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RETURN TO UNFINISHED BUSINESS: RE-ENERGIZING U.S. NUCLEAR ARMS
POLICY

by

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ABSTRACT

RETURN TO UNFINISHED BUSINESS: RE-ENERGIZING U.S. NUCLEAR ARMS POLICY

William T. Eliason
Old Dominion University, 2010
Director: Dr. Regina Karp

Today's international environment characterized in nuclear threat terms as having increasing concerns about the potential for terrorist or non-state use of nuclear devices and a decline in the likelihood of the original nuclear weapon states engaging each other in a nuclear war remains in search of a path away from the fear of nuclear attack some twenty years after the end of the Cold War. This research dissertation will seek to answer the question of how best to reestablish a nuclear arms control regime. This dissertation argues that the international environment has fundamentally changed since the end of the Cold War requiring a shift in emphasis on multilateral efforts to solve issues like nuclear proliferation with the United States as the leader of such work. Specifically, this research will test the hypothesis that the United States must reassert a position of leadership through bilateral and multilateral cooperation to develop appropriate nuclear arms policies that effectively reestablish worldwide controls, continue reduction of nuclear arms toward the Non Proliferation Treaty goal of nuclear disarmament. By reviewing the U.S. relationship to three specific nuclear arms control agreements, this research explores how U.S. leadership in these efforts impacts the risk of further nuclear proliferation and the potential for nuclear attacks by both states and non-state actors. Once the relationship of the United States to the nuclear arms control regime is characterized, a suggested policy framework will be provided as a means to analyze the strength of the dissertation hypothesis.

This dissertation concludes that U.S. leadership is essential to the reinforcement of the NPT, conclusion of additional bilateral and multilateral arms control agreements and fostering a persistent and supporting multilateral relationship with all states to achieve the goals of the NPT, halting nuclear proliferation, eventually achieving total disarmament. While the United States has begun to refocus international efforts to address nuclear issues, an expanded set of policy recommendations is discussed as well as a renewed research agenda in international relations as a follow on to this dissertation is suggested.

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CHAPTER I

INTRODUCTION

The United States as the first nuclear weapons state has a special obligation and responsibility to lead the community of nations to eventually fulfill the goals of the Nuclear Non-Proliferation Treaty (NPT). From the near nuclear exchange of the Cuban Missile Crisis to the present renewal of strategic arms control negotiations, the United States has been at the center of all nuclear arms issues. When this history is reviewed, a clear record of the impacts, both positive and negative, of U.S. leadership on the outcome of these issues from decisions to participate in strategic arms races to negotiations to reduce the nuclear inventories of the Cold War. Today's international environment characterized in nuclear threat terms as having increasing concerns about the potential for terrorist or non-state use of nuclear devices and a decline in the likelihood of the original nuclear weapon states engaging each other in a nuclear war remains in search of a path away from the fear of nuclear attack some twenty years after the end of the Cold War.

This dissertation finds that the United States must reassert a position of leadership through multilateral cooperation to develop appropriate nuclear arms policies that effectively reestablish worldwide controls, continue reduction of nuclear arms toward the NPT goal of nuclear disarmament. The nuclear arms policy of the United States is central to determining how successfully the original nuclear weapons state will fulfill its stated goal of a nuclear weapon free world. Arms control has been the most direct path the

United States has attempted to control nuclear arms races and sought to achieve the goals of the NPT.

The record of success in this effort has been uneven but as this research will show that the cumulative experiences of these efforts can be useful in developing an appropriate nuclear arms policy for the future that achieves the goals of the NPT. This leadership position on nuclear disarmament will require an appropriate balancing of multilateral efforts in those existing institutions such as the NPT Conference and the UN while finding appropriate power based options for nuclear states and those who seek to become nuclear states. Without direct and consistent engagement of the United States in bilateral and multilateral efforts to control nuclear materials and weapons, the goals of the NPT will remain distant and the international community less safe from nuclear attack than during the Cold War.

Arms control has long been an essential component of international diplomacy. The 20th Century, in particular, since the opening of the atomic era, has witnessed numerous arms control efforts in the form of treaty negotiations. While nuclear arsenals of the Cold War have been substantially reduced since 1990, their levels among the declared nuclear states remain at levels far in excess of any defensible amount with those of the United States and the Russian Federation constituting the vast majority of both strategic delivery systems and warheads. Currently, the United States and the Russian Federation possess an estimated 10,000 and 17,000 plus nuclear warheads respectively. The United States has 3,696 warheads operationally deployed while the Russian Federation has over 7,200 deployed warheads.¹ When compared to the remaining

¹ Arms Control Association (Washington D.C.), "Fact Sheet: United States Profile," *Arms Control Association website*, 2009. <http://www.armscontrol.org/factsheets/unitedstatesprofile>, (accessed March 22,

declared and undeclared nuclear states that possess an estimated combined total of less than 1,000 warheads of all types, one can easily see the need for cooperation and leadership to complete the unfinished efforts begun in the Cold War to achieve nuclear arms reduction. While the ultimate goal for some is a complete elimination of nuclear weapons, this research will focus on the policies needed to achieve progress in the near term which could potentially set the stage for great strides toward that goal.

The remaining nuclear arms control regime today is a result of several bilateral agreements which range from ratified treaties to outlines of yet to be completed negotiations between the United States and the now former U.S.S.R. now known as the Russian Federation. From the first agreed treaty in 1963, the "Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water" or the Comprehensive Test Ban Treaty to the now revived discussion of completing the Strategic Offensive Reductions Treaty, more than a half century of effort has shown the complexity, difficulty and at times success that can be achieved. Typically, these agreements have been negotiated among the five original nuclear weapon states (United States, United Kingdom, the Soviet Union (now Russia), France, the Peoples Republic of China. The majority of these agreements have been between the United States and Russia, the owners of the majority of nuclear weapons in the world. In recent years, even as the proliferation of nuclear capabilities has increased, progress on this path has been slow and in the case of the Anti-Ballistic Missile Treaty in reverse.

The nuclear regime, or the rules of the nuclear game, took over forty years to build and a series of external events to this "game" resulted in a virtual abandonment

2009). Summary information from various web pages of The Arms Control Association website. These figures include estimates of Russian tactical nuclear weapons which the Russian Federation has yet to fully inventory.

until the past year of any formal process to reach a permanent arrangement on controls of the two largest nuclear arsenals. At the same time, a lack of attention to formal negotiations and maintenance collectively of the nuclear regime has had the negative collateral impact of directly or indirectly encouraging several states to develop or expand nuclear capabilities. Since the departure of the Soviet Union as a partner in the effort to reduce the level of nuclear weapons, the relationship between the United States and Russia has not been sufficiently robust to insure a formal continuation of the decades long effort to reduce their weapons. The emergence of the United States as the “sole superpower” in the post-Cold War era combined with United States exercising conventional military power has had a number of side effects including pushing a number of less capable states to select pursuit of nuclear capabilities as a counterbalancing strategy.

The current situations in Iraq and Afghanistan and the election of President Obama allow for a unique moment since the end of the Cold War to reassess and reenergize U.S. nuclear arms policy especially in relationship to the Russian Federation. This dissertation will show that the ability to control nuclear proliferation lies in first understanding the global impact of the last twenty years of U.S. nuclear arms policy. Current international relations theory can provide useful means to explain this impact and allow a basis for formulation of more effective policy leading to the reestablishment of an effective nuclear arms control regime. The desired result of this policy agenda is an effective nuclear arms control regime that provides security and a reduction of the risk of a nuclear incident within the international community. This research is aimed at determining of the impact of consistent leadership by the United States in nuclear arms

control and the achievement of the goals of the Nuclear Non-proliferation Treaty (NPT), specifically nuclear non-proliferation and eventual disarmament.

PURPOSE OF THE RESEARCH

The nuclear arms control regime of the Cold War period was essentially left to atrophy after the fall of the Soviet Union due in great part to a lack of U.S. policy leadership. This research dissertation will seek to answer the question of how best to reestablish a nuclear arms control regime that leads to achievement of the NPT goals. Specifically, this research will test the hypothesis that the United States must reassert a position of leadership through multilateral cooperation to develop appropriate nuclear arms policies that effectively reestablish worldwide controls, continue reduction of nuclear arms toward the NPT goal of nuclear disarmament. By reviewing the U.S. relationship to three specific nuclear arms control agreements, this research can explore the question of whether or not a lack of U.S. leadership in these efforts impacts the risk of further nuclear proliferation and the potential for nuclear attacks by both states and non-state actors. As the relationship of the United States to the nuclear arms control regime is characterized, a suggested policy framework will be provided as a means to analyze the strength of the dissertation hypothesis. This framework will be based on the experiences from the Cold War through the current environment. As recent events have indicated, the United States is working to address the unworkable policy choices of the last twenty years while emphasizing the mutual benefits to all nations of first reestablishing a nuclear arms control regime followed by an orderly accounting and appropriate reduction of nuclear arms and their associated components. Whether this return to the unfinished business of the nuclear issue will be sustained remains an open question. This research

attempts to describe the benefits, challenges and risks associated with the remaining legacy of the Cold War nuclear arms race.

As scholars and policy leaders saw the end of superpower confrontation abruptly arrive, the global desire was to focus on the “peace dividend” prior to the attacks of September 11, 2001. The international studies community struggled to define the new environment that replaced the long revered bipolar explanation of the international system. Reinforced by the U.S. dominance of Iraq through demonstrated conventional power in freeing Kuwait in 1991 and the rapid implosion of the former Soviet power, those who had supported the intellectual community engaged in nuclear arms control turned their focus and economic support to other areas of international affairs. While a focus within the international relations academic community focused on the neorealist issue of polarity, whether the loss of a bipolar situation meant the creation of a unipolar situation and if so for how long a period of time, the longstanding centrality of nuclear arms to the core power of states seemed to fade from view. With perceived the loss of a “balance of terror”, states, policymakers and theorists shifted their focus on a wide range of other pressing issues. As a result the international relations literature from 1990 to the present became a much broader and diverse set of concepts and ideas, virtually all of which set nuclear issues to the periphery, an unfinished business that seemed to have been swept into the closet for later disposal.

While the primary focus on the bipolar security relationship that nuclear weapons supported has now shifted, there is a discernable set of literature on how an effective nuclear arms control regime could be achieved. Today’s environment requires such a regime that accounts for the concerns of all states and at the same time effectively

addresses criminal activity that allows non-state actors to acquire nuclear capabilities once the sole purview of a limited number of governments. When the current international environment is measured against international relations theory, any review of the post Cold War period of international relations research shows advancement beyond the traditional power based approaches of the realist tradition (Morgenthau, Waltz, and Mearsheimer). While the growth of normative literature has yet to overcome the more dominant power based theories of the field, significant ground has been opened to expose a strong set of alternatives focused on institutions, norms, rules and absolute gains. In the area of arms control and disarmament, the limits of traditional realist based theories may have reached their explanatory limits within the current environment. The purpose of this research is to begin to identify those theoretical concepts that are most useful to explain how to reestablish a nuclear arms control regime and suggest a practical U.S. nuclear arms control policy agenda for achievement of the NPT goals of non-proliferation and disarmament.

REGIME THEORY, INSTITUTIONS AND ARMS CONTROL

International relations as a field of study has long sought to describe how political phenomenon operate in the world while offering insights on how states can seek long term solutions to conflict. Arms control has been a constant source of case studies for those in the international relations field especially those who are interested in resolving conflict. From the dawn of armed combat, belligerents have sought advantage over their foes that would substantially increase their ability to achieve victory on the battlefield which would lead to the desired political state once the smoke of battle clears. For the

purposes of this paper, the writings of modern international relations theorists including Waltz, Jervis, Keohane, Mearsheimer, Ruggie, Gilpin, Krasner, Nye and others provide a theoretical foundation to review specific instances of arms control efforts in the atomic era. Other scholars offer additional insights on the potential methods that can be employed to turn conflict into cooperation with an eye on reducing the likelihood of future nuclear war. Given the nature of nuclear weapons and the decreasing strength of the memory of the direct witnesses to the use of these weapons at Hiroshima and Nagasaki, a growing requirement to renew international efforts toward achieving effective non-proliferation and reduction of the available weapons is evident. The signal that the new U.S. Administration of President Barak Obama has renewed efforts to discuss strategic nuclear arms control with Russia is a welcome if cautious renewal of the work needed to complete the work begun during the Cold War. The ability to assist policy makers and negotiators from all nuclear states both acknowledged and undeclared with understandable and useful theory of how to achieve a lasting set of binding and effective international nuclear arms agreements is an obvious goal of international relations theorists and practitioners.

In his seminal work, *After Hegemony*, Robert Keohane sought to delineate a functional theory of international regimes. Drawing extensively from economics, he was interested in providing a path out of the realist forest of constant state on state conflict. In particular, he looked to explain the conditions under which independent countries could cooperate in the world political economy especially those instances where the cooperating states were not under the direct influence of a hegemon.² Starting from an

² Robert O. Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy*, 1st Princeton classic ed. (Princeton, N.J.: Princeton University Press, 2005), 8-9.

understanding of “Realist insights about the role of power and the effects of hegemony,” drawing “on the Institutionalist Tradition,” Keohane argued “that cooperation can under some conditions develop on the basis of complementary interests, and that institutions, broadly defined, affect the patterns of cooperation that emerge.”³ He further argued that policymakers view cooperation “less as an end in itself than a means to a variety of other objectives.”⁴ Arms control can be viewed as an act of cooperation, a means to a number of objectives. What is most useful from Keohane’s work for the purposes of this paper are his definitions of cooperation and international regimes as well as his functional theory now over a quarter century since he proposed it.

Keohane defines cooperation first by contrasting it to harmony, an economic condition where cooperation is unnecessary as all participants as they pursue their individual self-interests must in turn contribute to the collective interests of all participants in the market. At the political “marketplace,” cooperation between governments “*takes place when the policies actually followed by one government are regarded by its partners as facilitating realization of their own objectives, as the result of a process of policy coordination.*”⁵ Keohane cites the development of the definition of international regimes beginning with Ruggie (1975) and refined by the international relations academic community a few years later.⁶ Specifically, regimes are

sets of implicit or explicit principles, norms, rules and decision-making procedures around which actors’ expectations converge in a given area of international relations. Principles are beliefs of fact, causation, and rectitude. Norms are standards of behavior defined in terms of rights and obligations. Rules are specific prescriptions or proscriptions for action.

³ Ibid., 9.

⁴ Ibid., 10.

⁵ Ibid., 51.

⁶ Ibid., 57. See John G. Ruggie, “International Responses to Technology: Concepts and Trends,” *International Organization* 29, no. 03 (2009): 557-84.

Decision-making procedures are prevailing practices for making and implementing collective choice.⁷

These definitions provide a basic platform to discuss international cooperation and regime theory as well as review the role of international institutions in achieving and sustaining nuclear arms control regimes.

METHODOLOGY

This study is a qualitative analysis of U.S. nuclear arms policy formation, implementation and resultant impacts on the international nuclear arms control regime. The policies and related nuclear force structures that existed before the end of the Cold War have changed in the two decades since the first President Bush took power. Yet as the older bipolar relationship passed from view, significant changes in U.S. nuclear arms policies were not fully aligned with the international environment that emerged after the Cold War. The analysis contained in this dissertation seeks to review three specific nuclear arms control treaties, the impact of U.S. participation on their development, implementation and sustainment while examining the relationship between these treaties and regime theories. Specifically, three nuclear arms control agreements will be reviewed to determine the impact of the United States in the implementation and sustainment of the international nuclear arms control regime.

This dissertation examines the hypothesis that the United States is essential to the sustainment of an international nuclear arms control regime. Without the development of a set of U.S. national policies to support the reestablishment and sustainment an

⁷ Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy*, 57. Author citing Stephen D. Krasner, editor. *International Regimes*. (Ithaca: Cornell University Press, 1983), 2.

international nuclear non-proliferation regime, U.S. attempts at leadership in the nuclear issue area will not likely be effective and are likely to result in a continuation of the weakened nuclear non-proliferation regime. Without significant renewed efforts to do so, the United States and its allies will likely be faced with increasingly complex and persistent challenges to the nuclear “rules of the road.” From a social science perspective, this study examines the interaction international nuclear treaties as a dependent variable and U.S. leadership in nuclear arms control and non-proliferation as an independent variable.⁸ Specifically, this study is based on the idea that the degree to which the United States forms and implements effective policies that lead to participation in nuclear arms control will result in a direct, positive enhancement of international security from the threat of renewed proliferation and potential use of nuclear weapons. Said another way, states will more likely adhere to a nuclear arms control regime, rejecting the pursuit of nuclear arms as the United States increases its participation in nuclear arms control and disarmament.

Using three specific case studies, this dissertation will discuss both the formation of specific nuclear arms control treaties and the policy positions taken by the United States relative to these agreements. Assuming nuclear arms control is primarily the responsibility of nation states and that doing so is in the security interest of all nation states, then a nuclear arms control regime would be made up of “principles, norms and decision-making procedures reflecting the interests of the most powerful states in the

⁸Stephen Van Evera, *Guide to Methods for Students of Political Science* (Ithaca: Cornell University Press, 1997), 10-11. In this passage, the author defines and explains the use of dependent and independent variables borrowed from mathematics in social science terms.

system.”⁹ Any policy that detracts from the maintenance of such a regime can be seen as counter to the interests of the most powerful state. Given that the United States, during the immediate post Cold War period, can be defined as a powerful, if not the most powerful, state in the international system, then this relationship between theory and policy making can be tested. The importance of this research is to provide a theoretically based approach to the development of policy options that lead to the reestablishment of an effective and sustainable international nuclear non-proliferation regime.

