thirds.\(^97\) Putin indicated a strong preference for a signed agreement, which
Bush resisted. On this issue, Bush overruled the position of Admiral Richard Mies, then CINCSTRAT, who was concerned about the future of the nuclear triad. Secretary of Defense Donald Rumsfeld has worked with the Senate to lift the restrictions imposed on reducing the arsenal below the ratified START I limits; while at this writing the House had only agreed to finally allow the elimination of the 50 MX missiles, it is probable that unilateral reductions will be permitted for this president.

If the November 2001 meetings in Washington and Crawford, Texas, were designed to get Russian approval of missile defense, they were less successful. While Putin hinted that some additional compromises on testing could be worked out, he reaffirmed the need to keep the ABM Treaty. As of this writing, the Bush Administration has pressed forward on testing with no announcement regarding withdrawal from the treaty. For both strategic offenses and defenses, and the remaining multilateral agreements, it will remain important for the OSD and JCS to ensure that their positions are considered within the government whether arms control remains informal or becomes more structured once again.

Notes

1. In Warren Christopher’s book on his time as secretary of state, if you look up “arms control” in the index you find “see nonproliferation.” Warren Christopher, In the Stream of History: Shaping Foreign Policy for a New Era (Stanford, Calif.: Stanford University Press, 1998), 573.


5. Sidney Graybeal and Patricia McFate, “Presidents and Arms Control,” in Presidents and Arms Control, ed. Thompson, 72.


11. In this section, interviews included, but were not limited to, Mark Schneider, Kerry Kartchner, Forrest Waller, Susan Koch, Lucas Fisher, Linton Brooks, David Hodson, Stan Riveles, and Rich Davidson.


18. Ibid., 164.

19. Ibid., 209.


25. Ibid., 61.


30. In this section, interviews included, but were not limited to, Stan Riveles, Dr. Susan Koch, Linton Brooks, Lucas Fisher, Mitch Nikolich, Dennis Ward, Col Glenn Trimmer, Dr. Mark Schneider, Lt Col Alan Van Tassel, Lt Col Frank Wolf, and David Hodson.


32. Kartchner, 246–47.


34. Graybeal and McFate, 127.


40. DOD Report, 1993, 73.

43. Graybeal and McFate, 129.
45. Graybeal and McFate, 130.
49. Ibid.
50. While the other Soviet successor states participated in the negotiations, there is no evidence that they contributed to the negotiations in an independent manner.
52. ACDA Factsheet on the First Agreed Statement of September 26, 1997.
55. The point of law is in fact even more convoluted: While the United States signed this convention, the Senate did not consent to Article 18.
57. Ibid., 223.
60. DOD Annual Report, 2000, 70–74.
62. In this section, interviews included, but were not limited to, Rick D’Angelo, Amy Sands, Nicholas Carrera, and Ed Nawrocke.
63. Christopher, 137.
64. Virginia I. Foran, “Preventing the Spread of Arms: Nuclear Weapons,” in Arms Control, 191.
67. Christopher, 49.
68. Ibid., 99.
69. Duffy, 77–78.
70. DOD Annual Report, 1994, 47.
71. Foran, 192–93.
72. Foran, 194–95.
75. DOD Annual Report, 1992, 12.
76. Ibid., 15–16.
79. Johnson, 89.
80. Ibid., 100–101.
81. Ibid., 105.
82. DOD Annual Report, 2001, 93.
87. Marie Isabelle Chevrier and Amy E. Smithson, “Preventing the Spread of Arms: Chemical and Biological Weapons,” in Arms Control, 203–4.
88. Chevrier and Smithson, 205.
91. Amy Sands, “The Impact of Governmental Context on Negotiation and Implementation: Constraints and Opportunities for Change,” in Arms Control, 125.
92. Bureau of Arms Control Factsheet.
95. Sands is one who has put this view into print.
Chapter 8


Thomas D. Miller

If the period from 1989 to 2000 began when the Cold War was still “hot,” it also encompassed the end of the Cold War and began what is still referred to as the Post-Cold War period. It marks a time when the United States began the transition from a well-defined and fairly constant security landscape of impressive duration. Where the transition is to remains the subject of continuing debate and speculation. It has however, transformed the arms-control community. While the fall of the Soviet Union and the dissolution of the Warsaw Pact are not solely responsible for the transformation, it was the seminal event and provides the context in which to reflect upon the arms-control trends of this period.

An examination of this period is, at best, a work-in-progress as the lens of time has not yet moved far enough from the events to permit a clear picture of the importance and interplay of the various forces at work. Indeed, within the Washington arms-control community, sides are still being taken over the questions of what happened, why, and with what result. This condition is exacerbated by the fact that much of the detailed arms-control documentation of this period remains classified, thus forcing undue reliance on individual remembrances of events that grow less clear with the passage of time. Events of the period are thus more susceptible to the innocent and unavoidable memory lapses of individuals concerning what negotiating positions were taken, and why, because they can no longer separate those memories from later events. The current agendas of involved organizations may also affect the way significant events of the last decade are now described. The
classified nature of the documentation thus limits the examination of specific treaty issues of interest to the Air Force to a more general treatment than would be preferred.

In the Beginning

Sometime between 1989 and 1992, the US arms-control infrastructure reached its high-water mark. Leadership was experienced; organizations were clearly defined, staffed with talented personnel, and well funded. This was certainly true within the US Air Force. On the Air Staff, the responsibility for all facets of arms control—from negotiation support to treaty implementation and compliance activities—was centralized in the International Negotiations Division (AF/XOXI) (today the National Security Policy Division, AF/XONP). This was perhaps the only Air Staff organization that defined Air Force policy, made plans, determined and budgeted for the resources necessary, and directed Air Force-wide execution of those plans. At its peak, over two dozen officers were assigned to AF/XOXI.

Due to the direct impact of nuclear arms-control efforts on its war-fighting capabilities, an arms control, or more properly, a treaties division, existed in the Plans and Policy directorate of the Strategic Air Command (SAC/XPXT). This division directed the execution of Air Force treaty implementation and compliance activities at SAC bases. It also functioned as SAC’s conduit into both the Air and Joint Staffs. That SAC had a direct relationship with both organizations resulted from its dual status as both the only remaining specified command, with a commander in chief (CINC) and his attendant combatant command responsibilities, and as an Air Force major command with its service responsibilities to train, organize, and equip combat forces for employment. In this regard, SAC was unique in the Department of Defense (DOD). It had the responsibility to acquire and train, in peacetime, the force it would employ in war. A specified command is comprised of only a single service, in this case the Air Force, and as such, the Air Staff clearly had a special relationship with the predominate nuclear war fighter of the day. This relationship extended to their respective arms-control organizations.
SAC not only heavily influenced Air Force positions on arms-control issues; it was the source of many experienced arms-control staff officers later assigned to XOXI. An excellent example of this, and of the experienced leadership enjoyed by the Air Force arms-control community early in this period, was Richard B. Wallace. Wallace, a B-52 radar navigator, was assigned as a major to SAC/XPXT before being transferred to AF/XOXI. After his first tour in XOXI, he served in a variety of arms-control positions, including special assistant to the chairman of the Joint Chiefs of Staff (JCS). Bringing with him a wealth of knowledge on the treaties and related issues, experience with the negotiating process, and close personal contacts with many in the arms-control community, Colonel Wallace returned to XOXI early in this period to lead the division.

The US internal negotiation support process was well structured and understood by those government agencies involved, as were the various perspectives and equities of the participants. The history of Cold War arms control, at that time, was one of extended bilateral negotiations. These negotiations were focused on nuclear force structure and supported by extremely detailed analyses of the relative costs and benefits accrued to each side in each possible interpretation of each element of every proposal. The perspective of the Air Force was that arms control was the use of diplomacy and international law to increase national security and promote international stability. This included actions which

- decreased the danger of military and technical surprise;
- improved military transparency and built confidence;
- controlled the spread of nuclear, chemical, biological, and other sophisticated weapon technology; and,
- reduced the risk to defensive forces and noncombatants from hostile acts.

Clearly, from a military perspective, the value of an arms-control proposal was determined by its effect on national security. At that time, the Soviet Union presented a clear and present danger to national survival. National security was the overriding concern and was the responsibility of the chiefs of the four military services. Given the influence of the service chiefs at the start of this period, there was little chance that
any arms-control proposal which placed limitations on the development, fielding, or use of military equipment, or forces, yet offered no reasonable expectation of increased national security, would be accepted. Treaty progress often appeared glacial, but there was an underlying confidence that the agreements were being well defined, the security ramifications and force structure implications were well understood, and talking with the Russians was better than fighting with them. There was also a sense that arms control was on the verge of major breakthroughs.