ORGANIZATION OF THE DISSERTATION

This dissertation consists of six chapters which include an introductory chapter, an argument chapter, three case study chapters and a concluding chapter. This introductory chapter discusses the outline of the dissertation, presents the thesis statement and provides appropriate but brief historical background discussion on the important features of Cold War nuclear arms control and non-proliferation regime. The argument chapter includes a discussion of the theoretical foundations that explain how regimes, institutions and state leadership can enable achievement of the goal of nuclear disarmament. The argument also suggests a hybrid explanation for states to cooperate toward achievement of the goals of the Non Proliferation Treaty.

The case study chapters will focus on the development of nuclear arms control

⁹ Theory Talks.com, "Theory Talks Presents Theory Talks #21: Stephen Krasner on Sovereignty, Failed States and International Regimes," Theory Talks.com website, 2009. http://theorytalks.fileave.com/Theory%20Talk21_Krasner.pdf, (accessed April 14, 2009). Specifically Krasner describes the development of two separate definitions of his earlier work on regimes, one neorealist and one constructivist. From the interview, Krasner states “there’s a realist definition, which is: ‘regimes are principles, norms and decision-making procedures reflecting the interests of the most powerful states in the system’.”

and disarmament focusing on those treaties that form the three case studies: the Nuclear Non-Proliferation Treaty, the 1972 Anti-Ballistic Missile Treaty and the series of strategic arms control treaties from the first Strategic Arms Limitation Treaty (SALT I) through the new START Treaty signed in April 2010. Each of the three case study chapters provides useful material and theoretical discussion in support of the concluding chapter. The final chapter will provide an analysis of the value of the case studies in support of the dissertation thesis and a conclusion that will discuss the necessary steps to outline a U.S. policy agenda that may be used to rebuild the nuclear arms control regime while accounting for the new realities of the current international security environment. Each chapter is briefly introduced here.

WHY REGIMES, INSTITUTIONS AND STATE LEADERSHIP MATTER: THEORETICAL FOUNDATIONS FOR NUCLEAR DISARMAMENT

This chapter examines the theoretical foundations that explain how regimes, institutions and state leadership can enable achievement of the goal of nuclear disarmament and states the central argument of the dissertation: if the goals of the Nuclear Non Proliferation Treaty (NPT), prevent nuclear proliferation, enable civilian peaceful uses of nuclear power and eventually reach complete disarmament are to be realized, a robust, multilateral effort led by the United States is essential. As a pillar of the NPT, nuclear disarmament is a nearly universally accepted aim of the international community but has remained elusive for more than 40 years. By considering relevant international relations theory, an appropriate set of explanations for both the impediments and the way forward to this goal can be examined. Specifically, two central themes of

international relations theory are important to any explanation of an international goal that has yet to be reached. First, realist based explanations of the international system focused on the power relationships between states have held a prominent and firm position within international relations theory since the end of the Second World War. Most explanations for the rise of nuclear weapons are tied to individual state concerns about their survival and their perceived right to protect themselves and their national sovereignty. These concepts have a strong hold on those states that have sought nuclear weapons as the best guarantee of their security in what each sees as an anarchic world. The other central theme within international relations that is derived from liberalist thought, specifically cooperation of states primarily through multilateral approaches supported by international institutions is essential to achieve is important to understanding how to achieve nuclear disarmament.

What this research suggests is the requirement for a middle ground explanation or “hybrid theory” to allow states from either power or cooperation viewpoints to begin to see the value of agreement on an actionable agenda that leads to nuclear disarmament. Similar in approach to removing language as a barrier between two cultures, the hybrid theory proposed in this chapter attempts conceptualize a common framework based in international relations theory to assist in strengthening the nuclear non-proliferation regime leading to disarmament. Nuclear weapon states and those who see their security in primarily military power terms retain an image of the world that is best explained in realist terms but is increasingly less appropriate given the growth of globalization and increasingly dense relationships between states on economic, political and social issues. Purely military power applications by states including deterrence which nuclear weapons

support are increasingly problematic given the growing interdependence of states. For the remaining states that have either rejected nuclear weapons or never sought them, cooperation through the “bargain” that the NPT provides has been seen as more important toward achieving their view of national security. The hybrid theory suggested in this chapter is an attempt to create a common language or framing of the nuclear issue for both groups of states. As the one state that possesses a great deal of power in any of the dimensions of state power be it political, military, economic, social or informational, the United States is best positioned to lead both groups to a common understanding that would eventually lower both the risk of nuclear weapons and the reliance on them for security.

THE NUCLEAR NON-PROLIFERATION TREATY: A CASE STUDY IN REGIME MAINTENANCE

This case study will review the history of the NPT from its development through the current period where the treaty will be undergoing its five year review which offers an opportunity to reinforce its regime and advance toward its disarmament goal. The history of the NPT offers the reader an understanding of the difficulty of reaching a multilateral agreement as well as its durability. Contained within the case is a discussion of the NPTs strengths, weaknesses and potential improvements that would further the agenda of nuclear disarmament. The NPT provides a rich platform to discuss the importance of multilateral agreements and international institutions to the maintenance of a nuclear non-proliferation and disarmament regime which is the first main element of this dissertation’s argument. As will be shown, the NPT’s weaknesses can and should be

addressed through a renewed interest in the non-proliferation and disarmament process reenergized by one state in a leadership role. The United States seems once again to be rising to this challenge through a renewed nuclear agenda. Sustained efforts by the United States to reinforce the NPT and support multilateral efforts to reach its goals will be essential to long term success. The May 2010 NPT Review Conference offers the United States an excellent opportunity to continue to forward the goals of the treaty.

THE ANTI-BALLISTIC MISSILE TREATY: A CASE STUDY ON THE NORMATIVE POWER OF ARMS CONTROL AGREEMENTS

This chapter will detail the Anti Ballistic Missile (ABM) Treaty's history, review the major issues it addresses, provide a review of the contemporary discussions at three critical moments in the life of the treaty and discuss the related international relations theory specifically the value of leadership perception and institutionalism as they relate to the long term implications of U.S. withdrawal.

The ABM treaty represents first demonstration of U.S. willingness to abrogate an international agreement which had in fact led to other mutually reinforcing agreements on nuclear disarmament. The ABM Treaty was developed in conjunction with the strategic arms limitations negotiations that began as an outcome of the détente between the United States and the U.S.S.R. during the Nixon Administration and remained in force until the United States unilaterally withdrew in the winter of 2001-2002. The historical record would seem to indicate that the U.S. withdrawal from the ABM Treaty has reinforced other nations' concerns of the validity of previous U.S. treaty obligations especially in the area of nuclear issues, lessened cohesion within the international community to develop,

agree and enforce similar agreements and likely increased the difficulty in reestablishing an increasingly more binding non-proliferation regime.

Both the historical record and international relations theory support the value of continuing and reinforcing arms control agreements like the ABM Treaty and that national leadership along with their supporting elites are critical to their initial negotiation, ratification and sustainment. The value of established nuclear arms control agreements when supported and updated by the states involved can provide an important foundation for other similar agreements. This foundation as theory and practice would suggest requires active participation by more than just the states to be fully effective. Epistemic communities can be successful participants in achieving lasting change where governments are unable or unwilling to do so. In an area involving so many agencies and a nearly incomprehensible destructive power, coherence of action at the individual level is an essential element to compliance with state obligations. One essential component of any agreement is the willingness of the parties to be transparent in their actions. Epistemic communities can act as the forcing function for transparency and state compliance with its obligations.

Despite the passing of the ABM Treaty, bilateral negotiations and agreements can form a significant and useful portion of larger multilateral arms control efforts. The renewed U.S. nuclear policy agenda still places value on completion of a limited missile defense and seeks cooperation in this effort with Russia. Continuing to support a renewal of the bilateral relationship between the United States and Russia is an important part of the overall nuclear disarmament effort.

STRATEGIC NUCLEAR ARMS CONTROL: A CASE STUDY IN LIMITING ARMS RACES

Among the longest and most prominent arms control efforts since the end of the Second World War are the series of negotiations between the United States and Russia on limiting strategic nuclear arms. Beginning with the first Strategic Arms Limitation Talks (SALT I) in the Nixon Administration and continuing through to the renewed discussions following the expiration of the Strategic Arms Reduction Treaty (START I) on December 5, 2009, the United States and Russia have been in a lengthy effort to control and reduce their massive holdings in strategic nuclear systems. This strategic arms reduction process has made substantial progress toward achieving the ultimate goal of the NPT, total disarmament. While progress has been slow, a number of significant successes have occurred despite significant swings of the political landscape on the part of both nations as well as the environment around them. This process, which has had a renewed momentum in the last year, displays several key features of a successful arms control process that are supported by international relations theory. This chapter will detail the strategic nuclear arms reduction process of the past four decades, review the major issues associated with strategic arms reduction, provide a review of the contemporary discussions of stages of this process and discuss the related international relations theory, specifically the potential for regional nuclear arms races, as it relates to the importance of future negotiations and strategic arms reduction agreements.

An arms race between the United States and U.S.S.R. was a prominent feature of this period. While the international environment will not likely see a repeat of such enormous nuclear arsenals, concerns of new states emerging as nuclear weapon states

lead to a question of the level of understanding among the elites of these states and those who feel threatened by them. While power based theories of international relations developed during the Cold War may have seemed appropriate at the time, the increased potential of a terrorist initiated nuclear attack since September 11, 2001 has provided power to Sagan's call for strengthening of non-proliferation. Renewed negotiation efforts between the United States and Russia in line with President Obama's April 2009 Prague Speech have resulted in a new START agreement which offers support for continuing to reduce strategic arms and open a wider discussion of all nuclear issues.

ANALYSIS AND CONCLUSION

The final chapter provides a summary analysis and conclusion of the dissertation research highlighting the case studies and identifying three central findings. First, multilateral treaties that establish an issue based regime, like the NPT, tend to be difficult to achieve initially, if properly developed around an appropriate set of rules and norms, and reviewed frequently and equitably, will last significantly longer than bilateral treaties among powerful states. Second, for any international agreement on nuclear weapons to succeed, it must be supported by the United States. Finally, power-based international relations theories seem to be losing their explanatory power in the increasingly globalized environment of the post Cold War world while normative theories have yet to completely replace them. A significant factor in the issue area of nuclear disarmament is the merging of arms control efforts into the overall non-proliferation and disarmament agenda. The research supports the dissertation argument that a hybrid explanation of how states can best cooperate to achieve the goals of the NPT where states focused on power can

cooperate in bilateral and multilateral efforts and normative based states can accept power explanations for resolving nuclear issues.

In an effort to bridge the gap between the two schools of international relations that bear on this issue area, this research suggests the formation of a hybrid theory which provides a the potential to allow nuclear weapons states and non-nuclear weapons states including emergent or undeclared nuclear states to develop a more frequent multilateral effort to achieve the goals of the NPT. First, the issue of eventual extinction of nuclear weapons has clearly been decided as early as 1970. Even the non-signatories of the NPT have from time to time indicated their willingness to eliminate nuclear weapons under the assumption that the regional issues that placed them in the security dilemmas driving their requirements for the weapons are resolved. The majority of the world's states do not possess any nuclear capabilities either for security or electric power generation. Most of the world's states do not face an extant security threat and as a result have no need for nuclear weapons.

A framework that explains the need to eliminate nuclear weapons would have to be able to explain the requirement in a power-based way for nuclear weapons states and regionally threatened states while adding in normative based procedures that provide appropriate transparency and irreversibility to reassure the rest of the international system. As an example of initial steps taken by the United States and Russia, efforts like the Nunn-Lugar Cooperative Threat Reduction Program offer appropriate economics based incentives to comply with treaty requirements while building a sufficient level of trust between the participants. Removal of the Libyan WMD programs under international supervision is another example. States have to see the alignment of short-

term interests with long term international goals in order to decide to comply with established multilateral norms. Regardless of the internal rationale for making the decision to disarm, the international community must be prepared to support that decision in the long term. Financial and political incentives are likely key to such efforts. Specific policy recommendations from the case studies will be summarized into a single framework presented in the conclusion.

Full U.S. support to the NPT community and its goal of total disarmament would have to be a prerequisite to the required further bonding of all states to the norms of this regime. From the NPT's initiation through each of its key stages including the 1995 decision to permanently extend its mandate, each positive step has occurred with the full support of the United States. The current difficulties in further solidifying the treaty's norms have also been in part due to incomplete U.S. support for these initiatives. The upcoming 2010 NPT Review will likely succeed or fail on U.S. support for any recommended changes. Similarly, the United States should continue the tradition of bilateral negotiations with Russia until these states' arsenals reach an equivalent level with the other nuclear weapons states when an increasingly multilateral negotiation under the NPT norms should be developed. The conclusion section of the final chapter provides a review of the suggested changes to policy the United States needs to consider in order to further strengthen the non-proliferation regime and further merge arms control efforts with nuclear disarmament.

The main hypothesis of this dissertation that United States must reassert a position of leadership through multilateral cooperation to develop appropriate nuclear arms policies that effectively reestablish worldwide controls, continue reduction of nuclear

arms toward the NPT goal of nuclear disarmament requires a supporting argument which the next chapter provides. The key elements of the argument are based in international relations theory that discusses regimes, institutions and state leadership. This argument essentially forms the lens through which one can evaluate the three cases that follow and assess the appropriateness of the policy discussion that concludes the dissertation. While the suggestion that the United States must lead in the effort to achieve nuclear disarmament may seem somewhat obvious, the substance of how this leadership will be accomplished is the focus of this research. Ultimately, this dissertation contains a point of review of the past record of U.S. leadership in nuclear issues and a point of departure to return to the unfinished business of the Cold War.

CHAPTER II

WHY REGIMES, INSTITUTIONS AND STATE LEADERSHIP MATTER: THEORETICAL FOUNDATIONS FOR NUCLEAR DISARMAMENT

This chapter examines the theoretical foundations that explain how regimes, institutions and state leadership can enable achievement of the goal of nuclear disarmament and states the central argument of the dissertation: if the goals of the Nuclear Non Proliferation Treaty (NPT), prevent nuclear proliferation, enable civilian peaceful uses of nuclear power and eventually reach complete disarmament are to be realized, a robust, multilateral effort led by the United States is essential as are bilateral arrangements that account for those states who continue to see power based solutions as more acceptable. As a pillar of the NPT, nuclear disarmament is a nearly universally accepted aim of the international community but has remained elusive for more than 40 years. By considering relevant international relations theory, an appropriate set of explanations for both the impediments and the way forward to this goal can be examined. Specifically, two central themes of international relations theory are important to any explanation of an international goal that has yet to be reached. First, realist based explanations of the international system focused on the power relationships between states have held a prominent and firm position within international relations theory since the end of the Second World War. Most explanations for the rise of nuclear weapons are tied to individual state concerns about their survival and their perceived right to protect themselves and their national sovereignty. These concepts have a strong hold on those states that have sought nuclear weapons as the best guarantee of their security in what

each sees as an anarchic world. The international system has also been explained by more normative based explanations derived from liberalist thought. The minority view within international relations theory views the international system as capable of supporting cooperation of states primarily through multilateral approaches supported by international institutions. While it would be elegant to classify states in one or other of these categories (power or normative based), states that rely primarily on power based explanations for their views of their security environment also frequently participate in multilateral efforts to resolve issues. Finding a middle ground explanation or as this dissertation suggests, finding a hybrid theory of how to achieve a greater level of engagement of all states in the multilateral effort to control nuclear capabilities, is essential to understanding how to achieve the long term goal of nuclear disarmament.

What this research suggests is the requirement for a middle ground explanation or “hybrid theory” to allow states from either primarily power or cooperation viewpoints to begin to see the value of agreement on an actionable agenda that leads to nuclear disarmament. Similar in approach to removing language as a barrier between two cultures, the hybrid theory proposed in this chapter attempts to conceptualize a common framework based in international relations theory to assist in strengthening the nuclear non-proliferation regime leading to disarmament. Nuclear weapon states and those who see their security in primarily military power terms retain an image of the world that is best explained in realist terms but is increasingly less appropriate given the growth of globalization and increasingly dense relationships between states on economic, political and social issues. Purely military power applications by states including deterrence which nuclear weapons support are increasingly problematic given the growing interdependence

of states. For the remaining states that have either rejected nuclear weapons or never sought them, cooperation through the “bargain” that the NPT provides has been seen as more important toward achieving their view of national security. The hybrid theory suggested in this chapter is an attempt to create a common language or framing of the nuclear issue for both groups of states. As the one state that possesses a great deal of power in any of the dimensions of state power be it political, military, economic, social or informational, the United States is best positioned to lead both groups to a common understanding that would eventually lower both the risk of nuclear weapons and the reliance on them for security.

WHY ARE NUCLEAR WEAPONS NECESSARY?

In understanding how nuclear disarmament could be achieved and what the U.S. role toward its achievement should be, a central question must be answered: what purpose do nuclear weapons serve today? During the Cold War, they were seen as essential to guarantee the security of those nations who possessed them and their allies. A balance was sought between the two ideological sides of the conflict and nuclear weapons played their role. Proliferation of nuclear weapons had two dimensions, horizontal or adding more states to the nuclear “club” and vertical or adding more weapons to existing arsenals. Horizontal proliferation was feared and was considered by a few dozen states but in reality remained limited to less than ten. Vertical proliferation reached over 60,000 weapons between the United States and the Soviet Union in the mid-1980’s and now stands at less than a third of that number. So if this confrontation has ended, should other states seek to avoid the expense and the risk of accident, use or theft?

Both states and individuals are renewing their call for nuclear disarmament as was done in the aftermath of the 1962 Cuban Missile Crisis which itself led to the completion of the Nuclear Non-proliferation Treaty (NPT). The United States was a central actor in the achievement of the initial NPT and remains central to the achievement of its goals.

This research accepts the premise that nuclear disarmament is not only an acceptable goal of the international community but an achievable one. All of the policy and procedures required to achieve nuclear disarmament are known and have been suggested. The NPT, used as a basic platform to build a cooperative and sustained regime, provides much of the necessary components for nuclear disarmament. The history of the bilateral arms control relationship between the United States and Russia (including the former Soviet Union) provides additional useful mechanisms for the regime as well as highlighting the limitations of any such two state effort. What has eluded the international community is a sustained and global non-proliferation and disarmament regime that incorporates the best features of arms control, non-proliferation and disarmament and has the substantial and persistent support of the nuclear states. The United States is uniquely positioned as the original nuclear state to choose to lead a non-proliferation and disarmament coalition. The power of national leadership and in particular the American President to deliver and sustain an appropriate disarmament agenda is seen as the necessary catalyst for such a global enterprise.

Forty years ago, all but a handful of states stated their common desire “to further the easing of international tension and the strengthening of trust between States in order to facilitate the cessation of the manufacture of nuclear weapons, the liquidation of all their existing stockpiles, and the elimination from national arsenals of nuclear weapons

and the means of their delivery pursuant to a Treaty on general and complete disarmament under strict and effective international control.”¹ With the dramatic changes of twenty years ago which resulted in an incomplete resolution to the seemingly unending confrontation between the United States and the Soviet Union, one must wonder why the nuclear security issue area continues to generate global concerns that are equally vexing as those of the Cold War. If the collective aim of the community of nations is to rid the world of the risk of nuclear attack, then a number of important questions must be answered. What set of circumstances are required to advance the goal of total disarmament of nuclear weapons as envisioned in the Nuclear Non-proliferation Treaty (NPT)? What set of theoretical approaches would be most useful in furthering such an agenda? What role and potential positive impact does U.S. leadership have in international efforts to reach nuclear disarmament? Since the demise of the Soviet Union, a true global effort to achieve this goal has been uneven at best.

CENTRAL ARGUMENT: U.S. LEAD COOPERATIVE EFFORT TO ELIMINATE NUCLEAR WEAPONS

The central argument of this work is that the United States is uniquely positioned to lead the international community to the universally accepted conclusion that the risk posed by any nuclear weapon exceeds its utility given the current and likely future global security environment. In its simplest form, this research supports the need for a reenergized multilateral effort led by the United States that establishes and sustains a non-proliferation and disarmament regime built on existing international agreements and incorporates the best practices of past arms control efforts. This research examines three

¹ Appendix A, 319.

interrelated and supporting concepts that are essential components of a successful nuclear disarmament effort and form the theoretical explanation of just how such an effort would be completed: 1) regime theory and the power of multilateral institutions; 2) the strengths and weaknesses of bilateral arms control agreements and 3) the role of national leaders in sustaining state participation in international agreements. The power of regimes to gain state adherence to a common norm through the support of international institutions like the United Nations has been established in non-security areas and has utility in the security environment as well. Bilateral agreements particularly between the United States and Russia (and the former Soviet Union) have important components as well as weaknesses that can be useful to multilateral efforts like the NPT regime. National leaders have proven essential as both catalysts and sustainers of arms control agreements. Future bilateral and multilateral nuclear non-proliferation, arms control and disarmament efforts will depend upon the success of these leaders in leading their states to participate.

The Nuclear Non-proliferation Treaty, despite its weaknesses, provides an important foundation for any nuclear non-proliferation and disarmament regime. The long history of strategic arms control between the United States and Russia provides both reinforcement of the need for multilateralism in international agreements as well as examples of effective elements for any sustained disarmament effort. This arms control history also highlights the importance of sustained and consistent United States leadership in achieving international disarmament. This last element, embodied by the President's policies and actions, can also serve as a catalyst to reenergizing nuclear disarmament. President Obama has explicitly stated his conviction that nuclear weapons should be eliminated. His administration is actively engaged in reviewing nuclear arms

policy, negotiating a follow-on agreement to the strategic arms reduction efforts of the past and is likely to strongly support efforts to strengthen the NPT at the 2010 Review Conference. In setting out an ambitious nuclear disarmament agenda, Obama has also suggested a number of international initiatives that would serve to energize international support toward nuclear disarmament. These include support for ratification of the Comprehensive Test Ban Treaty (CTBT), completion of a Fissile Material Cutoff Treaty (FMCT), wider acceptance of IAEA inspections, strengthened non-proliferation efforts, a cooperative nuclear fuel bank for civilian energy use, and support for stronger sanctions use against NPT violators as well as convening an international nuclear security summit to develop support for this agenda.²

Exactly what purpose do nuclear weapons have if the majority of states agree that they should be eliminated? If they should be eliminated, the goal is universally accepted or nearly so, then only two questions remain: how to achieve it and how soon should it be achieved. Setting aside the lingering Cold War based rationales for nuclear weapons, many states are now asking important questions about the risks of maintaining nuclear arms related to concerns such as the tragic loss of life in any exchange to the social, political, economic and environmental impacts long term especially on non-belligerent states of any nuclear event. But many in positions of power within nuclear states, those

² Barack Obama, "Remarks by President Barack Obama, Hradcany Square, Prague, Czech Republic, April 15, 2009," *The White House website*, 2009. http://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered/, accessed March 21, 2010. President Obama outlined an ambitious agenda for achieving nuclear arms reductions and eventual disarmament just three months into his presidency. While domestic agenda issues like universal health care reform took priority for his legislative efforts, the passing of the December 2009 expiration date of the START I Treaty has been viewed by the Obama Administration as a reason to increase diplomatic efforts to reach agreement for a follow on and more restrictive agreement on strategic arms with Russia. Additionally, the Obama Administration has taken a longer period than expected to complete the related Nuclear Policy Review. This delay is believed to center on a difference of views between the Department of Defense and the White House over the future of nuclear weapons in U.S. policy. See David E. Sanger and Thom Shanker, "White House Is Rethinking Nuclear Policy," *The New York Times*, February 28, 2010.

acknowledged, those suspected and those seeking that special status, have continued to devalue any other concerns about the weapons as they retain their perceived insurance against future threats. This group of states continues to hold to power based explanations of the international environment while the majority of states are seeking alternatives that agreements like the NPT offer.

Bilateral agreements such as those negotiated between the United States and Russia, while resulting in a lower level in both states' inventories than during the Cold War, have proven insufficient and too easily abandoned to successfully achieve nuclear disarmament. Traditional nuclear arms control has provided essential processes that could be incorporated into the NPT and the renewed nuclear non-proliferation and elimination regime. Each nation would have to accept a loss of a certain amount of sovereignty in security decisions in order to gain the advantage of a world free of nuclear destruction. An important byproduct of this environment would be increasing levels of awareness of the roots and potential solutions to key security issues that an increased level of interaction of all states on the nuclear issue. For the United States, continued calls for states like North Korea and Iran to cease nuclear programs without a similar serious effort to meet the requirements of international agreements like the NPT are less likely to achieve their ends.

This research is based on the thesis that nuclear disarmament is an appropriate goal for the international community and given the evolving security environment of this century should be aggressively sought in as short a period as possible. Nuclear disarmament requires a multilateral effort led by an engaged and powerful state, structured by international organizations ultimately the United Nations which in turn

engages all states to support efforts to resolve regional conflicts while inhibit its achievement. This disarmament goal rests squarely on the ability of the community of nations to cooperate through international organizations such as the United Nations. A robust regime that encompasses international efforts to control, verify, and eliminate nuclear weapons and related materials would be required to achieve the goal. Processes to implement the regime would have to be transparent and irreversible with sufficient international controls to check efforts to seek new nuclear arms whether by a state or group. This seemingly impossible situation would be sustained and guaranteed by the former nuclear states with the United States as the natural choice for regime leadership. This international cooperative effort is theoretically supported by the accepted concepts of regimes, the value of international organizations over individual states and the value of moral leadership of a state like the United States.

The current international security environment has shifted from the bipolar Cold War arrangement to a limited period of dominance by the “sole remaining superpower” to a much more nuanced situation where traditional sources of military power have limited utility in deterring non-state actors or influencing emerging nuclear states. Stockpiles of the two former nuclear competitors have been dramatically reduced but remain at levels that are difficult to justify given the current and foreseeable global environment. Bilateral arms control efforts between the United States and Russia have not achieved their results as comprehensively or as rapidly as were expected in the immediate moments after the end of the Cold War. Other states have sought the “protection” that nuclear arms seem to provide. Non-state groups have professed their desire to possess them as well in order to further their aims. Whether one sees state-on-state nuclear exchanges, a terrorist attack or

an accidental use as the most likely next nuclear event, it would seem there is ample evidence to support the NPT's goal of nuclear disarmament especially in a world that has many more nuclear fault lines than existed two decades ago. Achieving this goal requires more than an established multilateral regime backed by international institutions which incorporate the best practices of bilateral arms control. Leadership of the first nuclear state is essential.

DISARMAMENT CATALYST: THE REQUIREMENT FOR U.S. LEADERSHIP

Modern international relations theory reflects the Cold War relationship of the two greatest military powers, the United States and the Soviet Union. Nuclear weapons were central to the power of these two states and as a result became the heart of the security concerns each had with the other. As the Soviet Union ceased to exist, nuclear issues were rapidly pushed to the periphery of states' foreign policy making and academic research agendas. Concerns over weapons of mass destruction lingered but shifted to a discussion of rogue states and terrorists with concerns over major nuclear war fading from view. Arms races or vertical proliferation among the more mature nuclear states were thought to have been relegated to the same dustbin of history as the Cold War. Yet only the United States and Russia were making any significant cuts in their existing nuclear forces. Today, the nuclear club has at least eight declared members with a range of other states considering their options, a situation that would argue the world is subject to an increasing risk of a nuclear event over time.

How can the international community work to prevent further horizontal proliferation and eventually achieve the disarmament goal of the NPT? Reinforcing the

current non-proliferation regime and establishing international acceptance of the norms the NPT upholds would seem to be the obvious path. Leadership by the mature nuclear states, the United States particularly, would remove the argument that what one state does for security should be allowed for all states. A renewed valuing of multilateralism by the United States through increased support of international institutions would enable increased cooperation among states not only on the nuclear question but on a range of underserved issues such as regional conflicts, economic imbalances, environmental concerns, and individual rights. These institutions offer the ability to develop and implement agreements that bind states together in common purpose and readily identify defectors or cheaters for punishment when effectively supported by member states. As the web of agreements on a range of issues grows, individual issue regimes tend to be strengthened resulting in increased cooperation and reduced conflict among states.

Over time states involved in international organizations see cooperation as more valuable than conflict or from an international relations theory perspective, normative state relationships replace those that relied on power based explanations. To effectively achieve nuclear disarmament, the near term agenda would have to include power based explanations to the nuclear “haves” and those who want to join them that encourage participation in the nuclear regime outlined here. For the more mature nuclear states, the “haves,” specific practical confidence building efforts among them such as de-alerting forces, joint monitoring organizations, ratifying the Comprehensive Test Ban Treaty and the Fissile Material Cutoff Treaty and full support of a robust inspection system led by the IAEA would offer practical steps to lessen their nuclear security concerns. The United States has suggested such an agenda and through its actions to complete these items

would demonstrate a strong commitment to reducing a dependence on nuclear weapons for security. This example would in turn likely have a significant influence on other nuclear weapons states and those who see nuclear weapons as essential for their security. The actions of the United States would also be essential in resolving persistent regional security issues that tend to push weaker states to seek nuclear options to defend themselves.

For the newer nuclear states and those who seek nuclear weapons, regional security issues would have to be addressed. The most persistent regional conflicts with nuclear dimensions include the ongoing issues within the Israeli neighborhood, the Arabian Gulf region, the Korean peninsula and the Kashmir question. Each of these unresolved conflicts has caused several states to turn to nuclear arms to influence their adversaries. In addition to dealing with the concerns of nuclear states and those who want to be one, today's international environment requires a regime that addresses the security concerns of all states and at the same time effectively addresses criminal activity that could potentially allow non-state actors to acquire nuclear capabilities that were once the sole purview of a limited number of governments. While the United States would seem to be the one state best positioned to set the example for other states to follow while placing the necessary support to the non-proliferation regime, the extent to which the original nuclear state is willing to do so remains to be seen. As this dissertation argues, the building and sustainment of a regime within the auspices of an international institution is the first element of the necessary framework to achieve nuclear disarmament.

GOING BEYOND ANARCHY: REGIMES AND INSTITUTIONS

As the United States attempts to take action on the agenda President Obama established in his April 2009 Prague speech, understanding and support for the non-proliferation regime through participation in international institutions will be critical to success. While the concepts of regimes and institutions are not new, many states continue to seek the realist path of self-help when confronted with security challenges. Regimes and their supporting international institutions offer the promise of a release from the risks of a state's tendency to singularly focus on military power as a solution to security concerns. Without a concentrated and sustained international effort to seek a different security arrangement than that of the 20th Century, states may be more likely to be subject to the growing negative effects of globalization such as nuclear terrorism. Cooperation on security specifically on the nuclear question through the support of a non-proliferation and disarmament regime offers a higher potential for reduced risk of a catastrophic nuclear event.

After three decades of competition between the United States and the Soviet Union, a growing number of theorists sought to define new ways to consider international relations in situations which the concept of power was not central to the explanation of their behavior. One of the key concepts that became prominent in the early 1980's was regimes. In "Security Regimes," Robert Jervis defined regimes as

those principles, rules, and norms that permit nations to be restrained in their behavior in the belief that others will reciprocate. This concept implies not only norms and expectations that facilitate cooperation, but a form of cooperation that is more than the following of short-run self-interest.....the fact that neither superpower attacks the other is a form of cooperation, but not a regime. The links between the states' restraint and

their immediate self-interest are too direct and unproblematic to invoke the concept.³

Steven Krasner defined them similarly as “sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors’ expectations converge in a given area of international relations.”⁴ The definition Krasner uses narrows the concept to a single issue between two or more states. Regime theory has been useful in several issue areas such as environmental, legal and business but has had limited success when applied to security concerns.⁵ Specific to this research, nuclear issues, specifically non-proliferation, have been associated with the concept of a regime. As the NPT has evolved over the years, the treaty and subsequent associated agreements has functioned as a regime with a range of results. Each time an event that is viewed as contrary to the principles of the NPT, such as a North Korea exploding a nuclear device, the non-proliferation regime is seen as failing or no longer viable. Within the international relations field, regimes remain a subject of study and criticism especially due a limited set of successful examples.

Regime theory can be divided into three main views: power based, interest based or knowledge based depending on the degree that institutionalism matters to the description.⁶ The power based explanation centers on the concept of hegemonic stability advanced by Kindleberger and later codified by Gilpin. Gilpin theorized that an

³ Robert Jervis, "Security Regimes," *International Organization* 36, no. 2 (1982): 357.

⁴ Stephen D. Krasner, *International Regimes*, Cornell Studies in Political Economy (Ithaca: Cornell University Press, 1983), 2.

⁵ For a prominent successful example from the environmental issue area, see Peter M. Haas, "Do Regimes Matter? Epistemic Communities and Mediterranean Pollution Control," *International Organization* 43, no. 3 (1989). This work will be discussed in a later chapter. For a recent review see Joachim Blatter, "Performing Symbolic Politics and International Environmental Regulation: Tracing and Theorizing a Causal Mechanism Beyond Regime Theory," *Global Environmental Politics* 9, no. 4 (2009).

⁶ Andreas Hasenclever, Peter Mayer, and Volker Rittberger, *Theories of International Regimes*, Cambridge Studies in International Relations, 55 (Cambridge; New York: Cambridge University Press, 1997), 2.

international liberal economy was dependent on a single dominant state to survive. This hegemonic state has to be committed to the principles of a liberal international order.⁷ The hegemon is also “has a responsibility to guarantee provision of the collective goods of an open trading system and stable currency.”⁸ Given the history of the 20th century, Gilpin saw an alignment of dominant economic power with military power. Today, the discussion of the U.S. relationship to the world is in line with this concept.

The concept of interest based regimes is primarily from the work of Robert Keohane which will be discussed later in this review. In essence, Keohane’s argument is based on the realist assumption that states are rational actors seeking self-help and utility-maximizing under international anarchy. Regimes facilitate international cooperation, which, in Keohane’s view, would otherwise be difficult or impossible to achieve, not necessarily by changing actors’ interests (preferences) or values but by altering their incentives or calculations for action.⁹ International cooperation materializes in mutually beneficial agreements, not specifically in regimes. Regimes help bring about such agreements. Keohane argues that regimes facilitate cooperation by providing states with information or by reducing their information costs.¹⁰ States decide to cooperate because of their individual fear of being cheated is lowered by the fact that regimes facilitate the flowing of information about other states’ compliance.

⁷ Robert Gilpin and Jean M. Gilpin, *The Political Economy of International Relations* (Princeton University Press Princeton, 1987), 72-79. Author credits Kindleberger, “Dominance and Leadership in the International Political Economy,” *International Security Quarterly*, Vol. 25, No. 2, 242-254, for first identifying the need for a hegemon in economy. John Ruggie, in *International Organizations*, “International Regimes Transaction and Change”, 382, is credited by Gilpin for the requirement of a hegemon to adhere to international liberal norms.