The potential for breakthroughs had two major elements. First, it became apparent that exciting possibilities existed for further deep bilateral reductions in nuclear forces. As the scope of the economic collapse of the Soviet Union became evident, this sense of an upcoming breakthrough found focus as a desire to codify the US Cold War victory. This could be accomplished by capturing, in legally binding documents, the force structure reductions that would be forced, at least in the near term, on the Soviet Union, and later Russia, by economic limitations. The other potential breakthrough was based upon a growing awareness that the proliferation of nuclear, biological, and chemical weapons and technology (outside the context of East-West competition) was a serious problem that would likely become worse as the Soviet Union’s economic and political decline accelerated. There was widespread interest in the utility of arms-control vehicles to effectively address these broad new challenges.

As shown in figure 2, the sense that there were new and exciting possibilities for arms control proved to be accurate. When the US Air Force came into existence, there was one agreement for the Air Force to comply with—the Geneva Protocol banning the use of chemical and biological weapons. Even when the Anti-Ballistic Missile (ABM) Treaty was signed in 1972, there were few agreements, and fewer still relevant to the Air Force. Starting in the 1987 time frame, however, the number of arms-control agreements increased rapidly, and by the end of 2000, the United States had signed over 40 arms-control treaties and agreements with implications for the Air Force. This rapid expansion was only an indicator of more fundamental changes.
What Changed

An essentially bipolar world emerged shortly after the end of World War II and provided a useful military, political, and economic construct for over four decades. The breakup of the bipolar structure, marked by the fall of the Soviet Union, transfigured much of the world and fostered a significant increase in the number of actors and regional conflicts. These “new” actors and conflicts, which appeared to fuel the proliferation fire, were often viewed by the United States as new and different because they took place outside the familiar context of US-USSR competition. Many, however, were actors and conflicts that had lain more or less dormant for years due to the overriding influence of the superpower conflict and the tight control exercised by the Soviet Union within its post-WWII sphere of influence.

If arms control were to address these broad new challenges and objectives, new arms-control tools would clearly be required. Obviously, bilateral treaties between the United States and Soviet Union, or later Russia, would not be effective. New multilateral agreements were required and a variety of new confidence and security building measures, such as observations and force structure data reporting requirements, were also introduced. The movement from bilateral treaties to multilateral treaties included the ABM Treaty between the United States and the Soviet Union, which was formally
“multilateralized” by determining the Soviet Union successor states. With the end of the Cold War, the trend of US involvement in arms control was a gradual and informal movement from a clear emphasis on improving security to the more nebulous objectives of fostering global norms of behavior and supporting broad US political and economic agendas. This is to say, some reduction in US combat capability became acceptable even if the United States gained no additional security. This change in direction produced arms-control efforts increasingly disconnected from the national security strategy. The results of the US arms-control process also became less predictable as the center of influence shifted away from the services.

Service positions were no longer decisive on arms-control issues due to a combination of factors. First, the fall of the Soviet Union removed the clear and present danger, the accepted metric, against which the effects on national security of any arms-control proposal could be assessed. This proved to be a serious deficiency when the broadened objectives of arms control led naturally to the increased involvement of nongovernmental organizations with humanitarian and abolitionist, rather than national security, interests. This eventually led to proposals to ban or greatly restrict the use of so-called blinding lasers (which could have eliminated most US laser range finders), the Ottawa Convention on Anti-personnel Land Mines, and most recently, small-arms controls. Political and economic concerns began to dominate what had been political-military discussions.

Instead of meaningful participation in the process of formulating the US position from the onset, the services were increasingly brought into the discussion late in the internal US debate, and in essence asked, “Is there any reason the United States cannot ... ?” There was less interest in the effect on national security of a particular agreement because “as the last remaining super power, we can afford to give up our....” What concern there was focused more on whether US compliance with a proposal was physically possible and, on occasion, the cost of compliance. Arms control became well and truly disconnected from national security strategy to the extent that the Air Staff
developed a briefing, shared with the other services and Joint Staff at the three-star level, illustrating that national security was facing a “death by a thousand cuts” from the accumulated effects of numerous arms-control concessions. Even in nuclear reductions, the question of “how low can you go” seemed driven by economics and ideology, not security concerns. By historical standards, major arms-control negotiations were completed unbelievably rapidly, and without the benefit of analysis concerning the national security implications.

Under the Clinton Administration, the Air Force perspective on arms control outlined earlier was increasingly out of step. From a service perspective, it appeared arms control had been transformed from a sometimes painful tool useful in increasing national security to an end unto itself. At the same time, the reduced force structure and less stable, more unpredictable world increased the desire of the Air Force to maintain current operational flexibility and keep future options open. This flexibility was viewed as essential in an era when it was seemingly impossible to predict where US troops would next be deployed, and why, or what new defense challenges the United States would turn to advanced technology to address. Accordingly, during this period, Air Force arms-control priorities shifted from protecting force structure to avoiding operational constraints and opposing proposals that would clearly limit or prohibit the military uses of future technology. It became increasingly difficult for the Air Staff to support arms-control initiatives of the Clinton Administration that seemed to further what the Air Staff was trying to avoid.

The military was not unique. Congress was openly antagonistic and as a result, congressional consultations were avoided, and the president signed treaties that had virtually no chance of ratification. The START II Modification and the Treaty on Conventional Armed Forces in Europe (CFE) Adaptation are good examples. The Chemical Weapons Convention (CWC) was ratified by the United States (barely), largely to ensure a US role in the governing body, but was widely viewed as being unverifiable and unenforceable, yet permitting the most intrusive inspections to date. The Biological Weapons Convention showed all indications of being worse yet—more intrusive than
the CWC, yet even less verifiable. Further, the United States rejected the inspection protocol, largely due not to security concerns of the military, but rather the intense lobbying of the pharmaceutical industry whose industrial secrets were potentially at risk. During this period of decreasing military influence in the arms-control process, the Air Force was also simultaneously coming to grips with the effects of two other factors: the gradually increasing responsibility and authority of the Joint Staff and CINCs due to the Goldwater-Nichols Defense Reorganization Act of 1986 and the disestablishment of SAC in 1992.

Authority and responsibility in the military is seen as a “zero-sum” equation. If one organization is assigned more, another has less. The increased authority and responsibility of the Joint Staff and CINCs mandated by Goldwater-Nichols came at the expense of the military services. The shift did not occur at once, certainly not in the arms-control arena. It took place gradually as the CINCs and Joint Staff came to understand the expanded limits of their new authority and the services gave ground grudgingly. Bureaucratic momentum is slow to change, but over time the ascendancy of the CINC took place. This did not, however, leave the services without authority in arms control. Treaty implementation and compliance remained largely a service responsibility, but establishing war fighting requirements, and thus the assessment of an arms-control proposal’s effect on national security, became predominantly the role of the CINC. The other contributing factor the Air Force was coming to grips with involved SAC.

The transmutation of the specified command, SAC, into a unified command, US Strategic Command (USSTRATCOM) caused a fundamental transformation of the Air Force. In this case, some effects were felt almost immediately, but here also, others were recognized more slowly. The immediate effects involved the transfer of the service responsibilities of an Air Force major command to train, organize, and equip forces. The retirement of the SAC shield made possible a large reorganization of the Air Force. As SAC stood down, so did the Tactical Air Command and the Military Airlift Command. Replacing these three commands were two: Air Combat Command (ACC)
and Air Mobility Command (AMC). The responsibility to plan, program for, and train SAC’s tanker aircraft went to AMC. Initially, the bomber and intercontinental ballistic missile (ICBM) responsibilities both went to ACC; however, after about a year, the ICBMs moved to Air Force Space Command.

USSTRATCOM, ACC, and AMC all established provisional headquarters elements before the actual stand-up date to smooth the transition to the new command structure. Regardless, it was still a traumatic event, particularly at ACC and AMC where the transfer of responsibilities was significant and occurred, in a very real sense, overnight. The change was also felt at the Air Staff, albeit more gradually. The change was more gradual for two reasons. First, no SAC responsibilities were formally transferred to the Air Staff and second, the circumstances and personnel surrounding the stand-up of USSTRATCOM provided a certain amount of continuity.

Almost two-thirds of the personnel billets in USSTRATCOM were planned to be Air Force, with one-third being Navy with a smattering of Army and Marine Corps billets. At the time USSTRATCOM stood, however, well over three-fourths of the staff was comprised of Air Force personnel as former SAC personnel were retained in the new command for varying periods of time. This was done to either spread out arrival dates of new personnel in an effort to avoid the turbulence which would occur three years later if the majority of the staff completed its joint tour and transferred at the same time, or to allow SAC personnel, who chose not to accept another assignment, the opportunity to complete their careers and retire. Additionally, some billets were identified as critical to the USSTRATCOM transition and the SAC incumbent was retained to provide continuity. This initial imbalance was acceptable to the US Navy as it provided time for their personnel system to “grow” into satisfying the new USSTRATCOM staff requirement for over 200 Navy personnel.