⁸ *Ibid.*, 74.

⁹ Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy*, 64.

¹⁰ Hasenclever, Mayer, and Rittberger, *Theories of International Regimes*, 32-39.

Keohane uses game theory to explain the power based theory of cooperation where individual states' violation or defection from agreed procedures, rules or norms will affect their ability to achieve goals in other issue areas. As the games are iterated, cooperation will be achieved. Keohane also believes regimes help shape the reputations of members by providing standards of behavior, which raise the costs associated with noncompliance. But Keohane also acknowledges that there are transaction costs in creating and maintaining a regime, thus states are more willing to create regimes that are based on a large set of mutually beneficial agreements, but still regime's collapse is possible when transaction costs are high.¹¹ Knowledge can also be a basis for regimes. Knowledge based or cognitive regimes focus on "knowledge dynamics, communication, and identities."¹² Supporters of this theory, referred to as cognitivists, suggest these regimes are formed around the ideas and knowledge possessed by state decision makers. Cognitivists believe that the interests of states are shaped by the beliefs held by their respective leadership. As regimes are formed to shape state behavior, cognitivists see this shaping beginning with the assumption that leader's beliefs can be changed which in turn would lead to a change in policy that would be in line with regime norms. Changes in beliefs are likely to occur as state leadership assesses changes in the international system and see the need to align state interests with their new beliefs.

Cognitivism is divided into "strong" and "weak" formulations. Strong cognitivists see the existence of an international society governed by international institutions. The strong cognitivists "basic insight" about knowledge based regimes is that knowledge states possess is actually what the state is. These states exist "only by virtue of a shared

¹¹ Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy*, 100-03.

¹² Hasenclever, Mayer, and Rittberger, *Theories of International Regimes*, 2.

knowledge which spans international relations as a social space.”¹³ Weak cognitivists believe regimes can be formed and sustained based on learning of new ideas which “can influence the demand for rule-based cooperation between states.”¹⁴ These regimes are supported by experts like scientists who work with governments, non-governmental groups and individuals to form epistemic communities or knowledge-based transnational networks who can assist in agenda setting for regimes.¹⁵

DIFFICULTY OF ACHIEVING REGIMES

From a theoretical standpoint, if relations between states can be explained in terms of distribution of military and economic power (balance of power) then no regime exists. Jervis believes “if the connections between outcomes and national power are indirect and mediated, there is more room for choice, creativity, and institutions to restrain and regulate behavior, and produce a regime.”¹⁶ If states that submit to relations that are defined by activity that allows the fostering of long-term peace and are less likely to maximize the achievement of power in pursuit of fulfilling self-interest then a regime can operate. Problems exist from the fear of cheating or individual states behaving in pursuit of self-interest vice the common international good that the regime seeks to define and regulate. In the NPT regime, the common international good is total nuclear disarmament.

The biggest roadblock to achieving an effective regime is fear. Jervis is careful to point out that this dynamic can be seen in areas other than security but the stakes in the

¹³ Ibid., 138.

¹⁴ Ibid., 139.

¹⁵ Ibid.

¹⁶ Jervis, "Security Regimes," 358.

security area are much higher. Regimes seek to solve the security dilemma or the likelihood of states believing they need to increase their offensive and defensive capabilities due to a similar buildup of other competing states. The dilemma arises from two problems, first, the inability of this competition to defuse itself in anything less than war and second, the belief of the individual competing states that not building up will leave them vulnerable to attack and defeat. Regimes can achieve an acceptable level of security through the establishment of a set of rules or norms of cooperative behavior that all states accept. Jervis finds “security, its competitive nature, the unforgiving nature of the arena, and the uncertainty of how much security the state needs and has, all compound the prisoners’ dilemma and make it sharper than the problems that arise in most other areas. Furthermore, decision makers react by relying on unilateral and competitive modes of behavior rather than seeking cooperative solutions.”¹⁷ What has to occur for states to cooperate is the fostering of a collective willingness to go beyond the traditional security fears driving them to defect and protect their self interests.

While one can see specific instances where states can seek and achieve agreements but not necessarily under conditions one could identify as a regime, states can and do form regimes. Robert Keohane, drawing on the work of Ronald Coase, pointed out that states would not need a regime to form if agreements could be reached where the parties could be held accountable for any adverse actions, perfect information on the

¹⁷ Ibid., 359. For a discussion of the Prisoner’s Dilemma in the context of regimes, see Arthur A Stein, “Coordination and Collaboration: Regimes in an Anarchic World,” *International Organization* (1982). Stein’s discussion is also contained in David A. Baldwin, ed. *Neorealism and Neoliberalism: The Contemporary Debate* (New York: Columbia University Press, 1993).

issues was available and there would be no transaction costs associated with the agreement.¹⁸

According to Robert Jervis, to form and operate, regimes require four conditions. First, the most powerful states have to agree to start one which assumes they are happy with the status quo. Second, all states must share the belief that all share the same values for mutual security and cooperation. Third, no state can have expansionist desires in the belief that this would improve its security. Finally, states must see war and seeking security in pursuit of individual state interest “must be seen as costly.”¹⁹ Jervis describes the Concert of Europe as the best historical example of an operating regime. During this period, states chose to cooperate as a matter of state policy, emulating these four conditions for at least eight years (1815-1823) and to a lesser extent through the end of the Crimean War in 1856.²⁰ These same four conditions remain essential to the viability of regimes even in today’s security environment. What remains a point of discussion among international relations theorists is how regimes control state behavior.

One of the key divisions between realist and liberal views on regimes lies in just how regimes control national behavior. From the realist tradition, states will always act in line with their self interest only yielding when the power of other states cannot be countered. Jervis points to The Concert of Europe as an example of a successful regime as it provided the states involved with the belief that continuing the regime was better than going one’s own way. This “self-fulfilling dynamic” allowed the states to believe that war was not eminent and continuing the Concert was instrumental in maintaining this

¹⁸ Robert O. Keohane, "The Demand for International Regimes," *International Organization* (1982).

¹⁹ Jervis, "Security Regimes," 362.

²⁰ Robert Jervis, "From Balance to Concert: A Study of International Security Cooperation," *World Politics: A Quarterly Journal of International Relations* (1985). Jervis expands on his discussion of this example focusing on gains that can be expected from increased cooperation.

belief. Key to regime sustainment was the fact that states believed that the Concert would prevent any change to the status quo in relation to territory. Jervis discusses the idea of reciprocity as a strengthener of the Concert, or states were able to negotiate, make concessions without being seen as weak by other states, and in several instances states could give several concessions without expecting an equal amount from the others.²¹ One could argue that states in the Concert were acting in their self-interest but not in an effort to maximize their individual power, alignment with group norms trumped power seeking.

This environment was maintained by the accepted belief that any behavior outside the established norm would not be accepted and would result in a collapse of the regime and a loss of any further benefit especially in the long term. While the Concert lacked any formal institutional structure, it did have sufficient power from direct involvement of the states' sovereign leaders when discussions had to occur. In order to keep the leaders from developing positions that would be contrary to the common good, the diplomats met frequently and over time expressed views that were not always in line with national views. These conferees had developed a common understanding that worked to the benefit of all states vice the state individuals represented.²² Frequent meetings of conferees provided an early form of institutionalization of the common view of the participants that was distinct from their individual governments. When any participant did meet with their leaders at home, this common view was a direct influence on the briefs provided to state leaders and can be shown to have influenced national decisions.

²¹ Jervis, "Security Regimes," 366-67.

²² Ibid.

While the Concert showed an early example of an operating regime, Jervis believes that a lack of formalization, the process of “controlling the risk of war, and the perception at home of a lack of national loyalty likely destroyed it. States eventually saw the need to follow self-interest as the collective memory of the reason to form the Congress faded. The short-run need to be secure over rode the pursuit of the long-term goal of peace. Jervis concludes that a security regime is less likely to be in demand when the balance of power between competing states has “apparent stability.”²³

Key to his formulation of how regimes function was Jervis’ discussion of the relationship of offensive and defensive weapons. Which “individualistic measures” a state takes in order to maintain its security “depends on whether offensive measures differ from offensive and defensive policies.”²⁴ If a state can secure a “relatively cheap, safe and effective” defense, such as through a national anti-ballistic system, it would be less inclined to require a regime.²⁵ This offensive versus defensive debate is a strong thread throughout the literature both in realist and liberal camps.

At the height of the Reagan period of the Cold War some three years after “Security Regimes” was published, Jervis provided a deeper discussion on the mechanisms involved in establishing and maintaining a security regime. He first outlines the power based assumptions of state interaction where security is gained through the traditional balance of power theory. States react to external pressures to seek to maintain an acceptable level security in relation to other states. Normally this balancing effort results in states working together to prevent any one state from becoming dominant. Through this discussion, Jervis was building a bridge from power based explanations to a

²³ Ibid., 378.

²⁴ Ibid., 362.

²⁵ Ibid.

more normative view of the interaction of states in pursuit of security. In order to see how regimes can be successful, one needs to see the relationship between them and their supporting structures known as international institutions.

POWER AND INTERDEPENDENCE: EXPLAINING REGIMES IN THE INTERNATIONAL SYSTEM

In the neoliberal view of international relations theory, international institutions are the support structure for regimes to form and operate. Robert Keohane has been the leading theorist within what has become the school of institutionalism. Beginning with his collaboration with Joseph Nye in 1968 to develop a means to explain transnational actions and expand the discussion space in international relations, Keohane has progressively developed a set of concepts that go beyond the solely power based view of neorealists. The seminal work *Power and Interdependence* has been reissued twice with each new edition adding and adapting their conception of how states can work together for common interests.²⁶ *Power and Interdependence* outlines a set of four models of how regimes change state behavior based on the assumption that power alone is insufficient as a concept to fully explain state behavior.²⁷ These models are based on the concept of interdependence which assumes states are mutually dependent on each other for a range of transactions and outcomes.

Interdependence is not always mutually beneficial or balanced. Keohane and Nye saw the international system as divided in its operation along issues and by regions. Not all states were not as frequently drawn into as many other states' economies, issues or

²⁶Robert O. Keohane and Joseph S. Nye, *Power and Interdependence*, 3rd ed. (New York: Longman, 2001).

²⁷*Ibid.*, 9-17.

conflicts in 1977 when *Power and Interdependence* was first published as they are today. Even the most powerful states in the past did not directly impact every other state in the system. The authors argue that a more complex interdependence of states was emerging in more than military or security terms but also along increasingly economic and social lines. Keohane and Nye saw international regimes as the “intermediate factors between the power structure of an international system and the political and economic bargaining that takes place with it.”²⁸

Interdependence is described by Keohane and Nye through four models of regime change which is driven by changes in the norms and rules adopted by international institutions. From a social science perspective, changes in the rules states agree to follow in international institutions like the United Nations, International Monetary Fund, or the World Trade Organization would form an independent variable that impacts regime changes in issue areas. Regime change which would influence state behavior would form a dependent variable. Interdependence was not a simple issue of multiple bilateral state interactions. Complex interdependence, which more accurately described the world system, has three characteristics including “multiple channels of contact among society, lack of clear hierarchies of issues, and irrelevance of military force.”²⁹ The four models Keohane and Nye discuss include economic and technology processes, issue structure, overall power and international organizations models. Each of these models describes different dimension of the overall complex interdependence concept. Each also helps to show the limitations of a single and parsimonious theory that explains how the international system operates in all situations. While the nuclear issue area would lie

²⁸ Ibid., 19.

²⁹ Ibid., 21-25.

mainly in the security dimension, any action or policy taken would have impacts within all dimensions.

In the area of economics and technology processes (economic sensitivity model), Keohane and Nye point out that economic changes and advancements in technology have been suggested as having the power to upset existing international regimes. While they do not deny the wide ranging impacts of these changes, the authors believe states can and do reallocate resources to at least marginally mitigate these impacts. Money like power, they suggest, is fungible and more economically successful states are under no direct pressure to share their resources. Each economic issue or technological advance has varying levels of importance to different states and as a result those states with the greatest amount of economic power successfully tie it to political agendas.³⁰

Keohane and Nye's second model assists in explaining regime change and focuses on overall power structure, specifically in relation to a hegemon's ability to control the system. This model draws heavily on the idea that a militarily powerful state would also be the dominant economic power and was particularly useful during the early post Cold War period when the United States was seen as the sole remaining superpower. Change in this type of regime could only occur at a time of defeat in war or economic collapse. The history of the post Cold War period seems to be less supportive of the descriptive power of such a model. The power of the United States for example after World War II has declined economically in relation to other states such as Japan and Germany. The once dominant U.S. military power is seen by many today to be atrophied by the prolonged engagements in Iraq and Afghanistan. The Soviets and Chinese systems were essentially separated for the world economy and had varying levels of military

³⁰ Ibid., 33-36.

power before the demise of one and the opening economically of the other. As globalization takes hold, this model would seem to be losing its predictive capability.³¹

Issues structuring, the third of Keohane and Nye's regime models, aligns directly with the functioning of regimes as defined by Jervis. This model assumes the actor in a specific issue area with the most strength will drive the agenda by setting the norms and rules all actors would follow and while forcing compliance. In effect, an issue dominant actor is achieving a balance of power situation in an area that is important to its interests. Oil distribution and control in the 1970's by the Organization of Petroleum Exporting Countries (OPEC) was cited as an example of this type of regime. In the area of the law of the seas, smaller states dominated the agenda asserting their rights to access resources that had been assumed to belong to those states who first laid claim to them.³² Adding further complexity in the current international environment, actors who are not states can and often do become visible in the debate on specific issues and have at times dramatic impact on the establishment of both rules and outcomes.

Keohane and Nye provide a fourth model based on international organizations which attempts to deal with the inadequacies in the three structural models described above. The international organizations model assumes issue infungibility, or that there are no alternative solutions to an issue, is a problem to be solved. An international organization is able to leverage the combined capability of the individual states to counterbalance more powerful or capable states. By conveying rights to all member states, the more capable states have a lower importance. The machinery of international institutions allows change within regimes resulting in changes in the international

³¹ Ibid., 36-40.

³² Ibid., 45.

environment. The limitation of international organizations and this model lies in the fact that complex interdependence must be occurring. Should any state not wish to support the principles of an international organization, Keohane and Nye indicate one or more of the other models would be more useful.³³

The authors were able to use primarily economic and diplomatic examples to demonstrate the workings of their models but had not completely built concrete linkages between regimes and institutions. Keohane would provide a great deal of this necessary work in his book, *After Hegemony*.³⁴ While modeling the current environment is difficult to do precisely, two decades of experience and trends for the near future provide ample support for the requirement to attempt to do so as accurately as possible. Regimes and international institutions operate in an international environment that has long been described by international relations theorists as dominated by individual states acting in their self interest which in the case of security is means acting to survive. These explanations still retain a significant amount of power and must be understood to see how to best seek an effective regime in today's international environment.

THE REALIST TRADITION: UNDERSTANDING THE POWER OF ANARCHY

Discussions on how states relate to each other have a rich literature that in the last century has flowed from the dominant concepts of states acting in a world of lawlessness to the more nuanced views of a normative narrative since the 1970's. To fully appreciate the normative literature, one must have an understanding of the power based concepts that today's international relations theories either contain or challenge. Since the rise of

³³ Ibid., 50-51.

³⁴ Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy*. See additional comments on this work in this and the preceding chapter on this work.

the concept of a Westphalian state, scholars have worked to describe a general theory of how states interact. The core concepts that emerged in the last century flow from the writings of Hans Morgenthau. Later refined by Kenneth Waltz and John Mearsheimer, power based theories of state interaction focused on a world of anarchy.

Anarchy remains the most important concept within international relations theory. Defined as a state of lawlessness or chaos that governs the international environment, anarchy socializes actors or states to behaviors that are shaped by the situation they face. These states will find a need to protect themselves from threats of other states' behaviors. Security dominates this world view and is evidenced in reality by the fact that nearly all states have armies. An anarchic world is then characterized by a lack of government structure above the individual states. Without a governing body, no policing of "illegal" behavior occurs. States are free to pursue their own agendas which are in line with their interests. Key among these interests is survival. This Hobbsian world lacks any sense of community or a need to cooperate on common interests.

The anarchic world in this view is in operation today when compared with the available evidence especially beginning in the 20th century and continuing to today. Despite the efforts of the United Nations, today's international environment is absent of a widely effective government over all of the states. States are free to act as they see fit to further their interests. The U.S. invasion of Iraq in 2003 has been viewed as evidence of a state only minimally seeking UN permission to act on its behalf. Russia recently engaged in combat operations in Georgia violating another states border without any significant sanction or penalty from the UN. The only effective issue area where the UN has had

success is in the development and enforcement Law of the Seas and is beginning to have an impact in other non-security areas.

Within this anarchic world, the lack of a widely effective government over all states also leads to three important absent characteristics that state governments possess. First, in a state of anarchy, the world does not have an effective policing function. In the last century, the United States has frequently led other states in furtherance of this policing role. Whether in World War II as a late joining member of an alliance of states to Korea as a member of a United Nations force to Afghanistan in a coalition which includes the NATO Alliance, the United States has selectively engaged in enforcing the interests of the world community. One could just as frequently show the number of conflicts that were violations of the UN Charter that the United States chose not to enter to enforce the “will” of the international body.

The second missing characteristic of government missing in today’s world is a universally accepted set of laws that are enforceable and effective. The UN Charter is an attempt to set a foundation for such a set and is quite comprehensive in terms of generally accepted principles of human rights and proper behavior of states. Yet states repeatedly chose to follow their individual interests whenever these are seen as more important. Often this is a result of the unresolved conflicts that existed before the establishment of the UN. Despite the high ideals they embody, not all cultures accept even some of the basic accepted concepts of others. History is far longer than the efforts of modern states to develop a universally acceptable set of laws to be abided and enforced.

An example of this missing characteristic of government in the security arena would be found in the preamble to the UN Charter where the unresolved historical

conflict between sovereignty of individual states and the quest for universal peace acts as an incentive to strive for world government.

We the people of the United Nations determined to save succeeding generations from scourge of war, which twice in our lifetime has brought untold sorrow to mankind, to reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small, and to establish conditions under which justice and respect for the obligations arising from treaties and sources of international law can be maintained, and to promote social progress and better standards of life in larger freedom, and for these ends to practice tolerance and live together in peace with one another as good neighbours, and to unite our strength to maintain international peace and security, and to ensure, by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest, and to employ international machinery for the promotion of the economic and social advancement of all peoples, have resolved to combine our efforts to accomplish these aims.³⁵

How do the states of the world, all mindful of their individual survival, simultaneously release their hold on individual sovereignty sufficiently to align with the interests of all states? Evidence would indicate this is being attempted slowly but steadily on an issue by issue basis. Outliers such as war criminals are being held to account, Serbia's Milosevic being the latest example, under international legal authority.

The last missing characteristic of government that would control the anarchic world is a sense of global community. State governments are often formed and perpetuated based on culture. Among the nearly 200 recognized state entities that exist today, a wide range of cultures, economic conditions, resources available, and political systems results in few common or shared threads to hold them together. In comparison, the United States has a political culture based on democratic principles and an economic culture that is based on free enterprise. Other states range from autocratic rule similar to

³⁵ United Nations, "Preamble to the Charter of the United Nations," *United Nations website*, 2010. <http://www.un.org/en/documents/charter/> (accessed January 20, 2010).

that of the pre-Westphalian world to enlightened democratic states. Vestiges of the communist era remain despite the growing impact of globalization and the resulting political, demographic, economic and social shifts it has brought to the world. A single view of government has yet to emerge that fully eliminates the baser instincts of individuals and groups to seek power.

Living in an anarchic world has consequences. The largest among these has been the recurrence of state on state warfare. The UN was created in a second attempt in less than a generation to create a world body dedicated to reminding its members that war was a circumstance to be avoided. The previous attempt, the League of Nations, failed in part due to a lack of support of all nations to seek peace and reject an individualistic agenda. At the end of the Second World War, the victors and the losers sought to avoid another war. This United Nations concept was born out of the same motivations and painful memory of war that spawned the Concert of Europe. One could easily argue that while the threat of major power war has passed the potential for a recurrence exists in the anarchic world. Another important feature of the anarchic world is the drive for states to act in their self interest. This “self-help” world is a constant theme within the realist school and one that is difficult to completely deny. But is it possible to encourage and develop the appropriate frameworks to lower the likelihood of conflict? If so, how would that be accomplished? Institutionalism and regimes development offer one set of potential solutions. Shortly after the end of the Cold War, anarchy and power based international relations theories came to be hotly debated by those who saw its limitations.

NEOREALISM AND NEOLIBERALISM: POWER VERSUS NORMS

In the study of international relations, a debate between two prominent groups of scholars, best labeled as neorealists and neoliberals, began primarily with the publication of Kenneth Waltz's *Theory of International Politics* in 1979. Central to the debate was how the international system operated with neorealists led by Waltz maintaining the anarchic character of state interaction. Neoliberals had a wide range of alternative views of how the system functioned with most based on normative concepts. Somewhat simplified, the debate placed power or norms as the central force in the relationship of states to each other. One of the key points of contention was the role of regimes and institutions. In 1993, David Baldwin offered, *Neorealism and Neoliberalism: The Contemporary Debate*, a collection of essays and articles that renewed and extended this debate.³⁶

Baldwin framed the discussion in his introductory essay which outlines six key points of the debate.³⁷ Both sides acknowledged that the international system is anarchic but disagree about what anarchy means and why it matters.³⁸ On the issue of cooperation, neorealists view it as difficult if not impossible to achieve or maintain. Neoliberals accept this view but offer the European Union will be the modern test for the success of cooperation.³⁹ Neorealists view relative gains, where as long as a state stays ahead of the nearest competitor its security needs are fulfilled, as key to the international system while

³⁶ An earlier work edited by Robert O. Keohane, ed., *Neorealism and Its Critics* (New York: Columbia University Press, 1986) contained the initial collection of essays by Kenneth Waltz, John Ruggie, Robert Cox, Richard Ashley, Robert Gilpin and Keohane which placed Waltz's concepts and his more prominent critics in one volume. This debate continues to the present within the international relations field even though most aspects of the security environment of the 20th century have significantly changed.

³⁷ David A. Baldwin, "Neoliberalism, Neorealism, and World Politics," in *Neorealism and Neoliberalism : The Contemporary Debate*, ed. David A. Baldwin (New York: Columbia University Press, 1993).

³⁸ *Ibid.*, 4.

³⁹ *Ibid.*, 5.

neoliberals see absolute gains, where all states must see their needs are met, as central to fostering cooperation.⁴⁰ On the issue of priority of state goals, neorealists stress the need for national security for state survival. Neoliberals understand the need for security but believe economic issues are primary to achieving it.⁴¹ Neorealists see the measurement capabilities of states as another key to the relationship between states. Neoliberals emphasize the intentions of states as seen in their efforts to gain capability.⁴² A final major focal point for the debate centers on the role and value of international institutions and regimes. Keohane argues that since WWII, regimes and institutions have gained a significant role in international affairs that is not fully accounted for in neorealist theory. Neorealists accept the existence of both regimes and institutions but discount their impact on the anarchic system.⁴³

From the neoliberal's side, Arthur Stein offered regimes as a solution to anarchy.⁴⁴ Describing regimes in terms similar to those of Helen Milner, Stein felt that they exist when the interaction of states is not unconstrained or ruled by independent decision making.⁴⁵ International regimes exist when joint state decision making results in desired patterns of state behavior.⁴⁶ These regimes tend to arise in two situations or dilemmas: common interests or common aversions. The dilemma of common interests is commonly referred to the prisoner's dilemma where two actors independently chose options that result in an equilibrium outcome in neither state's interest. The issue is

⁴⁰ Ibid., 6.

⁴¹ Ibid., 7.

⁴² Ibid., 7-8.

⁴³ Ibid., 8.

⁴⁴ Arthur Stein, "Coordination and Collaboration: Regimes in an Anarchic World," in *Neorealism and Neoliberalism : The Contemporary Debate*, ed. David A. Baldwin (New York: Columbia University Press, 1993).

⁴⁵ Helen V. Milner, "International Theories of Cooperation among Nations: Strengths and Weaknesses," *World Politics: A Quarterly Journal of International Relations* 44, no. 3 (1992): 466-96.

⁴⁶ Stein, "Coordination and Collaboration: Regimes in an Anarchic World," 31.

addressed by regimes that focus on collaboration where specific desired behaviors and penalties for cheating are agreed.⁴⁷ The dilemma of common aversion is a situation where actors seek to avoid a common result. A regime focused on cooperation allows for self-enforcement and succeeds through converging of expectations.⁴⁸ Stein also provided further discussion on regimes and interests, the structural bases for regime formation, and regime change. All are elements of theory which neorealists and Waltz in particular tend to discount.⁴⁹

Displaying a range of alternative explanations to the neorealist view of the international system, other neoliberal voices provided key elements of the normative view that retain their value and help frame the role of regimes and international institutions. While not rejecting the concept of an anarchical world, Robert Axelrod and Robert Keohane outlined how cooperation can be achieved within one.⁵⁰ They focused on the effects of structure on cooperation and the context of how states interact. Cooperation among actors is affected by three situational dimensions: the mutuality of their interests, the concept of the “shadow of the future” and the number of actors involved.⁵¹ As states interact, each has specific interests that drive their actions. When these interests are similar, cooperation can be fostered if a suitable payoff structure for all actors can be devised. An improper payoff structure will likely result in an increase in

⁴⁷ Ibid., 41.

⁴⁸ Ibid., 43.

⁴⁹ Ibid., 45-50.

⁵⁰ Robert Axelrod and Robert O. Keohane, "Achieving Cooperation under Anarchy: Strategies and Institutions," in *Neorealism and Neoliberalism : The Contemporary Debate*, ed. David A. Baldwin (New York: Columbia University Press, 1993).

⁵¹ Ibid., 87. Lengthening the shadow of the future first suggested in this authors work in the early 1980's now is a key concept in international relations theory and economic research attempting to explain consumer behavior and expectations. In international relations, lengthening the shadow of the future is related to how a state perceives the security environment; the more secure the state perceives it will be the longer the length of the future's shadow. An expanded explanation appears later in this chapter.

the level of conflict which in turn causes actors will defect from the agreement. The authors believe achieving cooperation is more easily done in some settings than others. They note security issues tend to be more contentious than economic ones.⁵²

The degree of value the states place in payoffs for future cooperation relative to today's payoffs will determine the level of continued cooperation, as the value increases in the future (lengthening the shadow), cooperation will increase.⁵³ This shadow is lengthened by several factors including long time horizons of agreements, reliability of information exchanged and fast feedback of changes in other actor's actions.⁵⁴ The number of actors involved affects the level of reciprocity among them. To be effective, reciprocity depends on the actors' ability to identify defectors, the ability of actors to retaliate against defectors, and the sufficiency of long term incentives to do so.⁵⁵ The authors believe that problems with reciprocity can be dealt with by including powerful actors to deal with states with a lower level of commitment.⁵⁶ Regimes can be used to reinforce and institutionalize reciprocity.⁵⁷

Confronting a central neorealist concept, Helen Milner challenged the view that the world is anarchic directly and offered that interdependence is a more appropriate theory of international politics. Addressing one of the keys to widening the neoliberal view, interdependence, Helen Milner offers a critique of neorealist approach of emphasizing international politics over domestic systems. She stresses the concepts interdependency as being the better description of the world. She draws on Thomas Schelling to describe "strategic interdependence" as "the ability of one participant to gain

⁵² Ibid., 91.

⁵³ Ibid.

⁵⁴ Ibid., 92.

⁵⁵ Ibid., 94.

⁵⁶ Ibid., 109.

⁵⁷ Ibid., 110.

his ends is dependent to an important degree on the choices or decisions that the other participant will make.” Milner believes in this situation, an actor must cooperate to achieve his desired interests.⁵⁸ She extends interdependence to a structural type that would show the anarchic international system as functioning like a perfect market in the economic sense.⁵⁹ Adding another challenge to a central concept to neorealist theory, Duncan Snidal argued that relative gains do not represent an inhibiting impact on international cooperation.⁶⁰ His main claim is that in conditions other than bipolarity, relative gains are not as important to the actors.⁶¹ Neoliberal views of the international system retain useful explanatory power as they support the role of norms and regimes which are in turn supported and sustained by international institutions.

THE ROLE OF INTERNATIONAL INSTITUTIONS: AFTER THE HEGEMON FALLS

Derived primarily from realist tradition, international institutions are defined as those structures within the international system that will provide states with the same stability that was provided previously by a hegemon. After the failure and decline of a hegemon, the common goods it provided will become the responsibility of international institutions.⁶² An international institution is a persistent and connected set of rules both formal and informal that prescribe behavioral roles, constrain activity, and shape

⁵⁸ Helen V. Milner, "The Assumption of Anarchy in International Relations Theory: A Critique," in *Neorealism and Neoliberalism: The Contemporary Debate*, ed. David A. Baldwin (New York: Columbia University Press, 1993), 163.

⁵⁹ Ibid., 166-67.

⁶⁰ Duncan Snidal, "Relative Gains and the Pattern of International Cooperation," in *Neorealism and Neoliberalism : The Contemporary Debate*, ed. David A. Baldwin (New York: Columbia University Press, 1993).

⁶¹ Ibid., 170.

⁶² Robert O. Keohane and Joseph S. Nye, *Power and Interdependence*, 2nd ed., Scott, Foresman/Little, Brown Series in Political Science (Glenview, Ill.: Scott, Foresman, 1989), 39-52.

expectations. These institutions are larger in concept than a regime as they can and will shape state's behavior in a range of issue areas vice a single one as regimes do. States join institutions in a realist view due to their cost versus benefit analysis and will attempt to change these institutions when their analysis dictates they do so.

Three distinct schools of thought within these concepts evolved in the 1980's: conventional structural school, modified structural school, and the Grotian school. The conventional structural school of international institutions, in a pure realist view, recognizes institutions exist but see their power as far less than that of states. States' power will determine outcomes of interactions in the international system.⁶³ The modified structural school sees institutions as potentially having impacts on the system when the Pareto-optimal (game theory) outcomes between states do not have the expected impact.⁶⁴ States will use regimes under these institutions to achieve desired outcomes in a particular issue area. In the modified structural school view, institutions will achieve better outcomes. The Grotian School believes that institutions are threaded through the life of world politics and that they play fundamental roles in the system including with the powerful states.⁶⁵ This school sees institutions as being normative by nature, that they have a moral basis as they ask states to determine what good will come from their actions. Grotians see a better world is achieved through the use of institutions.

Institutions have three functions: lower transaction costs, increase transparency and increase trust between states. Institutions offer states a "place" to interact at low costs as they typically provide a forum for mediation. The cost of talking is always lower for a

⁶³ Susan Strange, "Cave! Hic Dragones: A Critique of Regime Analysis," *International Organization* (1982).

⁶⁴ Keohane, "The Demand for International Regimes."

⁶⁵ Named for Hugo de Grot, a 17th century Dutch jurist, who along with others, founded the concept of international law.

state than war where citizens die and national treasury are spent. Institutions provide a set of norms around which actor expectations converge which in turn form the basis for good understanding. Transparency is increased informally as states interact through exchanges of ideas and views. Institutions have rules that require transparency such as the IAEA's access to NPT signatory states. Greater transparency within institutions leads to greater trust. Cheating is readily visible and is quickly punished as state actions are always under review. Institutions make expectations for states more clear than in bilateral state relationships. Repeated transactions between member states primarily through meetings allow for verification, review and updating the rules within the institution which in turn will result in compliance and behavior management.

One of the central concepts used to describe the impact of institutions on states, is the “shadow of the future” of state interactions.⁶⁶ The longer states expect to be interacting then the shadow of the future will be said to lengthen. In terms of security, if states interact through institutions over a long time then states will sense their cost benefit analysis will continue to push them to interact. This projection of the future where the “shadow” is lengthened is a positive one which will in turn shape a state's behavior in the present. A long shadow will push states to comply and cooperate in the short run and be less likely cheat or defect from the institution. If states perceive a short shadow of the future, then cheating will likely not be punished. Over time states will lengthen and deepen cooperation as long as others do and work to prevent “bad” state behavior. This concept forms the core of the normative description of institutions and regimes where rules will in the long run shape states behavior. In order to effectively develop a common understanding of the NPT goals, both nuclear weapons states and non-nuclear weapons

⁶⁶ Robert M. Axelrod, *The Evolution of Cooperation* (New York: Basic Books, 1984).

states require these goals to be framed in such a way that matches their view of the international system and their future in it.

In an effort to bridge the gap between the two schools of international relations that bear on this issue, this research suggests the formation of a hybrid theory which provides the potential to allow nuclear weapons states and non-nuclear weapons states including emergent or undeclared nuclear states to develop a more frequent multilateral effort to achieve the goals of the NPT. First, the issue of eventual extinction of nuclear weapons has clearly been decided as early as 1970. Even the non-signatories of the NPT have from time to time indicated their willingness to eliminate nuclear weapons under the assumption that the regional issues that placed them in the security dilemmas driving their requirements for the weapons are resolved. The majority of the world's states do not possess any nuclear capabilities either for security or electric power generation. Most of the world's states do not face an extant security threat and as a result have no need for nuclear weapons. So how does one resolve the issue of the needs of the few outweighing the needs of the rest? This research suggests the development of a "hybrid" explanation that is useful for both power focused states (realist view) and states seeking international cooperation to resolve their security issues (normative view). This hybrid explanation is developed to provide a common ground, a new language of sorts for two different security cultures to seek and understand how to reach a mutual understanding leading to nuclear disarmament through cooperation. As this theory is developed, it is important to note that all states have a certain amount of both power and normative based conceptions of the international environment depending on the issue under consideration. This hybrid

theory discussion that follows is an attempt to acknowledge this reality and seek to determine the extent that a useful theory that describes it can be developed.

BRIDGING A THEORY DIVIDE: A HYBRID EXPLANATION FOR NUCLEAR DISARMAMENT COOPERATION

Given the very different views of the international environment of nuclear weapons states from those of non-nuclear weapon states, a hybrid explanation of how to cooperate on the goal of nuclear disarmament for both would be useful. Such a hybrid explanation would provide a framework that explains the requirement in a power-based way for nuclear weapons states and regionally threatened states while adding in normative based procedures that provide appropriate transparency and irreversibility to reassure the rest of the international system. Importantly, all states use both power and normative based explanations for their policies and actions depending on the issue being considered. As a result, all states have a less than infinite set of options in the international environment. The deeper all states cooperate, each has a further limited set of options especially in the area of using force to resolve security issues. From this reality, the ability to find an explanation theoretically for state interaction that would lead to nuclear disarmament that combines both power and normative concepts is possible. The most useful concept from international relations theory for this hybrid explanation lies in a discussion of gains from actions states take. Neorealist explanations have seen states as focused on relative gains in the security arena while neoliberalist explanations have suggested absolute gains matter more.