In the nuclear arms-control arena, the continuity provided by three Air Force officers slowed the inevitable growing apart of the Air Staff and USSTRATCOM for several years. The last CINCSAC, Gen “Lee” Butler, became the first CINCSTRAT; the last SAC/XP, deputy chief of staff for Plans and Resources,
Maj Gen Robert Linhard, became the first USSTRATCOM J-5, director of Plans and Policy; and Col Robert “Dusty” Rhoades, the last SAC/XPX, director of Force Plans and Policy, became the first USSTRATCOM J-51, chief of the Strategy and Policy Division. All were experienced “arms controllers,” and were familiar with the current nuclear arms-control issues from Air Force and SAC perspectives. Colonel Rhoades had led SAC/XPXT earlier in his career; and, as a colonel, General Linhard had served in the National Security Council during the Reagan Administration when the groundwork for the treaty successes of the Bush Administration was put into place. General Butler had supported the Strategic Arms Limitation Talks while assigned to the Air Staff in 1974 and had served as the Joint Staff J-5 prior to assuming command of SAC in 1991. In effect, a talented and experienced SAC arms-control “chain of command” transitioned unbroken to USSTRATCOM. As a result, although common interests facilitated a more robust relationship with the Navy, the close relationship between SAC and the Air Staff was retained for their tenure. Naval officers would later move into all three of these positions on at least a rotational basis, and this encouraged the natural development also of a stronger relationship with the Navy. However, USSTRATCOM appropriately developed its closest relationship with the Joint Staff.

As time passed, another effect of SAC’s demise was recognized. The Air Force had lost its organizational focal point for nuclear matters. On the Air Staff, the historical dependency on SAC for nuclear expertise gradually became apparent as the interests and agendas of the Air Staff and USSTRATCOM diverged over time. It also became apparent that, in this regard, neither ACC nor Air Force Space Command had filled the void left by SAC. In response, and as part of a larger reorganization of the Air Staff in 1996, Gen Ronald Fogleman, the Air Force chief of staff, directed the creation of AF/XON, the Nuclear and Counterproliferation Directorate. As part of this reorganization, XOXI formally assumed additional responsibilities involving counterproliferation and became XONP, the National Security Policy Division. Despite the additional responsibilities, however, the division’s manpower was being
steadily reduced as a result of a series of large, congressionally mandated, service headquarters staff reductions. Although it had greater responsibilities, XONP manning had been reduced over 60 percent and, by the end of 1999, less than 10 officers were assigned.

What Worked

The central Air Force arms-control organization, XOXI, entered this period with experienced leadership, an office well manned with experienced people, and great institutional power in the arms-control process. By the end of the period, XONP had none of these things, yet had undeniably remained remarkably effective in influencing events throughout the period. This happened for a variety of reasons, among them the personal contributions of Major General Linhard.

After completing his tour as the USSTRATCOM J-5 in 1994, General Linhard was assigned to the Air Staff as the director of Plans, AF/XOX, where, as part of a broad and diverse set of responsibilities, he supervised and directed the activities of XOXI. Exceptionally well-respected in the US arms-control community, he had remained current in nuclear arms-control matters as the J-5. He brought to the Air Staff a belief that good ideas combined with a thorough understanding of the issues and process could be decisive. Accordingly, he emphasized thoroughly understanding the staff processes involved in an issue, the key actors and their equities, and seeking to strategically effect results through intellectual excellence. This philosophy required the Air Force to be proactive in the arms-control process. As the Air Force’s institutional power had been greatly reduced, the Air Force now had to demonstrate it offered great value to the process. Key to the strategy was compensating for the continuity and source of experienced arms-control officers that disappeared with SAC and the reduction in service headquarters staff personnel. Air Staff efforts to address this shortfall focused on hiring highly qualified contractor personnel to augment the Air Staff arms-control office. Examples include Commander Kenneth J. Chapman, USN, retired, who was the acknowledged Joint Staff and DOD expert on the CFE Treaty when he retired and Dr. Mitch
Nikolich, whose academic background and involvement in missile defense programs during the Reagan years enabled the Air Force to achieve a strong technical understanding of futuristic missile defense and the associated treaty implications and issues. It would be difficult to overestimate the impact of these talented individuals and others like them, in advancing Air Force positions in the arms-control arena through the years that followed.

Another way that XOXI, and later XONP, added value to the arms-control community on a routine basis was by identifying emerging arms-control issues, thoughtfully constructing a framework which identified the implications, pros and cons, and then vetted the work with the broader arms-control community—in effect helping the community determine how to think about an idea conceptually before it became an issue. Key factors in the success of this approach were the collegial manner in which the vetting was accomplished, the senior level of the personnel, the personal nature of the relationships involved, and the trust this approach fostered.

Many of the major XOXI/XONP efforts were vetted as part of a conference series held at Airlie House, a conference center in Warrenton, Virginia. These conferences were typically one and one-half to two days in length. While the format of the programs varied slightly, it generally involved a half-day of the Air Force presenting a body of work it had finished, usually a framework which organized the important factors and implications of a given issue or question. This was followed by a half-day or more of small group activities designed to validate the work by using it, often building upon it in some way to become familiar with the rationale supporting the construct or to explore the implications of different US courses of action. During the last half-day, the small groups briefed their activities to the entire conference and the results were discussed.

A series of 10 Airlie House conferences were held between 1995 and 2000. They were

- Airlie I (Arms Control Political—Military Game); the international political ramifications of early implementation of START II;
• Airlie II (Alternative Futures for Strategic Arms Control); three START II implementation scenarios—accelerated, on-time, and delayed;
• Airlie III (Strategic Offense/Defense Issues); strategic offense/defense issues in the current security environment;
• Airlie IV (Asian Regional Security Issues); understanding arms control and proliferation issues in Asia;
• Airlie V (The Future of US Nuclear Strategy); factors effecting US nuclear strategy and implications for the Air Force;
• Airlie VI (US Nuclear Strategy—Back to the Future); role of nuclear weapons in national security and potential objectives of arms control;
• Airlie VII (Counterproliferation); linkage between policy objectives and operational capabilities shaping efforts to organize, train, and equip forces;
• Airlie VIII (Implementing Counterproliferation); inform senior officials on DOD and Air Force counterproliferation initiatives and build consensus;
• Airlie IX (The Future of Air Force Nuclear Strategy); the future nuclear force structure requirements, issues, and challenges facing the Air Force; and
• Airlie X (The Air Force Agenda for Arms Control); the extent current and future treaties could restrict technologies and ways to resolve restrictions.

Clearly the quality of the Air Force work was important to the success of these conferences, but no less important were the participants. Largely due to General Linhard’s efforts, the list of conferees was literally a “Who’s Who” of the DOD arms-control world. Mr. Bob Bell, from the National Security Council, was a frequent attendee, as were Ambassadors Linton Brooks, Henry Cooper, Reed Hamner, Bob Joseph, and Ron Lehman. At least one general officer and often several always represented the Air Force. On occasion, either the vice chief of staff of the Air Force or the Air Force director of Air and Space Operations were present. Depending on the subject being addressed, conferees also represented the Joint Staff, other services, CINCs, Supreme Headquarters Allied Powers Europe (SHAPE), NATO, several offices in OSD, the Department of Energy, and the Defense Nuclear Agency—later
becoming the Defense Special Weapons Agency, and most recently, the Defense Threat Reduction Agency. Also included were the Arms Control and Disarmament Agency, the National Laboratories, national intelligence organizations, and senior policy analysts and futurists.

The effects of the Airlie House series were threefold. First, the series established Air Force credibility and involvement on a subject. Second, it provided a forum for the Air Force to informally and subtly register its position, or at least the intellectual underpinnings of a future position, on an issue, determine the leanings and rationale of other agencies likely to be involved, and hopefully sway a few towards the Air Force line of reasoning. Last, it provided an opportunity for the Air Staff to develop the personal relationships that enabled the sharing of sensitive information.