The essential components of this argument will be discussed in the context of three case studies which in turn discuss the three central components of this argument, the requirement and utility of an arms control and non-proliferation regime backed by international institutions and a multilateral treaty, the weakness of arms control through bilateral agreements alone, and the importance of leadership by one state to act as catalyst and sustainer of the disarmament effort. As has been discussed earlier in this chapter, achievement of nuclear disarmament is a common goal of the international community embodied in the NPT but progress toward this goal has been uneven at best. The first key to furthering the agenda of nuclear disarmament, as highlighted in the NPT case study, is reinforcement of a single issue nuclear disarmament regime. This regime would be focused on widening the agenda of bilateral nuclear arms control through a wider engagement of nuclear states beyond the United States and Russia first to the N5 then regional conflict focused states such as India, Pakistan, North Korea, Iran and Israel and their neighbors and finally a universal discussion sponsored by the UN. Keys to its success would be multilateral efforts to enable transparency, irreversibility and a focus on absolute gains for all states. Gains, as will be discussed later in this chapter, are the common reference point for neorealist or structural realist states and normative or neoliberal institutionalist states.

In order to achieve the common goal of disarmament, all states need to understand the limitations of bilateral agreements which the case study on the ABM Treaty shows. A very narrowly focused arms control agreement may satisfy each party's desire to "do something" about the systems that are perceived to lower the costs of using force against the other. The power of a single state's leadership to influence such an agreement as it is

developed cannot be overstated. These agreements may also provide useful processes for removing these systems and opening a lasting channel of discussion between the parties such as the ABM's Standing Consultation Committee. However, as the unilateral withdrawal of the United States from the ABM in 2002 highlights the major weakness in bilateral agreements is the lack of other parties to provide a deeper binding of the agreement. A single influential state, which in the current environment this research indicates is the United States, can also be equally useful as a catalyst and sustainer of both bilateral efforts to reduce the two largest nuclear stockpiles and serve as a confidence and momentum builder for further multilateral disarmament.

States can be divided into essentially two camps, one which follows power based concepts and the other seeking normative or a rules based society. These views are not necessarily in conflict as has been discussed power based states can and often do cooperate if not for normative reasons. Each group, power and normative based states, sees the requirement to calculate the gain achieved from future interaction in the international environment. In the nuclear issue area, nuclear weapon states tend to perceive the security environment in power based or structural realism terms. As has been discussed earlier, states that perceive the international environment as a Waltz-like system accept that this system is anarchic and security focused where military power is the primary guarantor of a state's security. These states tend to seek to maximize their power relative to other states especially those that are perceived as threats. In this system, force is most often seen as the eventual option required for the survival of the state, a constant concern. Relative gains a state receives in this system are often sought as a means to eventually be used against other "weaker" states. Since the narrative these states

have is focused on such concepts as power, threats, relative gains and use of force, persuading their leaders to seek an actual end state such as nuclear disarmament will be difficult at best. A hybrid explanation that is able to offer a potential alternative to holding to relative gains calculus is needed.

This issue within international relations theory has long been a point of debate between structural realism and neoliberal institutionalism in general terms. Robert Powell provided an effort to align discussions of conflict and cooperation into a single analytic framework which sought to shift “the focus of analysis away from preferences to constraints” facing states.⁶⁷ Powell observed that in line with structural realism, states focus on relative gains “when the possible use of force is at issue.”⁶⁸ This seeking of relative gains is at the core of realist views on the potential for cooperation in an anarchic system. Unequal absolute gains in the neorealist international system as an option of cooperation are unsustainable due to the issue of defection of states to allow them to achieve a relative gain. Cooperation will be achievable when force is not a part of the future outcomes as any state’s relative loss will not result in harm to the state by another in the future. When this is the case that relative gains are no longer important to states, cooperation is possible. Powell developed a simple structural model that produced three results which are supported by this argument and accompanying research and serve as a point of departure for forming a hybrid explanation for nuclear disarmament.

Powell’s model merging relative and absolute gains produced three important results. First, the differences to the two approaches to state interaction should focus on

⁶⁷ Robert Powell, "Absolute and Relative Gains in International Relations Theory," *The American Political Science Review* 85, no. 4 (1991): 1304.

⁶⁸ *Ibid.*, 1316.

constraints not state preferences for future action.⁶⁹ Powell observes through his model that Waltz's view of the international system does not adequately account for changes in constraints on states particularly whether or not a state should use force to achieve relative gains. He cites repeated plays of games such as those involving the Prisoner's Dilemma that give a state additional relative gains without a significant advantage over another state as evidence. Second, Waltz's system is unable to account for variations in the feasibility of cooperation.⁷⁰ Powell also believes that his model "clarifies the relation between anarchy and cooperation by helping to explain why anarchy does not imply a lack of cooperation in some systems but does impede cooperation in others as neoliberalism has shown."⁷¹ Finally, cooperation is dependent on the degree of whether or not the use of force is considered an option. Powell believes that cooperation is not necessarily dependent on a universal government to enforce the rules as neoliberal institutionalism proposes. However, a lack of such a government makes enforcement of rules to sustain cooperation more difficult. This lack of central authority and constraints on states also offer the opportunity for some states to take advantage of relative gains to the disadvantage of others.

Taking Powell's discussion a step further into a specific issue area in the international system, nuclear arms control and non-proliferation, a direct extension of his work is possible. If states rely on nuclear weapons as a part of their security, then as long as each sees these weapons as providing a relative advantage over another in a future use of force and in absence of a central authority, the weapons will remain. Those states that see international institutions and agreements as valuable prefer to seek the absolute gain

⁶⁹ Ibid., 1305.

⁷⁰ Ibid., 1312.

⁷¹ Ibid.

for all states by subtracting these weapons from the potential use of force calculus. Any strengthening of enforcement of universal agreements, in this case the NPT, through the UN's IAEA and backed by the UN Security Council would serve as a means to raise the cost of the use of force above the level where states see a future advantage of any relative gain.

The current issue of alleged Iranian pursuit of a nuclear weapons program serves as a current test case of the strength of this concept. Assuming Iran is seeking nuclear weapons, success in stopping this effort would serve as an effective example of this model and offer power based states a reminder of the potential of multilateral efforts. The recurring attempts by North Korea to engage the United States in a bilateral discussion and the United States continued policy of supporting only a multilateral effort offers additional support for the likelihood of a hybrid explanation of the path to nuclear disarmament. Other specific initiatives have allowed the United States and Russia to provide evidence that the security framework these states operate within may not require nuclear weapons indefinitely.

PRACTICAL STEPS AS EVIDENCE OF PROGRESS

As an example of initial steps taken by the United States and Russia, efforts like the Nunn-Lugar Cooperative Threat Reduction Program, offer appropriate economics based incentives to comply with treaty requirements while building a sufficient level of trust between the participants. Removal of the Libyan WMD programs under international supervision is another example. States have to see the alignment of short-term interests with long term international goals in order to decide to comply with

established multilateral norms. Regardless of the internal staff rationale for making the decision to disarm, the international community must be prepared to support that decision in the long term. Financial and political incentives are likely key to such efforts.

Ultimately, the issue of nuclear disarmament will neither be quickly resolved nor remain permanently completed without a concerted and sustained multilateral effort. Nuclear disarmament is a stated objective of the United States and all but four states in the international system. This dissertation suggests that international institutions backed by both power based and normative focused states in a multilateral effort is required to shift the focus of the international security environment away from the use of force which nuclear weapons provide the “ultimate security guarantee.” The case studies that follow show the potential of a multilateral agreement like the NPT and the weaknesses and slow progress of the 40 year U.S./Russian nuclear arms control effort. The agenda provided by President Obama in Prague in April 2009 and the resulting new strategic nuclear arms agreement between the United States and Russia offers fresh evidence of the power of state leadership to create momentum toward nuclear disarmament. The potential to widen the nuclear conversation beyond the bilateral relationship is also a part of the U.S. nuclear arms policy agenda as evidenced by the April 2010 U.S. sponsored 47 nation Nuclear Security Summit and strong support for the 2010 NPT Review Conference. While these initiatives are welcome, getting global consensus will remain difficult.

Nuclear weapons states like the P5 will find it difficult to disarm without sufficient mutually reinforcing behaviors on the part of the other states. For example, the United States would have to refrain from attempting to describe China or Russia as a potential military competitor in such documents like its Nuclear Policy Review. De-

alerting nuclear forces and allowing IAEA or at least bilateral confidence building, inspection and verification efforts to become routine practices among all nuclear states would be essential to advancing toward the NPT goal. Support for these activities is well within the power-based side of international relations theory and are proven methods that were used in completion of the INF Treaty as well as the Conventional Forces in Europe Treaty. The Conventional Forces in Europe Treaty provides a better fit for any multilateral nuclear disarmament program than the bilateral INF Treaty.

The non-nuclear weapons states would provide a ready pool of support for the development of additional inspectors and negotiators who could offer and insist on changes to strengthen the NPT. Efforts in the past have been stalled by nuclear weapons states that were for a number of reasons unable or unwilling to commit to changes that did not seem to reassure them that the potential for cheating was eliminated. Given the far more integrated international environment, efforts to educate state elites on the history, theory and implications of nuclear weapons to all states are likely far more influential and simplified than during the Cold War. In a recent NPT Review workshop held in the Philippines, the Republic's Foreign Secretary expressed concern for the need to work for an improved NPT in order "to benefit Filipinos, especially those living and working overseas."

His nation was proud to lead the effort "because it is in our national interest to strive for a world free from the threat of these devastating and inhumane weapons. There is not a single corner in this small world of ours where you will not find a Filipino who

could be adversely affected with the use of nuclear weapons.”⁷² This view is likely felt by a majority of non-nuclear weapons states and contains both the norm of disarmament enshrined in the NPT as well as alignment of state interest in protecting its people from nuclear threats without using military force as a response. Leadership in the NPT Review by a non-nuclear weapons state is a significant opportunity for the normative focused states to engage the nuclear weapons states in a common effort to disarm. Support in this effort from the United States and other nuclear weapons states will be critical.

Increased access to other states academic research, historical studies, as well as cultural experiences that would help states with little knowledge of the impact of nuclear weapons both from a security or power based perspective as well as a societal or social impact such as that of the Japanese, Russians and Americans. Reform of the United Nations Security Council to allow increased influence of states with a normative view of security issues might be another important step toward the goals of the UN Charter and NPT.

Full U.S. support to the NPT community and its goal of total disarmament would have to be a prerequisite to the required further bonding of all states to the norms of this regime. From the NPT’s initiation through each of its key stages including the 1995 decision to permanently extend its mandate, each positive step has occurred with the full support of the United States. The current difficulties in further solidifying the treaty’s norms have also been in part due to incomplete U.S. support for these initiatives. The upcoming 2010 NPT Review will likely succeed or fail on U.S. support for any recommended changes.

⁷²Jerry E. Esplanada, "Rp Riding High, Heads Nix Nuke Conference," *Philippine Daily Inquirer On-line edition*, January 31, 2010. <http://newsinfo.inquirer.net/inquirerheadlines/nation/view/20100130-250247/RP-riding-high-heads-nix-nuke-conference> (accessed February 5, 2010).

A security regime that is strengthened by universal state acceptance and evidenced by state behavior in compliance with its rules and norms is seen to be providing a needed public good to participating states. States view of their future in terms of security is important to how they will likely behave in reaction to this view. Robert Axelrod's description of cooperation among states or "lengthening the shadow of the future" is useful for both nuclear weapons states and non-nuclear weapons states in terms of how they will view future NPT efforts.⁷³ One state has the experience, resources and moral position to lead the effort to lengthen the shadow of the future for all states in terms of the nuclear issue: the United States.

THE ROLE OF THE UNITED STATES: LEADERSHIP TOWARD DISARMAMENT

The United States must seek to reinforce the NPT through a range of activities that both reduce the threat of a nuclear event in the near term and eventually eliminate it altogether thus lengthening the shadow of the future for all states. The public goods that this leadership would produce include freedom from nuclear threats, attacks or accidents as well as opening up the opportunities for economic benefits that come from nuclear power based electricity production. The United States has the requisite position and power to help all states adjust their cost versus benefit calculation of trading in weapons for economic property and the security that comes with increased wealth. Similarly, the United States should continue the tradition of bilateral negotiations with Russia until these states' arsenals reach an equivalent level with the other nuclear weapons states when an increasingly multilateral negotiation under the NPT norms should be developed.

⁷³ Axelrod, *The Evolution of Cooperation*.

The essential components of this argument will be discussed in the context of three case studies that follow in the next three chapters which in turn discuss the three central components of this argument, the requirement and utility of an arms control and non-proliferation regime backed by international institutions and a multilateral treaty, the weakness of arms control through bilateral agreements alone, and the importance of leadership by one state to act as catalyst and sustainer of the disarmament effort. In the next chapter, the first case study of this work provides a discussion of the history, strengths and weaknesses of the Nuclear Non-proliferation Treaty as well as a suggested set of options to adapt it for the future. Following the NPT case study, the Anti-Ballistic Missile Treaty provides an example of the limitations of a bilateral nuclear agreement, describes the relationship of such agreements to limiting arms races and offers key components for an effective nuclear non-proliferation and disarmament regime. The third and final case study discusses the impact of national leadership on negotiations and resulting agreements through a review of the United States and Soviet Union/Russian Federation strategic arms reductions agreements from the Strategic Arms Limitation Talks (SALT I) to the current negotiations of a follow on agreement to START I. To achieve nuclear disarmament, the ultimate stated goal of U.S. nuclear arms policy, leadership of the United States in a multilateral arms control and non-proliferation regime that learns the lessons of the past is required.

CHAPTER III

THE NUCLEAR NON-PROLIFERATION TREATY: A CASE STUDY IN REGIME MAINTENANCE

As long as some nations continue to insist that nuclear weapons are essential to their security, other nations will want them. There is no way around this simple truth.

Former Director General Dr. Mohamed El Baradei,
International Atomic Energy Agency¹

So today, I state clearly and with conviction America's commitment to seek the peace and security of a world without nuclear weapons.

President Barack Obama, Prague, Czech Republic,
April 5, 2009²

While El Baradei's simple truth about nuclear weapons as a guarantee of state security is difficult to discount, he does offer the opening that if states, most importantly the original nuclear weapon states, were to stop insisting that these weapons were required then other states could reconsider their options. The United States has had a stated policy to work to reach total nuclear disarmament since the initial signing of the Nuclear Non-Proliferation Treaty (NPT).³ The actions of the United States since the beginning of this multilateral effort have not always followed the path toward the goals of the treaty. With the end of the Cold War now two decades past, the opportunity for the United States to regain a position of leadership among nations to achieve the goals of the

¹ Mohamed El Baradei, "'Globalizing Security: A Challenge for Your Generation,' Commencement Address to the School of Advanced International Studies, Johns Hopkins University, Baltimore, MD, May 25, 2006," *International Atomic Energy Agency website*, 2009. <http://www.iaea.org/NewsCenter/Statements/2006/ebsp2006n008.html> (accessed October 9, 2009).

² Obama, "Remarks by President Barack Obama, Hradcany Square, Prague, Czech Republic, April 15, 2009."

³ A full copy of the Treaty can be found in the Appendix A or from the United Nations Office of Disarmament Affairs website, <http://disarmament.un.org/TreatyStatus.nsf> (accessed October 6, 2009).

NPT through multilateral and bilateral efforts has arrived. The President has stated his commitment toward the goals of the NPT and has been actively aligning both U.S. policy and nuclear negotiations with this purpose. Each of the emerging policies and activities by the United States can ultimately be measured against the degree of international progress toward the NPT goals. The difficulty of the past four decades of the NPT provide an appropriate case study in the power of multilateral efforts and the effectiveness of a leader state such as the United States to achieve the stated goals of the treaty. As the argument presented in the dissertation asserts, the essential element of successful multilateral efforts to control and eliminate nuclear weapons is leadership of the first nuclear weapon state toward the goals of the NPT.

This case study will review the history of the NPT from its development through the current period where the treaty will be undergoing its five year review which offers an opportunity to reinforce its regime and advance toward its disarmament goal. The history of the NPT offers the reader an understanding of the difficulty of reaching a multilateral agreement as well as its durability. Contained within the case is a discussion of the NPTs strengths, weaknesses and potential improvements that would further the agenda of nuclear disarmament. The NPT provides a rich platform to discuss the importance of multilateral agreements and international institutions to the maintenance of a nuclear non-proliferation and disarmament regime which is the first main element of this dissertation's argument. As will be shown, the NPT's weaknesses can and should be addressed through a renewed interest in the non-proliferation and disarmament process reenergized by one state, specifically the United States in a leadership role.

OVERVIEW

The keystone of the nuclear non-proliferation and disarmament regime is the Nuclear Non-proliferation Treaty of 1970. The three goals of the agreement, no state to state transfers of nuclear weapons (Article I), sharing nuclear technology for peaceful purposes (Article IV), and nuclear disarmament (Article VI) have been almost universally accepted in principle by all but a handful of states. In general, these goals have been respected and continue to be respected by the vast majority of states. As with any multilateral agreement, the NPT has both strengths and weaknesses which have direct impact on the successful achievement of its goals.

This case study of the NPT in the contemporary context contains a discussion of the weaknesses in the treaty. A discussion of the current Iranian nuclear issue highlights many of the important problems within the nuclear non-proliferation regime and the difficulty with reaching total nuclear disarmament. One of the important elements in understanding the complexity of the Iranian issue is viewed through the concept of how states develop a strategic culture and are influenced by their strategic elites. These elites still must work through the calculus of deterrence as the key concept to the rationale for developing and deploying nuclear arms. As the added complexity of achieving multilateral norms may at times be seen as opposing national interests, other means must be sought for convincing states through their elites that the loss of perceived power in adherence with such a norm is beneficial in the long run. Epistemic communities have achieved such gains in other issue areas such as the environment and international law of the seas and may provide an important new dimension toward nuclear disarmament. One of the key features of an effective regime lies in how states are persuaded to accept a loss

of freedom to take actions within the international environment for the gains offered by conformance to the regime's norms. The leadership of a single state in the non-proliferation regime is seen as essential with the United States being the best candidate for the position. The research conducted for this case study indicates that the NPT remains the best international agreement in support of a regime that promotes non-proliferation and eventual disarmament, requires a means to effectively deal with the differing state views of the role of nuclear weapons and will rely on the emergence of a single state leader, most likely the United States, that can set and persuade compliance with regime norms, rules and procedures. The 2010 NPT Review Conference provides an obvious opportunity for the United States to seek such leadership.

THE PROBLEM OF NUCLEAR POWER: PREVENTING PROLIFERATION

For several decades, a great deal of effort to control the spread of weapons of mass destruction has yielded an international non-proliferation regime. The purpose of these efforts is to check the spread of nuclear, chemical and biological weapons with the ultimate goal of elimination of all WMD capabilities. Consisting of interlocking agreements, verification tools and controls on production of WMD, the non-proliferation regime has seen both success and failure. After pursuing various WMD programs for national interests, Brazil, South Africa, and Argentina have been persuaded by these agreements and the associated international pressure to eliminate their respective programs. Chemical and biological weapons programs have a number of complexities from production to operational employment that make them less desirable than conventional or even nuclear weapons. Yet with nuclear weapons, there remains a

constant residual power that these weapons offer to both established nuclear weapon states as well as those who see the advantages they offer against other states with superior conventional forces. Some states have taken the lesson of the last two decades of the dominance of U.S. conventional power that the best defense against this power is through nuclear arms programs.

These other nations who see nuclear arms as an appropriate defense to external extant or perceived threats have rejected these agreements either in part or total lessening the opportunities to make further progress. Some nations have for various reasons either openly or clandestinely developed, tested, deployed and used their WMD as in the case of Iraq and Iran. The case of Iraq is without doubt the best known example of a nation doing all it could to gain a full complement of WMD, prepare, deploy and employ them in combat while maintaining a public position of the opposite.⁴ Their example is not likely unique. Most experts agree that only with the full and continuing support of the five nuclear weapon states (United States, United Kingdom, France, Russia and China) named in the NPT (known as the P5) will other nations curb and eventually eliminate their WMD programs. While only limited success has been achieved, with continuing verification efforts and a willingness of the nation being inspected to fully comply with the spirit and intent of the various agreements, actual WMD disarmament can occur. Even the P5 would eventually have to submit for the goal of WMD disarmament to be reached. As long as any of these nations see a potential or actual threat that can be deterred by the possession of nuclear arms or other WMD, reductions will be difficult to achieve. Some experts have even begun to see the continuing utility of nuclear weapons

⁴ Joseph Cirincione, *Repairing the Regime: Preventing the Spread of Weapons of Mass Destruction* (New York: Routledge, 2000), 175-84.

as a deterrent not only to similar weapons but also the use of chemical and biological weapons citing Iraq's restraint from using chemical or biological warheads on their SCUD missiles in the Gulf War of 1991.⁵

Would the United States have used nuclear weapons to retaliate on Iraq in 1991? Fortunately, the question was not answered at the time. As has been demonstrated in 2003, the United States chose to use conventional force to action its concern for Iraq's alleged WMD capabilities. The problem still lies in the age-old issue of national interest being held up as superior to achievement of disarmament. With the addition of both declared and undeclared nuclear states since the NPT was signed, the calculus for continuing disarmament under the original "rules" has become increasingly complicated. The Nuclear Non-Proliferation Treaty stands as one of if not the most significant and accepted international agreement in the arms control arena. Nearly all of the world's states are signatories with a lesser number having ratified and fully supporting all of its constraints. Weaknesses in inspection and verification as well as controlling dual use technologies that were a part of the original treaty have been strengthened over time but still require state compliance in order to be effective. The three most recent crises over compliance have focused attention on three states that were not willing to adhere to the NPT norms: North Korea, Iraq and Iran. While Iraq has been resolved by the U.S. led intervention and North Korea seems to have emerged as a nuclear state, Iran remains the focus of concern over the effectiveness of the NPT. A review of the development of the treaty, its goals and weaknesses with a focus on the current issues will provide key insights on the value of the treaty and the viability of the non-proliferation regime.

⁵ See Oliver Thranert, "Nuclear Weapons: A Deterrent to Biological Warfare?" in David G. Haglund, ed. *Pondering NATO's Nuclear Options: Gambits for a Post-Westphalian World* (Kingston: Queen's Quarterly: John Sloan Dickey Center for International Understanding, 1999), 81-104.

Despite the weaknesses inherent in the original treaty, the three pillars of the agreement, non-transfer of nuclear weapons technology, seeking total nuclear disarmament and sharing nuclear technology for civilian uses remain essential to the security of the international environment. In order to better understand the value of a multilateral agreement to achieve international goals of the magnitude of nuclear non-proliferation, support of civilian uses of nuclear power and eventually nuclear disarmament, a review of the history of the NPT provides important insights on how the treaty was constructed and its important features.

BUILDING A MULTILATERAL AGREEMENT: A BRIEF HISTORY OF THE NPT

The movement to create a universal control of nuclear weapons leading to their eventual elimination has roots as deep as any in international relations. As long as humans have fought each other, there have been efforts to control the tools by which they use force. Shortly after the end of the Second World War, the only nation to have used nuclear weapons in war, the United States, proposed a complete ban and the rules by which this ban should be implemented.⁶ The Truman Administration forwarded the Baruch Plan in 1946 to the newly formed UN Atomic Energy Commission which had two key elements that remain central to the discussion of nuclear issues today: recommendations on how to totally eliminate nuclear weapons and on how to control the exploitation of nuclear materials for production of energy both through internationally

⁶ Roger K. Smith, "Explaining the Non-Proliferation Regime: Anomalies for Contemporary International Relations Theory," *International Organization* 41, no. 2 (1987): 264-65. In discussing the theoretical basis for a non-proliferation regime, Roger K. Smith argues that the US took this approach not as the common interpretation of history as a natural posture of a hegemonic state seeking to protect the sources of its power. Instead, Smith suggests the historical record of US efforts to form regimes in other areas such as economic recovery through the Marshall Plan as a part of an open international trade regime were successful. US efforts with the assistance of the UK to control access to nuclear weapons and materials were not, essentially showing that cooperation is not the result of hegemonic control.

regulated controls.⁷ This plan specifically called for “international managerial control or ownership over all potential weapon-related nuclear facilities, as well as powers to license and inspect all other nuclear activities.”⁸ As would become the pattern for the future, the Soviet Union response was to submit a plan that was based on national control and ownership.⁹ Within three years, the Soviets would have their own nuclear weapons followed by the United Kingdom in 1952. As this occurred, the United States abandoned its efforts to deny other states from acquiring nuclear capability to a position of cooperation with the formulation of the Atoms for Peace program in 1953.¹⁰ This program formed the basis for the non-proliferation regime later codified with the NPT signing. Serious negotiations on limiting the proliferation of nuclear weapons began in 1954 with the initial focus on allowing individual national control and ownership of all aspects of a state’s nuclear programs “but overlaying this with international arrangements to provide assurances that these activities were not being used for military explosive purposes.”¹¹ These discussions led to the formation of the International Atomic Energy Agency in October 1956.

During this period, the U.S. Congress passed legislation called the Atomic Energy Acts of 1954 and 1958 with the aim of limiting the flow of nuclear capabilities to those

⁷ John Simpson, Kristan Stoddart, and Marion Swinerd, "Mountbatten Center for International Studies CNS NPT Briefing Book (2008 Edition)," *Mountbatten Centre for International Studies website*, 2008, Part I, 12. http://cns.miiis.edu/research/npt/briefingbook_2008/pdfs/npt_briefingbook08_part1.pdf (accessed October 9, 2009).

⁸ Ibid.

⁹ Ibid.

¹⁰ Smith, "Explaining the Non-Proliferation Regime: Anomalies for Contemporary International Relations Theory," 266.

¹¹ U. S. Nuclear Regulatory Commission. Office of the General Counsel, *Nuclear Regulatory Legislation : 110th Congress, 2nd Session* (Washington, DC: Office of the General Counsel, U.S. Nuclear Regulatory Commission, 2009). <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0980/v1/sr0980v1.pdf>, (accessed October 9, 2009). This document contains the full text of the 1954 Act as amended. Congress routinely requests the NRC to produce a two volume which contains the basic U.S. law related to nuclear activities of the government.

nations the United States was willing to assist. The 1954 act was to arrange how U.S. government agencies and civilian firms could transfer nuclear material and processes to other nations for the peaceful development of nuclear energy for primarily power production. The 1958 act delineated the limited transfer of nuclear weapons designs to U.S. Allies to facilitate the carriage and use of U.S. nuclear weapons in wartime as well as how to operate in a nuclear combat environment.¹² Unfortunately, the result of the 1958 Act was the unintended signal to all states that they could negotiate bilateral arrangements relatively freely on nuclear weapons issues outside of any multilateral arrangement just as the United States intended to do.¹³ This U.S. move would serve to undermine the effectiveness of the IAEA. Equally unhelpful to the regime being established was the formation of the European Atomic Energy Community (EURATOM), regional entity that was separate from any UN or single state solution.¹⁴ These events show the initial outline of the early period of nuclear non-proliferation policy making that raises the question of how an effective and lasting regime could be set in place and maintained if individual states selected positions that would be counterbalancing as in the case of the bipolar United States and then Soviet Union's relationship.

During this early period, nuclear non-proliferation developments were characterized by the growth of the IAEA and its safeguards and sanctions development, U.S. efforts to provide its allies with nuclear weapons, the spread of technical knowledge to various states in order to develop peaceful uses of nuclear power, and most importantly

¹² Simpson, Stoddart, and Swinerd, "Mountbatten Center for International Studies CNS NPT Briefing Book (2008 Edition)."

¹³ Ibid.

¹⁴ Ibid. See also the EURATOM website for more details on the current activities of this organization which remains the cornerstone of cooperative nuclear efforts within Europe. http://ec.europa.eu/energy/nuclear/euratom/euratom_en.htm, (accessed October 9, 2009).

to the non-proliferation regime, the birth and growth of a process for nuclear disarmament negotiations.¹⁵ Additionally, this era saw the outline of specific issues that would frame the non-proliferation agenda for the foreseeable future emerge: slowing and eventually halting the testing and further development of nuclear weapons, slowing the nuclear arms race, dismantling and destruction of existing weapons, verification of status of nuclear programs, banning nuclear weapons from entire geographic regions and steps to prevent the spread of devices and technology to more states.¹⁶

One of the early efforts to control the nuclear arms race was somewhat successful in slowing the competition by limiting testing. The Comprehensive Ban on Nuclear Testing (CBT) while not achieving an actual treaty led the three nuclear weapon states of the time to establish a moratorium on testing from 1958-1961.¹⁷ The key issue blocking agreement was the inspection protocols to verify compliance which were seen as too intrusive to be acceptable. The Soviet Union resumed testing in 1961 followed by the United States two years later. As the prospects for agreement on a complete ban faded, the states sought to achieve some limits on testing through the Partial Test Ban Treaty (PTBT). The PTBT was seen as a path to slow development of military weapons by agreeing to prohibit all but underground testing.¹⁸ In succeeding years, the states were unable to limit nuclear weapons through a curtailment of the production of nuclear fissile material. As the desire to build nuclear power plants increased, the inability to see a clear separation of peaceful use from military ones in the Soviet Union where the state

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ April Carter, *Success and Failure in Arms Control Negotiations* (New York: Oxford University Press, 1989), 46-58.

¹⁸ Susanna Schrafstetter and Stephen R. Twigge, *Avoiding Armageddon: Europe, the United States, and the Struggle for Nuclear Non-proliferation, 1945-1970* (Westport, CT: Praeger, 2004), 5.

controlled both of these processes caused “insurmountable difficulties”¹⁹ in achieving any form of agreement. In 1964, the leaders of the three nuclear weapons states separately announced national intentions to put measures in place to limit future fissile material production for military purposes.²⁰

By this time, attempts to limit nuclear proliferation through the creation of regional nuclear free zones were at an impasse, ideas to form an international agreement to deal with the potential for proliferation of nuclear technology leading to weapons development and deployment had developed sufficiently to encourage a group of states to develop the NPT under the auspices of the United Nations. Resolution 2028 was adopted by the UN General Assembly in 1965 outlined the terms under which the NPT was to be negotiated.²¹ Five main tenets of the NPT for the negotiations to conclude were:

- No loopholes that would allow states to proliferate nuclear weapons in any form;
- Should balance the mutual responsibilities and obligations of both nuclear and non-nuclear states;
- Should be a step on the road to achieve global complete disarmament including nuclear disarmament;
- To assure the NPTs effectiveness, it should include “acceptable and workable provisions”;

¹⁹ Simpson, Stoddart, and Swinerd, "Mountbatten Center for International Studies CNS NPT Briefing Book (2008 Edition)."

²⁰ Ibid.

²¹ Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (OPANAL). “United Nations Security Council, Resolution 2028, Non proliferation of nuclear weapons,” OPANAL website, 2009. <http://www.opanal.org/Docs/UN/Res-2028.pdf> (accessed October 9, 2009).

- Should contain no provisions that would negatively impact “the right of any group of states to conclude nuclear-weapon-free zone (NWFZ) treaties.”²²

By 1966, the forum to negotiate the NPT had migrated to the Eighteen Nation Disarmament Committee (ENDC) which was not a formal UN entity but met in Geneva on the UN compound, was co-chaired by the United States and the U.S.S.R. and included several non-aligned nations as well as allies of the co-chairs. Neither Germany nor Japan were members but the United States assisted by Italy provided coordination in an eventually successful effort to craft a treaty that both would sign.²³ Articles I and II of the NPT were developed by the United States and U.S.S.R. and dealt with retaining current U.S. agreements on bilateral transfers of nuclear capabilities with NATO allies as well as the ability to transfer and store nuclear weapons during wartime but prohibited transfer of complete nuclear weapon systems in peacetime.²⁴ One key missing provision in the NPT was any prohibition of “the storage or deployment of nuclear weapons states’ nuclear systems in a non-nuclear weapons state.”²⁵ Article III, negotiated in 1967, provided verification provisions through the existing IAEA with the EUROATOM agency agreeing to submit to these same safeguards at the insistence of the Soviets.²⁶

In an effort to fulfill the intent of the signatories to expand the access to nuclear energy production for economic development, Article IV enshrined “the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination” which was intended to help developing

²² Ibid., 2.

²³ Simpson, Stoddart, and Swinerd, "Mountbatten Center for International Studies CNS NPT Briefing Book (2008 Edition)."

²⁴ Ibid.

²⁵ Ibid.

²⁶ Ibid.

nations in particular.²⁷ Reflecting the early days of nuclear evolution, Article V allows for non-nuclear states to have access to research data from nuclear testing.²⁸ Article VII allows for regional nuclear weapons free zones to be negotiated. Articles VIII, IX, X and XI provide the processes and procedures for amendments and their review; signing and ratification; withdrawal and long-term viability of the NPT; and equality of the five different language versions respectively.²⁹

The main goal of the NPT in the short run was to limit and eventually stop nuclear arms races particularly between the United States and the U.S.S.R. with the ultimate goal of elimination of all nuclear weapons, total disarmament. Specifically this would be carried out through negotiations among the states. Article VI states:

Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict and effective international control.³⁰

By 1968, an agreed wording of the treaty was reached, states began to sign. Key delineations of the treaty negotiated over time established both the goals of the treaty and the sources of continuing concern and issues as to the ability of the agreement to actually achieve the intended results. First, the NPT established the dividing line between nuclear and non-nuclear weapon states declaring a nuclear weapon state “is one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to January 1, 1967.”³¹ The other key operational concept of the NPT was the dual obligations of nuclear weapons states to refrain from providing nuclear weapons or

²⁷ Appendix A, 320.

²⁸ Appendix A, 321.

²⁹ Appendix A, 320-2.

³⁰ Appendix A, 320.

³¹ Appendix A, Art IX, section 3, 321.

related technology and the non-nuclear weapons states from receiving, making or accepting assistance in the development of nuclear weapons.³² Two years later the NPT went into force with the hopes that negotiations to tie the treaty to the IAEA inspection protocols would follow in short order.

The true power of any treaty that involves arms reduction is a combination of compliance of the signatory states and an agreed inspection protocol. While states may act in accordance with the letter of a treaty, confidence that they have done so and will continue to comply rests within the evidence of compliance provided to both signatories as well as states and interested parties outside of the treaty. Since the NPT was envisioned to account for and eventually eliminate all nuclear weapons while promoting peaceful uses of nuclear power, the requirement for compliance verification would be crucial to success. Eventually, signature states were able to agree to the use of the IAEA process for inspection and verification through lengthy negotiations. These negotiations set the precedent for recurring negotiations during each of the five-year reviews of the treaty.³³ The obvious most distant goal set by the treaty of total disarmament would continue to elude the party states to the present time due in large part of the interaction of the United States and U.S.S.R. during the Cold War and the continuing uncertainty of regional security especially in the geographic arc from the Arabian Peninsula to the Korean Peninsula.