This same philosophy extended to implementation and compliance activities. During this period, the Air Force routinely supported the Joint Staff as part of the US delegation during negotiating sessions in Geneva, which could last six weeks. Given the manpower cuts, this became increasingly burdensome for the Air Staff, but in truth, due to their own manpower reductions, the Joint Staff nuclear arms-control organization required support from the Air Force to be completely effective, particularly as the objectives of the military and Clinton Administration diverged. In this environment, it was advantageous for the Air Staff to be inside the US delegation where it could immediately inform and influence the US position when the Russians raised an issue. These lengthy sessions in Geneva also provided another opportunity to establish a close working relationship with key actors in the US arms-control community that would keep the Air Staff informed as events unfolded even after returning to Washington, D.C.

Other initiatives of XONP demonstrating the proactive mindset of the time included the development of a treaty “Compliance Gameplan” for the Airborne Laser (ABL) and working treaty-compliance issues within the US government. The ABL Gameplan was designed to ensure the Air Force did not inadvertently violate a treaty during the ABL’s development phase or take an action, such as testing the ABL against
an ICBM, which would cause it to be defined as a strategic ballistic missile defense system, and thus prohibited by the ABM Treaty. The second part of this effort involved introducing information on new weapons systems to the United States. Compliance Review Group (CRG), the DOD forum with the responsibility to formally determine, for the US government, treaty compliance when it even appears there may be an issue. Being proactive in providing information to the CRG well before a specific compliance issue arose paid huge dividends for the Air Force both in preventing an issue from being raised due to a simple misunderstanding concerning the operation or capabilities of a weapons system, and in successfully defending the Air Staff position if a compliance issue were raised.

Sharing information to educate others involved in the broader arms-control process regarding Air Force weapons systems and procedures also proved valuable. For instance, in the interest in improving warhead monitoring, the United States was contemplating a proposal that would open nuclear weapon storage areas (WSA) for inspection. This would permit the nuclear weapons, in their sealed containers, to be viewed and counted. The Air Force strongly opposed this and arranged a tour of base-level WSAs for involved members of the Joint Staff and OSD. It was quickly established that the specific proposal was unworkable. Similarly, the Air Force also provided a forum for the larger arms-control community to explore more complex issues and create a common understanding of the intricacies of implementation. This established the Air Force’s credibility and provided it the opportunity to highlight important Air Force operational issues and influence the US position. It also served, in the same manner as Airlie House conferences and Joint Compliance and Inspection Commission (JCIC) sessions, to build the common frame of reference and relationships that would ensure the Air Force was considered a valuable participant in any discussion of the issue. For example, the CWC inspection protocols included provision for a “challenge inspection.” If directed at the United States this would initiate the most intrusive arms-control-driven inspection a US facility had ever experienced. In an effort to foster an understanding of the operational, security, and policy issues and potential pitfalls of such an inspection, the Air Force hosted a
series of “mock challenge inspections” at active US air bases both in the continental United States (CONUS) and abroad. There was broad interagency participation in these week-long, high-fidelity exercises designed to test various US procedures and policies prior to treaty entry into force. As a result of this initiative, many US procedures were revised and policies modified as a better understanding of the demands of such an inspection and the military equities at risk was achieved.

**When It Was Over**

By the end of the Clinton terms, the way the world thought about arms control had changed. The concepts of equality, verifiability, and deep cuts that were the heritage of the Reagan years were no longer the cornerstones of negotiations. Nuclear negotiations were at a full stop; it appeared the Russians were neither really interested in additional cuts nor particularly influenced by the size of the US force. The number of arms-control agreements had slowed appreciably: 26 agreements concluded between 1987 and 1995, compared to only four between 1996 and 2001. Perhaps more troubling from a US perspective is that historic US allies in Europe seemed interested in arms-control efforts that would limit US unilateral capabilities or constrain US technology advances in areas such as space and information operations. In some US circles, there was now growing dissatisfaction with the old bilateral treaties and recognition that they not only failed to address the new security concerns, they could also be counterproductive. The old tools, force reduction and inspection, were still in place, but Russian compliance was increasingly not enforced for economic or political reasons. As a result, the utility of these agreements was increasingly called into question. Due to the rapid completion of several major treaties early in the period (INF, START I, CFE) with several others in work (CWC, START II, Open Skies), emphasis in the Air Force had shifted from treaty negotiation support to implementation and compliance issues. New compliance concerns were being raised involving treaties of indefinite duration as the discontinuities between the current security environment and those at the time of treaty signature became increasingly apparent. For
example, the CFE Treaty did not envision the circumstances surrounding US involvement in Bosnia, but did complicate the logistics problem of US force deployment. Likewise, the Vienna Document did not envision a situation which would permit the Russians to conduct 10 inspections of NATO staging bases and provide information on force composition and location to a third party actively engaged in a conflict with NATO. Yet, that is what happened. Finally, from a US perspective, the ABM Treaty was never intended to restrict theater missile defense or leave the US homeland vulnerable to rogue threats, yet arguably, it was doing both.

The new multilateral treaties were often not considered a success either. The Non-Proliferation Treaty (NPT) was one example. Although generally regarded in military circles as useful, the pressure by nonnuclear weapons states on the nuclear weapons states for a specific commitment on nuclear disarmament left many in the United States wondering if the cost of the treaty might exceed its usefulness in the near future. More importantly, there was a sense that with the end of the Cold War, and its underlying economic and political competition, old bilateral treaties, such as the Strategic Arms Reduction Treaty I (START I) and the ABM Treaty, were out of place. Military treaties seldom exist between friendly nations, and, rather than being viewed as the foundation of the US strategic relationship with the Russians, there was a growing suspicion these bilateral treaties might only be preserving an adversarial relationship and inhibiting the evolution of a warmer one. As the period ended, there was in the arms-control community a sense that the United States was again on the verge of major change, but there was great uncertainty as to what the direction would be.

**Treaty Issue Addendum**

**Strategic Arms Reduction Treaty**

The Strategic Arms Reduction Treaty (START I) which entered into force in 1994 is a good example of a treaty that was largely negotiated in one reality (Cold War) but entered
into force in another (Post-Cold War). Generally accepted as a landmark treaty, there continued to be implementation and compliance issues discussed at the JCIC. Examples include use of ICBM parts for space activities, B-1B cruise missile hard point covers, andPeacekeeper elimination procedures. These issues resulted from individual interpretations of treaty text and, in some cases, conflicting treaty provisions.

For the Air Force, these were largely resource issues. The Air Force was unwilling to spend additional, and in its view unnecessary, money to satisfy Russian concerns involving issues not believed to be important to the Russians. Rather, they were believed to be issues of “convenience” used to keep the other treaty partner on the defensive. As such, even if resolved, another issue would quickly be found. These issues were not resolved.

**Strategic Arms Reduction Treaty II**

The Strategic Arms Reduction Treaty II (START II) was ratified and represented the US attempt to codify the Russian economic disadvantage. In several areas, it clearly favored the United States and was substantially modified by the Russian Duma before ratification. The modified treaty has not been resubmitted to the US Senate as of this writing.

For the Air Force, the significant issue was that the retention of the bomber conventional capability that the United States was finding increasingly important was apparently not taken into account when negotiating the treaty. The treaty states that bombers would count against nuclear warhead limits “as equipped” without defining the term or stating any requirement to modify the aircraft. This statement all but guarantees compliance issues with the Russians if the treaty is ratified by the United States.

A Strategic Arms Reduction Treaty III (START III) was first envisioned as a rapid follow-on to START II, and it was presented by the Clinton Administration as a way to reenergize the nuclear reduction process. The concept was to resolve the START II impasse by getting past the START II equity issues through a substantial reduction in the numbers of deployed nuclear weapons permitted by START II. This effort died when
it became apparent the JCS would not support START III without a START II entry into force prerequisite. Without START II as a known departure point, the chiefs found it impossible to define the issues, goals, and security objectives for START III or assess the impact on US national security. START III standing alone was too unfocused and unbounded for the chiefs to support given their distrust of a US negotiating process that no longer recognized that no agreement might be better than a bad agreement.

**Anti-Ballistic Missile Treaty**

The Anti-Ballistic Missile Treaty (ABM Treaty) raised serious issues associated with theater missile defense (TMD) and, later, with national missile defense. Although a treaty vehicle already existed to resolve the issues, in 1993 Congress required a treaty compliance review of three specific TMD programs, including the Army’s Theater Air Defense (THAD) program.

Both the Ballistic Missile Defense Organization (BMDO) and the US Army conducted reviews. It was eventually concluded that THAD could likely violate the ABM Treaty. This was a serious issue because if THAD had a compliance problem, there were probably many to follow as improved technology increased capability. Given the US experience with theater ballistic missiles during Desert Storm, there was a need to negotiate room for TMD in the ABM Treaty. Within the US government this evolved into an internal debate concerning broad versus narrow interpretations of the treaty. The Air Force views on many issues were not adopted, and it was soundly defeated on the issue of space-based interceptors, despite the strong intervention of USSPACECOM. However, the Air Staff was successful in arguing that many issues, such as the role of space sensors, definition and use of “other physical principles,” and the ABL were simply too complex to address with the Russians at this time. Although signed in 1997, the agreement on demarcation has not been ratified. The great irony is that in successfully driving such a hard line for a narrow interpretation of the treaty, the Clinton Administration may have inadvertently sown the seeds of the treaty’s demise at the hands of the succeeding Bush Administration. Time will tell. The other interesting note is that
the United States resolved all three of the specific program issues that ignited the original debate internally before the foreign negotiations were completed.

**Treaty on Intermediate-Range Nuclear Forces**

The Treaty on Intermediate-Range Nuclear Forces (INF), responsible for the removal of an entire class of nuclear weapons, provided an example of unintended consequences resulting from treaties of indefinite duration. Were unmanned combat aerial vehicles (UCAV) airplanes or cruise missiles? The Air Force position was that they were airplanes; however, the treaty language provided no specific definition other than range parameters, which were in fact, descriptive of the UCAVs’ capabilities.

This was a newly recognized shortcoming of the treaty because the technology enabling development of the UCAVs did not exist when the treaty was drafted. It was an important issue to the Air Force because if considered cruise missiles, the INF Treaty prohibited UCAVs. This was an internal US issue; however, it was not decided that UCAVs were aircraft until 2001.

**Treaty on Conventional Armed Forces in Europe**

The Treaty on Conventional Armed Forces in Europe (CFE) entered into force in 1992; however, it was formally revised/adapted in 1999 to address Russian exemptions from the agreements and the new European realities, which included the former Warsaw Pact nations of Poland, Hungary, and the Czech Republic joining NATO. The Air Force unsuccessfully opposed a US proposal to include long-range transport aircraft as treaty-limited equipment, but the Russians declined to accept the proposal.

The Air Force, with the support of the United States European Command (USEUCOM), was successful in defeating US efforts to include fighter aircraft and attack helicopters in territorial ceilings. The Air Force argued that their inclusion would create a reporting requirement nightmare with no practical impact given the speed of the aircraft, and the CINC
shared Air Staff concerns regarding loss of operational flexibility. Despite a four-year delay and relaxed requirements, the Russians are still not treaty compliant and the agreement has not been presented to the US Senate for ratification.

Open Skies

Open Skies was once the air observation portion of the CFE Treaty, but developed a life of its own. Given other intelligence resources available and Open Skies censor restrictions, Open Skies offers little intelligence value to the United States. The most heated Air Staff issues involved resources. The Air Staff successfully defeated a proposal that would have forced it to buy new aircraft by arguing that the existing capability was sufficient to meet joint trial flight requirements and sufficient time existed to increase capability prior to treaty entry into force, if needed. There has been some effort by the Defense Threat Reduction Agency to establish direct operational control over the US Open Skies aircraft, but this was also defeated. Open Skies has yet to enter into force, but this may happen before the end of 2001.

Ottawa Convention on Anti-Personnel Land Mines

The Ottawa Convention on Anti-Personnel Land Mines (APL) raised issues of primary interest to the US Army. The Air Force supported the Army position opposing the United States signing the agreement because the loss of area denial munitions would create an increased demand for direct air support from the Air Force. It was also evident that a number of countries that had signed the treaty were violating it with impunity. Obviously, it offered no increased US security and the United States did not become a party to the treaty. The Clinton Administration did however establish a goal of signing the treaty by 2006 if alternatives to APL become available.
PART V

Conclusion
From the dawn of the nuclear age until the present time, it should be no surprise that arms control (the process and the substance) evolved as the global environment changed, and as the US-Soviet/Russia relationship progressed from adversarial to more cooperative. There were no serious arms-control initiatives by US administrations until the United States faced a peer competitor in the Soviet Union.

Throughout the history of strategic arms control there are several noticeable trends and realities that provide guidance as to the role arms control will and can play in the future. These arms-control realities relate to both the process of negotiating agreements and to the substantive terms of those agreements. For the United States Air Force, its involvement in US strategic arms-control initiatives followed a rather predictable path given the political nature of the arms-control process. The military in general, and the USAF in particular, were able to exercise influence when they felt compelled to do so and when they were organized to make it happen.

The Process

The first characteristic of the arms-control process in the United States is that it was and still is primarily a civilian-dominated exercise in the political sector with the military playing a reactive, though sometimes influential, role. By contrast, in the Soviet Union/Russia the military is an active and formidable participant, whose role is made more prominent because the Soviets do not have a civilian arms-control agency to take on an active/leadership role (this was most likely intentional). This author is not convinced the Soviets suffered significantly from this in the Cold War years in terms of getting much of what they wanted.
As Wheeler notes in his examination of arms control in the early years, there were opportunities for military involvement but mostly to voice support for positions already negotiated by the political leadership. Though the military was not excluded in the early years, its involvement was diminished because of secrecy surrounding the atomic bomb. Being in a reactive mode would last for the military and for the Air Force until organizational structures were in place allowing the Air Force to be more proactive. Larsen is probably correct that there has been a lack of interest in the Air Force in the details of arms-control negotiations, but a willingness to voice its concern about or support for certain outcomes.

Whether serving to stymie progress in arms-control negotiations or allowing for a certain decisiveness leading to success, another noticeable characteristic is the continuity of many of the political actors through much of US strategic arms-control history. For the most part, the military was not poised to provide the same continuity within its ranks (though as Waller notes, there was some continuity during the Reagan years). Having some of the same political actors involved in the process from agreement to agreement across presidential administrations accentuates the importance of individual actors and their own beliefs about the objectives of arms control. It also influences the outcome because of the actors’ notions about what deterrence and strategic stability require.

For the Department of Defense and for the Air Force, bureaucratic perspectives prevailed after the early years. For the military, it wasn’t until later that a service perspective prevailed (i.e., what is good for the service). In the early years there was a certain consistency between the Air Force and those in the political arena about the likely success of arms control. The Air Force was involved and supported US political arms-control initiatives. Kaplan’s chapter demonstrates how the Air Force perspective was the perspective of its chiefs of staff and the leaders of Strategic Air Command. Their personal experiences, like those in the political arena, influenced their opinions about arms control.

In the 1950s and early 1960s, when civilian and military perspectives diverged, and the Air Force did not support the
Kennedy and Johnson arms-control positions, Kaplan shows how the Air Force was not organizationally situated to examine, devise, and subsequently present a service perspective, thus, its input was ad hoc and not influential. At the beginning of the SALT era, when Air Force weapons were not really at issue, the Air Force wasn’t engaged. Larsen concludes the Air Force wasn’t interested enough to be engaged. SALT II changed this, with the Air Force becoming more involved, but the Air Force position resulted from a centralized process that reflected individual inputs from a few. It wasn’t until the late 1970s that the Air Force staff reorganized to expand the number of members dealing with arms-control-related issues. What Larsen writes in his piece on the SALT era holds true today—the organizational structure within DOD serves to “mute” individual service inputs and promote a joint perspective. The Air Force would need to be motivated and creative to address this organizational challenge.

The third noticeable characteristic of strategic arms control, whether necessitated by the political process or by the technological advancement of the strategic arsenal, is the evolutionary nature of arms control. It has been a systematic engagement with subsequent agreements building on previous ones, sometimes correcting certain shortcomings in previous agreements. Campbell reviews how SALT I, that negotiated inequalities in strategic offensive weapons, required (some would say mandated) certain outcomes for SALT II to reverse that inequality. Dusch demonstrates how START focused on SALT’s shortcomings and a desire to reverse SALT’s adverse consequences for stability and security.

The START negotiations are the model of modern-day Air Force involvement in formal arms control, and it is an indicator of what is required for the Air Force to succeed when it comes to articulating its views on weapons systems in its portfolio. According to Waller’s account, the Air Staff, SAC, and the Joint Staff worked over a period of eight years to get bomber discount rules that wouldn’t threaten the future of the bomber force. This kind of sustained involvement produced substantive results.
The Substance

These characteristics of the strategic arms-control process—civilian dominated, though military influenced and supported; continuity over time of many of the political actors involved in the negotiation process; and the evolutionary nature of agreements—have resulted in and contributed to certain trends in arms control and in the strategic weapons they are designed to address.

One is struck by how since WWI there has been a clear intent to satisfy at least one of the classic objectives of arms control not just because they are desirable goals, but also to gain military and political support at home and allied support abroad. It has been a challenge at times because these objectives (preventing war, limiting damage should war occur, and reducing the costs preparing for war) can conflict when devising a national security strategy, and when negotiating limits and reductions in nuclear arms.

In general, one can conclude that the overall substantive themes one sees in arms-control agreements are either those that are ambitious in nature with broad objectives (mostly in the early years), to more narrowly defined outcomes pointed at certain weapons systems (though the negotiation exercise might have been linked to other political behavior), to pessimism about arms-control's benefits and concern that initiatives today can be a straightjacket to US national security goals in the future. The desire for arms control at the beginning of the atomic age was first motivated by the weapon's destructiveness. The Joint Chiefs of Staff (JCS) showed support for the need for arms control because the military recognized that others would acquire similar weapons and possibly use them against the United States. Put another way, the United States should negotiate from a position of strength, a theme that would resonate throughout the Cold War. Even during the early years, there were concerns about treaty compliance, and this issue would be an ever present element during negotiations throughout the Cold War period, sometimes limiting what weapons and weapons characteristics could be “controlled.” Kaplan reviews how the Air Force position was one that insisted on verification as a necessary part of arms
control because of distrust of Soviet motivations and fear that they would cheat. This was a constant military and civilian position throughout the history of strategic arms control leading to intrusive on-site inspections as the expectation instead of relying on verification by national technical means.

Since the 1950s the Air Force focus has been on technological capability and superiority, and thus it had concern about any attempts to limit technological and qualitative advancement in more than just offensive weapons systems (e.g., reconnaissance satellites, space vehicles). Air Force war plans called for a quantitative edge as well. So, any arms-control initiatives that put limits on an Air Force advantage were met with opposition. It is clear that for the Air Force the essence of arms control starting in the 1950s—reductions and/or limits—were contrary to what it saw as necessary for performing its national security role. Though many thought early on that deterrence was the best response should arms control fail, the Air Force leadership was more concerned about having the forces necessary should deterrence fail. While the United States had superiority, there was no motivation to limit or even dilute that superiority (e.g., the Air Force opposition to the 1963 Limited Test Ban Treaty).

The mid-1950s saw the evolution and maturation of deterrence as a concept in the strategic arena—the evolution of various deterrence strategies designed to deter the Soviet threat and minimize the costs of doing so (e.g., minimum and graduated deterrence, and countervalue targeting). The Air Force did not support these approaches because it felt they were not credible responses to the Soviet threat and could have unintended consequences. Minimum deterrence, for example, would require an increase in costly conventional forces as a counterweight to a smaller nuclear force structure.

In an environment of US-Soviet parity in the 1970s, arms control became a device to control the strategic arsenal, keep the other side from advancing, and for enhancing stability. Campbell and Larsen review this vigorous era of arms control.

Campbell’s chapter covers how during the SALT era arms control’s goals were broadened. Not only was it a vehicle to stop Soviet advancement and reduce defense expenditures, it
was hoped it could be used to increase stability by reducing military competition elsewhere. While it became a political tool in the 1970s to address certain fiscal realities (i.e., the need to reduce defense spending) there were other political benefits from an era of détente. This linkage between arms control and broader issues during the Nixon administration was inevitable though not supported by subsequent administrations. This gave arms control additional responsibility over and above its classic objectives.

The SALT years, the ambitious era of arms control that included using arms control to engage the Soviets on broader international security issues, resulted in a clash not only between the DOD and State Department, but within DOD itself, between the military and a strong secretary of defense (McNamara). Dusch shows how DOD and state diverged in opinion, and how civil-military tensions within DOD during the McNamara years limited the Air Force’s ability to influence the strategic debate. Given all this, when the debate centered on particular weapons systems, the OSD and JCS had influence on relevant positions that affected the outcome (e.g., insisting on the requirement for on-site inspections for a MIRV flight test ban the military didn’t want knowing it wouldn’t be accepted by the Soviets).

One could argue that arms control becomes very difficult when linked to broader political goals. But even when negotiations focus on weapon systems the task has been difficult, with agreements taking years to finalize and the outcomes sometimes considered ineffective, if not dangerous. One reason for this was the constant disagreement between the United States and the Soviets as to which weapons contribute to or detract from strategic stability. Added to this is the military’s insistence that it not be prevented or limited in being able to fight and prevail in a conflict should deterrence fail.

Because the USAF had an obvious interest in the systems under contention in SALT II (mainly due to its concerns about ICBM vulnerability), it is not surprising that it established an office to deal with arms-control issues. In addition to this action, Larsen notes how the Air Force used the political process to make its views known (e.g., meetings with members of Congress,
the State Department, the Arms Control and Disarmament Agency, etc.). Waller says the Air Force used the lengthy arms-control negotiation process to consolidate its position and gather inputs from its subordinate units. This proactive approach was needed if the Air Force’s organizational interests were to be considered (and some of these positions were inconsistent with those held by some in the administration).

Waller is right; the Air Force sees things like security, stability, and predictability in strictly military terms while the political arena sees these things achieved through a variety of political and military actions culminating in these desirable goals. When it was proactive, organized to provide a substantive input, and used the political process to its advantage, the Air Force usually got what it needed.

This is a lesson that among others should be noted by Air Force leadership, especially since, as the Miller chapter reminds us, over 40 treaties and agreements have direct implication for the Air Force. Given the current focus on dramatic strategic arms reductions of systems “owned” by the Air Force, the leadership will need to be organized, proactive, and savvy enough to influence how many are reduced and how fast. The Air Force has not supported the dramatic post–Cold War reductions proposals, and Miller shows how its opposition continues to reflect the military’s views since the dawn of the atomic age—avoiding operational constraints and opposing proposals that limit the use of future technology.

It is unclear whether and how internal DOD organizational changes might dilute the Air Force’s ability to influence strategic arms control. The Larsen chapter covers how DOD’s organizational structure serves to “mute” individual service inputs by promoting a joint perspective. Goldwater-Nichols is responsible for this organizational change and the consequences resulting from it. On the other hand, as Miller notes, even the Joint Staff needs Air Force input and its support. Another significant organizational development is the dissolution of SAC and the obvious questions relate to what this means in terms of Air Force influence on arms control, and on the ability to maintain a pipeline of development of USAF arms-control expertise.
All of the authors note the primacy of SAC in the DOD arms-control arena. Miller talks about how SAC’s leaders were influential in the process and how SAC provided many of the arms-control staff officers who would be engaged in the process. SAC “owned” the strategic nuclear bombers and land-based ICBMs (the two legs of the triad belonging to the Air Force), and it “owned” the officers involved in negotiating their limits and reduction. When SAC was dissolved, the bombers went to Air Combat Command and the ICBMs went to Space Command. On the other hand, the Air Force’s Pentagon-based arms controllers are still in place organizationally (AF/XONP) and members of that organization appear to be proactive and creative in developing and promoting Air Force interests.

**Lessons Learned**

There are a few inevitable realities about the future of strategic arms control in general, and a few lessons learned for the Air Force to consider. For the most part, the future of strategic arms control will be a reflection of the international environment, its challenges and threats. Strategic arms control is still a bilateral exercise between the United States and Russia, but it no longer holds center stage: the relationship has mellowed and it is no longer adversarial; the weapons still concern the United States, but other weapons of mass destruction concern many states. And these are getting the same attention now as nuclear weapons have in the past.

The new weapons of concern are chemical and biological, and the likely employers may not be states. Thus, the shift for arms control will be multilateral initiatives aimed at weapons of mass destruction in general. This also suggests the continued focus on strategic and theater defenses as a means to satisfy one of the classic objectives of arms control—reducing the damage should war (attack) occur. Without knowing any details of how and whether the Air Force influenced this new direction towards defenses, it got what it must want—no limit on its ability to develop new and better technologies, and no limits on its ability to prevail should deterrence fail.
• LESSON 1. The general trend at the end of the 1990s was one in which the Air Force was organized to engage in the arms-control area. This is positive because the history of strategic arms control is one that showed the Air Force is generally successful when it is proactive and engaged. Developing and maintaining a cadre of Air Force expertise in arms control cannot be overstated. The continuity of political actors helped, and the expertise of military participants helped when it was available. Having some historical perspective increases the likelihood of success.

• LESSON 2. Having influence and being organized to maximize it (for the Air Force) is important because history also shows that the political community needs it and will reward service support perhaps in the form of weapons systems funding to compensate for some capability lost at the negotiating table (as it did in getting strategic modernization and the B-1 in the early 1970s).

• LESSON 3. An arms-control outcome the Air Force (and military) worried about throughout the Cold War and the current administration worries about now (and has dealt with it head on) is the fact that earlier arms-control agreements can bind you when they prevent you from taking advantage of new technologies, or prevent you from addressing current and future security challenges. This is an obvious reference to the ABM Treaty (which the Bush Administration has decided to walk away from) and the need to make progress in national and theater defenses technologies.

• LESSON 4. The previous lesson increases the likelihood that unilateral actions will continue. This started with the first Bush Administration’s decisions on tactical nuclear systems in Europe, and continues with the current Bush Administration’s initiatives. With no formal agreements to bind you, you can make adjustments in your arsenal when the environment dictates change. Also, there aren’t any states involved that might later see dramatic changes in their political systems that could complicate things. In general, unilateral actions are quick, can be exactly what
you want to do (not a watered-down, negotiated outcome), and they are reversible.

• LESSON 5. These realities, along with the nature of arms control being one that is evolutionary, not revolutionary (except for perhaps the revolutionary INF Treaty that resulted in the elimination of a class of nuclear weapons) means that bilateral arms control will have limits in what it will achieve in the immediate future (yet another justification for unilateral actions). Even the current dramatic nuclear-weapons proposals have provisions for reductions over a long period of time, with weapons being “stored,” not destroyed.

• LESSON 6. Successful arms control ultimately depends on more than just the brilliance and logic of one’s negotiation proposal—sometimes prodding by the public based on a desire to alter spending priorities matters. Also, the men sitting in the White House or Kremlin, along with their staffs’ ideological views, can set the tone for success or failure. There are a number of explanations for the end of the Cold War, among which are the tough Reagan arms-control positions based on a strategy of negotiating from a position of strength, along with insistence on tough verification measures. But clearly, Reagan’s success with getting the Soviets back to the negotiating table, and his influence on “ending” the Cold War were due to the centrality of SDI, and the Soviet economic crisis, and the new Soviet political leadership in the form of Mikhail Gorbachev. All of the planets were in alignment.

• LESSON 7. Graham Allison’s Bureaucratic Politics model describes the strategic arms-control process in the United States, within both the civilian and military arenas, as it focuses on the pulling and hauling within these sectors and between them. The differences between DOD and state, within the administration, and between the administration and the DOD (and the Air Force) are the result of “fundamental disagreement among reasonable men about how to solve” problems. Graham also notes that “different groups pulling in different directions produce a result, or better a resultant—a mixture of conflicting preferences and unequal
power of various individuals—distinct from what any person or group intended. As Dusch notes, one’s negotiating strategy begins at home where the various constituencies hash out a set of proposals based on the president’s guidelines. In strategic arms control, the Air Force is one of those constituencies. And finally, “To explain why a particular formal governmental decision was made, or why a pattern of governmental behavior emerged, it is necessary to identify the games and players, to display the coalitions, bargains, and compromises, and to convey some feel for the confusion.”

This book on the Air Force and strategic arms control does just that. Arms control has come a long way from “how much is enough” during the Cold War to “how low can we go” in the post–Cold War era (i.e., strategic sufficiency, which was not supported by CINCSTRAT). There was some serious discussion during the Reagan years about eliminating all ballistic missiles (see Larsen’s review of the Weinberger proposal in preparation for the Reykjavik summit). These discussions don’t come close to the debate generated by retired Gen Lee Butler (former CINCSAC), who proposed in 1996 the total elimination of nuclear weapons. General Butler was supported by many retired and well-known flag-ranked officers in the United States and in Russia. Total elimination of nuclear weapons could be considered the ultimate goal of arms control for some.

The debate this generated rejuvenated arms control in the post–Cold War period if only to introduce new formations of arms-control-type actions such as “de-alerting” and “virtual arsenals.” Not surprisingly, the military does not support numbers below those in START II, and it opposes these creative conceptualizations of how to base one’s strategic nuclear forces. This leads to the final lesson.

• **LESSON 8.** Strategic nuclear arsenals, once they start declining as the means of control, will continue to decline to minimum levels deemed safe by the military. It is hard to imagine strategic nuclear forces increasing. There is reason to believe that technological development will continue so that smaller forces are more capable to meet emerging and evolving threats. Whether or not formal
arms-control measures are used, traditional elements of the process and concerns about the substance of those limits, reductions, and controls will remain.

Notes
2. Ibid.
3. Ibid.
Contributors

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Glare: Missile Defenses and the Future of World Politics* (2001);
editor (with Kurt J. Klingenger) of *Controlling Non-Strategic
Nuclear Weapons: Obstacles and Opportunities* (2001); editor
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Arms control is a field rich with material but not much has been written specifically about the United States Air Force and its relationship with arms-control issues. One has to look closely in books and articles on arms control for nuggets of information on the Air Force. The ability to read between the lines is exceptionally important. Alternatively, one must conduct original primary research, and it is not easy finding either the right people to interview or the right staff papers to read. The most recent period, in particular (since the START treaties were signed in the early 1990s), is problematic precisely because of its recency—there simply has not been time for serious analysis or writing about arms control in this period, and much of the source material remains classified. Nor is the level of public interest over arms control as high as it once was. With the end of the Cold War and a new relationship between the United States and Russia, people simply don’t think about strategic issues in the same way. This has also effected the volume of material in recent years. Finally, many of the archives and files on more recent arms-control issues in which the Air Force took an interest were put at risk by the attack on the Pentagon on 11 September 2001, when the offices of the National Security Policy Division (AF/XONP), where these files were stored, suffered significant damage.

Nevertheless, we can suggest a number of recommended works on arms control. For complete texts of all treaties ratified before 1991, as well as some analysis of the negotiating history, see Josef Goldblat, *Arms Control: A Guide to Negotiations and Agreements* (London: Sage Publications, 1994). A superb source for general information, analytical essays, and treaty highlights is the three-volume set by Richard Dean Burns, ed., *Encyclopedia of Arms Control and Disarmament* (New York: Charles Scribner’s Sons, 1993). Updated references can be found in Jeffrey A. Larsen and Gregory J. Rattray, eds., *Arms Control Toward the 21st Century* (Boulder, Colo.: Lynne Rienner Publishers, 1996), and
a forthcoming edition from the same publisher, also edited by Jeffrey A. Larsen, *Arms Control: Cooperative Security in a Changing Environment* (2002). An annual publication that provides excellent up-to-date material is *SIPRI Yearbook* (Stockholm International Research Institute, published by Oxford University Press and also found at www.sipri.org). The Institute for Defense and Disarmament Studies, Cambridge, Mass., publishes monthly editions of *The Arms Control Reporter*; archived editions can be found on their web site at www.idds.org. The best monthly journals that follow arms-control topics and related issues are *Arms Control Today*, published by the Arms Control Association, Washington, D.C., also found at www.armscontrol.org; *The Bulletin of the Atomic Scientists*, published by the Educational Foundation for Nuclear Science, Chicago, and found at www.thebulletin.org; and the irregular but frequent *Documents on Disarmament* series put out by the US State Department (which, along with treaty summaries, can be found at www.state.gov). Other good databases for basic treaty and arms-control negotiations information are found at the web sites of the Federation of American Scientists (www.fas.org), Physicians for Social Responsibility (www.psr.org), the University of Illinois program in Arms Control, Disarmament, and International Security (www.acdis.uiuc.edu), and the Center for International Security and Cooperation at Stanford University (www.cisac.stanford.edu). A forthcoming publication that will provide in-depth background and reference material on this subject is being written by two of this book’s authors: Jeffrey A. Larsen and James M. Smith, *Historical Dictionary of Arms Control and Disarmament* (Lanham, Md.: Scarecrow Press, 2002).

Specific information on the role of the US Air Force in arms-control deliberations and negotiations, as well as compliance issues, is hard to find. Some can be gleaned from the Secretary of Defense’s *Annual Report to the President and the Congress* (Washington, D.C.: US Government Printing Office); some can be found in the sections on arms control in *American Defense Annual*, edited from 1985–1993 by Joseph Kruzel and in 1994 by Charles Hermann (Cambridge, Mass.: Lexington Books); and in the US Arms Control and
Disarmament Agency’s regular publication *Arms Control and Disarmament Agreements* (Washington, D.C.: US Government Printing Office, latest edition 1996), although whether the State Department will continue to publish this valuable reference guide now that ACDA has been dissolved is yet to be seen. Good sources of current topics are the published papers of the annual International Arms Control Conference held at Sandia National Laboratories, Albuquerque, N.Mex. (since 1991) and the findings of the annual International Conference on Controlling Arms hosted by the Defense Nuclear Agency (which became the Defense Special Weapons Agency, which then became the Defense Threat Reduction Agency) from 1992–2000.

The remainder of this bibliographic essay will provide some key works in each of the four historical periods addressed in this book: the early post–World War Two era, the SALT era of the 1970s, the Reagan era of the 1980s, and the START era of the 1990s and beyond. Within each section we have attempted to find and list some of the best sources used by the authors of those chapters.

**The Early Post–World War Era**

The period 1945–68 could be called the “pre-arms-control” period, as the United States and the Soviet Union aggressively sought strategic superiority in terms of numbers of weapons and delivery vehicles. The concept of containment led the push for advanced military capabilities, rather than a serious effort towards cooperative security, arms control, or disarmament. To be sure, there had been a considerable body of literature prior to the nuclear age devoted to questions of the legality of aerial bombardment, the role and purpose of airpower, and the like. But not until the early 1960s was the theory of arms control writ large properly developed. A number of books came out in 1961, however, that set the stage and laid the foundation for all the arms-control successes of the following decades.

The US Air Force in this era was concerned with achieving superiority using the manned bomber and the intercontinental ballistic missile. Both of these were controlled by Strategic
Air Command, the preeminent organizational element within
the Air Force. As arms-control measures began being consid-
ered toward the end of this period, the concept of national
technical means of verification arose. This, too, fell under
SAC’s control, as satellites and high-altitude manned spy
planes began looking at the USSR and its proxies. But neither
SAC nor the corporate Air Force had any desire to get involved
in arms control, nor did they see any advantage to be accrued
from doing so. A telling point about the Air Force’s view of
arms control during this period—or the lack thereof—can be
seen by omission: in the 665 pages of *Ideas, Concepts,
Doctrine, Volume I: Basic Thinking in the United States Air Force
1907–1960*, by Robert Frank Futrell (Maxwell AFB, Ala.: Air
University Press, 1989), there is not one single mention of the
words *arms control* or *disarmament*.

What arms control that did occur took place in multilateral
forums, primarily the United Nations, and led to vague agree-
ments couched in disarmament terms. None of these directly
affected the Air Force; none of these was affected in any way
by inputs from the Air Force.

**Suggested Reading**

Air Force Manual (AFMAN) 1-8. *Air Doctrine: Strategic Air

Bechhoefer, Bernhard. *Postwar Negotiations for Arms Control.*

Bernstein, Barton J. “The Quest for Security: American
Foreign Policy and International Control of Atomic
March 1974, 1003–44.

Howard, George J. Andreopoulos, and Mark R. Schulman,
edds., *The Laws of War: Constraints on Warfare in the
Western World*. New Haven, Conn.: Yale University Press,
1994.

Bowie, Robert P., and Richard H. Immerman. *Waging Peace:
How Eisenhower Shaped an Enduring Cold War Strategy.*


**Suggested Readings on Basic Arms-Control Theory**


The SALT Era

The period 1969–80 was a golden era for arms control. During this period the United States and the Soviet Union entered a phase of their relationship known as détente, a relaxation of relations whereby both sides began taking tentative steps away from the nuclear brink that had epitomized their relationship for the previous 15 years. Part of this change involved direct bilateral negotiations between the superpowers that proved quite successful. During the 1970s barely any years passed without at least one, and usually several, new arms-control treaties or agreements between the two. In part this reflected unilateral political decisions on both sides to further the arms-control agenda despite conservative arguments to the contrary.

The Air Force was caught off guard by the new centrality of arms control in interagency negotiations and decision making. It had been so busy building up its forces that it entered this vibrant period without any bureaucratic apparatus in place to deal with arms-control issues. As a result, the Air Force did not play a major role in the early agreements (such as the ABM Treaty and Interim Agreement of SALT I). But by the latter part of the period, it had created a small and tightly controlled advisory group within the Air Staff to provide the chief of staff with inputs as he developed the Air Force’s official position on negotiations.

There is scant direct evidence in print about how the Air Force went about creating this network. Between the closehold nature of the business and the fact that this was but one policy development aspect of a major government agency, there has been very little written about the inner workings of the Air Force. Again, one must read the books on the era carefully to glean Air Force-specific items from the prose. Some of the best material comes from stories about the strategic procurement programs of the era, and the effect on those programs generated by distant arms-control negotiations that seemed to be permanently in the background, but which were becoming increasingly annoying—like the droning sound of a distant cloud of mosquitoes that was slowly drawing ever
closer. Other anecdotal evidence can be found in the memoirs and autobiographies written by participants in the era.

**Suggested Reading**


**The Reagan Era**

From 1981 to 1988 the United States and the USSR expanded their strategic systems and capabilities through a series of innovations, and moved the confrontation into new realms (such as outer space and information operations). This was the era of the Reagan defense buildup, and strategic forces (both offensive and, after 1983, defensive) were a major winner in the budgetary largesse of this presidency. After a rocky start, during which time it appeared as though arms control might have been cast aside in the interest of military power, both sides were back at the negotiating table by the middle of the decade. This renewed vitality, enhanced perhaps by the realization during the early 1980s that neither side could win a nuclear war, led to a second period of pronounced success in arms control. This period included agreements on a myriad of issues, from theater and strategic weapons to chemical and conventional forces. It carried over into the early 1990s, its momentum uneffected by the end of the Soviet Union, the dissolution of the Warsaw Pact, and the final stages of the Cold War.

The US Air Force during this period had achieved a central role in the bureaucratic political maneuvering of the interagency process when it came to arms control. True, most of the central strategic weapons systems were controlled by the Air Force, but its influence extended beyond simple management of those systems.

As researchers seeking insight into the Air Force and arms control we run into the same problem in this era as in the previous one: lack of direct sources to verify what went on behind the scenes during the arms-control negotiations of the START
period. There have been several key works written about the
Reagan years, but much of that literature deals with NATO,
Europe, Euromissiles, and the Strategic Defense Initiative
rather than strategic arms control. This was a transition
period between the SALT successes and the START deals still
to come.

Suggested Readings

Congressional Record from the period.
Kartchner, Kerry M. Negotiating START: Strategic Arms
Reduction Talks and the Quest for Strategic Stability. New
Shultz, George P. Turmoil and Triumph: My Years as Secretary
Skinner, Kiron, Annelise Anderson, and Martin Anderson.
Spanier, John. American Foreign Policy Since World War II.
Talbott, Strobe. Deadly Gambits: The Reagan Administration
and the Stalemate in Nuclear Arms Control. New York:
Weakness to Strength. San Francisco, Calif.: Institute for
Contemporary Studies, 1980.

START and the Transition to the Future

Our final period begins with 1989 and continues through
today. It was an era that witnessed the culmination of the
negotiations and understandings reached between the super-
powers toward the end of the Reagan administration, reflect-
ing a renewed sense of common destiny between the super-
powers, as well as the rise to power of one key individual in the
Soviet Union: Mikhail Gorbachev. Gorbachev’s term of office
witnessed (indeed, in many ways predicated) the end of the
Soviet state, the fall of the Berlin Wall, the dissolution of the
Warsaw Pact, and the Western victory in the Cold War.
Throughout the early years of this period, as the world tried to sort out the strange and exhilarating news, the United States and the USSR, then Russia, continued to negotiate new arms-control deals, to ratify old treaties that had lain on the sideboard for many years, and to set up organizational constructs to help bring the world peacefully and uneventfully into the new era.

By later in the decade, the bloom was off the arms-control rose. The George W. Bush Administration came to power in 2001 with unilateralist tendencies and a decided dislike for arms control of any stripe, and it began overturning many of the fundamental agreements of past years. At the same time, however, the United States made valid points that the world had outlived the usefulness of treaties made in a different era, that some of these treaties had, in fact, outlasted the problems they were created to solve in the first place. Therefore, it was argued, perhaps the international strategic setting could be better served through unilateral force-level decisions and less formal agreements than in the past.

For the United States Air Force, this period was truly one of transition. In the early 1990s, the Air Force had a large and robust organizational commitment to arms-control negotiations and implementation, and it foresaw years of work bringing all the new treaties to fruition. Yet by the end of the decade, many of these agreements and the sometimes burdensome implementation and compliance requirements seemed old-fashioned if not outright unnecessary. The Air Force was attempting to make the transition to a nonnuclear, strategic conventional force with global reach, and arms-control restraints on its less important strategic arsenal seemed less and less relevant.

The literature for this period is, by nature of its recency, scanty when it comes to illuminating internal Air Force decision making. The sources listed below deal primarily with national strategic-level issues, rather than bureaucratic ones. This reflects the continuing theme we have seen in each of these periods: that the Air Force has been constantly caught in the tug and haul of strategic and policy alternatives and has never been in complete control of its own destiny. This has
certainly been true for the Air Force’s strategic weapons, and may ultimately extend to its force in space, information operations, and possibly the strategic conventional realm, as well.

**Suggested Reading**