In an era of constant suspicion of states' intentions when millions of lives were at risk at nearly a moment's notice that existed in the Cold War, this portion of the treaty's processes became both key to reaching the treaties goals and subject to intense interest of

³² Appendix A, Art I and II respectively, 319.

³³ George Bunn, "The Nuclear Non-proliferation Treaty: History and Current Problems," *Arms Control Today* 33, no. 10 (2003): 4-10.

both nuclear weapons states and non-nuclear weapons states.³⁴ These two negotiation periods, first the ten years from 1958-1968 leading to the opening of the treaty for signature and the inspection protocol discussions following this period are key to a full understanding of both the power and limitations of achieving even a partial success in reducing nuclear weapons both in the past and today. From the inception of the idea of a nuclear non-proliferation regime to today, the United States has been at the center of the developments and key to negotiations, establishment and maintenance of the nuclear non-proliferation regime. The only states not signatories of the NPT are India, Pakistan, Israel and Cuba. All but Cuba allow some IAEA inspections of their nuclear programs.³⁵ International concerns over questionable or suspected activities on the part of signatory states Iraq, Iran and North Korea are seen by detractors as evidence of the weakness of international agreements and the inability of their multilateral organizations to be effective.

From the issues surrounding Iraq in the 1990's subsequent to the end of the 1991 Gulf War, the international community reached agreement on revised IAEA inspection protocols that served to strengthen the Agencies ability to detect and warn of treaty violations. One of the keys to strengthening the IAEA included providing the Agency with improved intelligence which in the case of North Korea led to identification of their covert nuclear activities. Spurred a lack of enforcement action from the UN Security Council once apprised of the North Korean non-compliance with IAEA inspections as a part of the Agreed Framework between 1994 and 1998, the United States "took the lead

³⁴ Ibid.

³⁵ Amy F. Woolf, "Arms Control and Non-proliferation Activities: A Listing of Events," in Leon T. Carter, *Arms Control and Non-proliferation: Issues and Analyses* (Huntington, NY: Nova Science Publishers, 2000), 33.

in negotiating an agreement that sought to stop construction at North Korea's disputed facilities and eventually open them to IAEA inspections."³⁶ While there is some dispute over the status of North Korea in relation to its member status in the NPT, the continuing interaction of the United States in the process of seeking to enforce compliance of member states to the principles of the NPT provides an ongoing example of both the difficulties and the potential a multilateral treaty like the NPT. Two other examples of the need for enforcement of the NPT include Iraq's efforts to develop various weapons of mass destruction including nuclear weapons and the on-going Iranian efforts in the nuclear arena that fall in the crease between peaceful uses of nuclear power and potential weapons development. Each of these examples will be reviewed next to provide support for argument that a multilateral agreement that supports a non-proliferation regime is essential to international security environment. Ultimately, these examples support the value of sustained U.S. diplomatic leadership in multilateral efforts to deal with nuclear proliferation. Since the end of the Cold War, the NPT remains the essential foundation of the non-proliferation regime despite dramatic shifts in the international security environment including new compliance challenges from a number of states including Iraq, North Korea and Iran. The continuing evolution of Iran's nuclear ambitions provides an important demonstration of the limits of the current NPT regime and the need for a multilateral agenda to deal with those states that resist compliance with NPT norms.

THE NPT IN THE POST COLD WAR WORLD

Despite the near universal acceptance of the NPT and the demise of the bipolar confrontation that marked the Cold War, some states continue to act in concert with their

³⁶ Ibid., 34.

interests even when they conflict with the articles of a treaty they have signed and ratified. While the NPT was designed to require a reaffirmation of its value after it had been in place for 25 years, it would seem that without a universal acceptance of its permanence, these states believe in the primacy of their state over international norms. One of the key provisions of the treaty was its expiration clause contained in Article X:

Twenty-five years after the entry into force of the Treaty, a conference shall be convened to decide whether the Treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods. This decision shall be taken by a majority of the Parties to the Treaty.³⁷

This relatively unique provision allowed both those states who wanted a means of putting some time limits on the schedule for total disarmament and those who would wish to hedge their security interests against the constant unknown of the future security environment to see their options preserved. Combined with the requirement for five year reviews, the NPT at least allowed the member states to have a reminder and a forum for review and expression of concern which did not exist. It was clear to many states that allowing the two main antagonists of the Cold War to be relied upon to “self-police” was problematic as in the time between the first explosions and the beginning of the NPT these states made their own decisions on who would share both nuclear energy and more importantly nuclear weapons technology. But by the time the 25th anniversary of the treaty arrived, this antagonism had at least changed if not disappeared and nearly a dozen states had or were seeking nuclear weapons. This change in the international political scene did not immediately result in an orderly acceleration of arms negotiations or reductions.

³⁷ Appendix A, 322.

Beyond the issue of how to proceed in negotiations, the immediate nuclear needs in the aftermath of the fall of the Soviet Union including determining the final status of ICBM systems outside of the Russian borders, securing nuclear material and related technology and finding proper employment for nuclear technicians in order to contain the further spread of nuclear capability were of immediate concern to the international community. At the same time the security situation was changing in Europe, other states of concern had the attention of the NPT community. The case of Iraq's alleged weapons of mass destruction program is the most controversial due to the 2003 invasion of the United States and subsequent continuing events triggered in great part to the lack of appropriate cooperation with IAEA inspections by the Iraqis. Another is the case of North Korea's decade and a half continuing nuclear brinkmanship beginning with the events that resulted in the 1994 Agreement with the United States and its subsequent failure. This Agreement was nullified by the United States in reaction to continuing actions by North Korea to proceed with a nuclear program in direct violation of their obligations under the NPT. During this period, the North Korea's stated their intent to withdraw from the NPT itself.³⁸ A more recent challenger to the NPT regime is the on-going issue of the Iranian nuclear program. Without a direct diplomatic link to Iran until recently, the United States had limited options except to work with other nations to seek Iranian compliance with the NPT. The non-adherence to the NPT regime of these states displays both the weaknesses and potential strength of the NPT and provides a view into the relationship that U.S. involvement in multilateral negotiations and international affairs has on outcomes related to NPT enforcement. With Iraq's WMD programs now a matter

³⁸ Peter Crail, "The U.S.-North Korean Agreed Framework at a Glance," *Arms Control Association website*, 2004. <http://www.armscontrol.org/factsheets/agreedframework> (accessed October 4, 2009).

for historians to discuss and North Korea having withdrawn from the NPT and become a nuclear state, the future of the NPT's ability to control state proliferation behavior continues to be tested by Iran.

CURRENT CHALLENGE TO THE NPT: CONTROLLING NON-COMPLIANCE

As fears of a major conventional war in Europe faded, terrorism replaced the superpower nuclear confrontation as the main threat to peace. Many experts predict that proliferation of nuclear weapons is already under way to more states and potentially terrorist groups. Given the recent membership expansion of the nuclear club and the potential for more members in the future, revision and restatement of the club rules are a prerequisite to controlling further proliferation of nuclear weapons. But far from being a never ending cycle of more and more states or groups seeking nuclear capabilities, reestablishing the nuclear non-proliferation regime based on treaties, backed by international inspections and enforced by multilateral state efforts and international engagement activities below the state level should allow reduction of the threat of nuclear weapon use and the desire to acquire these capabilities. This reinvigorated non-proliferation regime must be seen as legitimate, fully supported by the international state system and energized by non-state groups. In many respects, the challenges of combating terrorism are the same as those encountered in controlling the spread of nuclear weapons. A non-proliferation regime that is seen as legitimate, that can adequately address all states' security concerns and that can be effective in controlling its members' nuclear affairs is central to the collective security of the world.

IRAN: DANCING ON THE NUCLEAR SEAM BETWEEN PEACEFUL USE AND WEAPONS

One of the facts of the post-Cold War period is that nuclear weapons and their delivery systems are still important but different states retain or seek to acquire them for different reasons. The original five nuclear weapons states (United States, Russia, United Kingdom, France and China) remain stewards of varying sizes and capabilities that have dramatically fallen in numbers in the last 15 years. Their challenge rests in maintaining a reliable capability as a hedge and as a visible symbol of their importance to the international system. The next tier of nuclear weapon states has now risen to four with the recent North Korean nuclear tests. India, Pakistan, Israel and North Korea each possess their capabilities primarily for regional security balancing but directly impacting the international security equation. Of this group, North Korea has caused the most concern and may have provided other states with an example that validates Dr. El Baradei's view expressed at the beginning of this chapter. While the Six Party talks were not able to arrest North Korea's nuclear ambitions, Iran's emerging nuclear calculus has heightened international concerns.

The Iranian effort to develop nuclear capabilities initially for peaceful purposes extends back well before current Islamic state and was for many years after the revolution dormant. Continued U.S. presence in the region, long term impact of economic sanctions and growing nationalism among the people and their leadership has provided an opportunity for another NPT signatory to attempt to acquire nuclear weapons. Iran is likely to do so through using domestic civilian nuclear capabilities to enable weapon development.

Iran's current program to develop nuclear capabilities both for energy as the government publicly claims and for weapons as the international community assumes began during the 1980-1989 war with its neighbor Iraq.³⁹ As Iranian efforts are difficult to identify directly due to the low amount of direct contact with international organizations or an open diplomatic outlook, the International Atomic Energy Agency (IAEA) has provided the best available assessment of the Iranian efforts. The IAEA was allowed to inspect and monitor Iranian nuclear energy related programs beginning in 1974 in accordance with a nuclear safeguards agreement.⁴⁰ Iran and the IAEA had negotiated a nuclear safeguards agreement that the agency eventually concluded had been violated by Iran. In August 2002, when the IAEA was informed by Iranian exiles that Iran had "built a vast uranium enrichment plant at Natanz and a heavy water plant at Arak without informing the United Nations."⁴¹ By December 2002, satellite photos of the facilities at Natanz are shown on international television and Iran agrees to accept additional inspections by the IAEA. Additional allegations that the Iran continued to develop nuclear weapons were aired.

In September 2005, the IAEA reported on Iran's 18-year record of nuclear deception and declared Iran was in non-compliance with its NPT obligations setting up the possibility of UN Security Council action.⁴² IAEA did so in March 2006 resulting in

³⁹ Judith S. Yaphe and Charles D. Lutes, "Reassessing the Implications of a Nuclear-Armed Iran," (2005): 1.

⁴⁰ International Atomic Energy Agency. "The Text of the Agreement between Iran and the Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons," *IAEA Circular*, New York, 13 December 1974. Iran signed this agreement as a result of joining the Nuclear Non-proliferation Treaty (NPT). The agreement remained in force and was accepted by the Iranian Revolutionary government subsequent to the 1979 revolution. Iran signed an additional protocol.

⁴¹ BBC News, *Timeline: Iran Nuclear Crisis*, 24 September 2005, http://news.bbc.co.uk/1/hi/world/middle_east/4134614.stm (accessed June 14, 2010).

⁴² Jon B. Wolfsthal, "Dealing with Iran's nuclear ambitions: four approaches: Focus on actions, not Iran's intent," *Christian Science Monitor*, March 13, 2006. <http://www.csmonitor.com/2006/0313/p09s01-coop.html> (accessed October 4, 2009).

a UNSCR “statement calling upon the Tehran Government to suspend all uranium enrichment-related and reprocessing activities in an effort to guarantee that its nuclear programme is for exclusively peaceful purposes.”⁴³ Iran has steadfastly held to the line that their efforts are for nuclear energy producing purposes and that even if they were to undertake efforts to produce nuclear weapons, Iran has a sovereign right to do so.⁴⁴

Why is Iran attempting to become a member of the nuclear club? As this program is two decades old in its current form, the obvious answer would have been Saddam Hussein’s Iraq. With his removal from power and the resulting instability of the new Iraq, Iran likely sees an even greater uncertainty in the security situation in the region and sees the nuclear card as a hedge for the future. Additionally, Iran likely views the presence of the U.S. led coalition in its neighbors (Iraq, Afghanistan, and several of the former Soviet republics) as additional evidence of the need for additional capability beyond its conventional military might. Iran has seen the application of U.S. and allied conventional military power twice in the past 15 years. The Iranian leadership no doubt noted that this evidence clearly points to the need for states to engage in combat that does not involve the United States or find new means to negate their conventional superiority. The other message from the two U.S.-Iraqi contests: a state’s military should be organized, trained and equipped to fight in such a way as to achieve their state’s objectives while keeping the United States and its allies out of the war. The India, for example, decided to take the lesson of relying on nuclear weapons and the Revolution in

⁴³ UN News Centre, “Annan hails UN Security Council call on Iran to suspend nuclear activities,” New York, 30 March 2006. <http://www.un.org/apps/news/story.asp?NewsID=18000&Cr=iran&Cr1> (accessed October 4, 2009).

⁴⁴ Yaphé and Lutes, “Reassessing the Implications of a Nuclear-Armed Iran,” 6. According to the authors, since 2005, Iranian leaders have made public statements alluding to nuclear capabilities they might be “pushed” to acquire and withdraw from the NPT. The Iranian Defense Minister “began talking about nuclear counter attack and preemption.”

Military Affairs from Iraq's experience in the Gulf War.⁴⁵ Pakistan followed suit.

Military parity even at the nuclear level has historically been seen as a necessity for state survival in this region.

The problem, then, for any state that has a requirement for a robust defense and certainly for any state that contemplates future offensive action lies in deciding whether or not to acquire nuclear capabilities. With the relative importance and power of the United States and its allies as a potential opponent, the options may be quickly determined. Even if a state determines the United States is not likely to be a part of the combat (as Iraq must have thought in 1990), the presence of any state possessing nuclear weapons in a state's home region would be incentive for it to do so as well. This rational helps to somewhat explain why Iran has declared Israel a partner of the Great Satan (United States) and should be removed from the face of the earth. By openly expressing rancor towards Israel, Iran may be attempting to get Israel to display her nuclear intentions.⁴⁶

Given the level of isolation and decreasing standards of living in Iran which are in many ways similar to the path that North Korea has traveled, are external threats enough of an incentive? Many states who desire to be prominent in the international environment see the possession of nuclear weapons as a path to respectability, a member of an elite group that determine the path of world events or the perception that nuclear capability will give them a better ability to chart their own destiny. Displaying tenacity in denying its existence, Iranian leaders no doubt see a nuclear development program as providing

⁴⁵ Thomas G. Mahnken and Timothy D. Hoyt, "Indian Views of the Emerging Revolution in Military Affairs," *National Security Studies Quarterly* (Summer 2000): 55.

⁴⁶ Nazila Fathi, "Wipe Israel 'Off the Map' Iranian Says," *The New York Times*, October 27, 2005. One of the sources of constant irritation in the region is President Mahmoud Ahmadinejad inflammatory statements vis-à-vis Israel.

all of these advantages with a low likelihood of negative consequences beyond those they already suffer.

If Iran wants a nuclear capability, how soon will they have it? Estimates vary widely. Most agree that Iran is still a few years from having a complete weapon system to deliver a nuclear weapon to its target.⁴⁷ Key to this development is the ability of Iran to acquire sufficient weapons grade material for the warhead device. The IAEA has so far identified two programs in Iran that could produce nuclear material for either nuclear power generation (peaceful purposes) or for weaponization. These processes include a gas-centrifuge based uranium enrichment program and a heavy-water moderated nuclear reactor now under construction. The enrichment requirements for power generation, called low-grade uranium, are far less than those of weapons-grade (high-grade uranium).⁴⁸ Centrifuges used in enriching uranium spin the material at high speeds in order to concentrate it. A single simple nuclear warhead might contain 10-20 kg (22-44 lbs) of highly enriched uranium (HEU). To get this much HEU requires between 2000-4000 centrifuges in a single facility working for approximately six months.⁴⁹ The facilities at Natanz that were so prominently displayed on the international news were buildings built and covered over with earth and concrete totaling over 750,000 square feet in size, more than adequate to house a cascade of the size described above and larger.⁵⁰ In the other alternative for Iran, the spent fuel from a heavy-water reactor contains

⁴⁷BBC News. "Iran nuclear weapons 'years away'." http://news.bbc.co.uk/2/hi/middle_east/4217824.stm (accessed October 4, 2009).

⁴⁸ Paul Kerr, "Questions Surround Iran's Nuclear Program," *Arms Control Today*, March 2006, Arms Control Association, http://www.armscontrol.org/act/2006_03/MARCH-IranQuestions (accessed February 7, 2010).

⁴⁹ Richard Kokoski, *Technology and the Proliferation of Nuclear Weapons* (Solna, Sweden; New York: Stockholm International Peace Research Institute ; Oxford University Press, 1995), 23.

⁵⁰ See the Global Security.org website for graphic depictions and descriptions of the Natanz facilities, <http://www.globalsecurity.org/wmd/world/iran/natanz-imagery3.htm> (accessed October 4, 2009).

plutonium which can be used in nuclear weapons. Iran's efforts are not cutting edge technologies but can be expected to reliably produce the necessary material for either application once the facilities are operational. The IAEA estimates that the reactor facilities will not be completed for at least 3-7 years while the centrifuge complex could house as many as 3,000 centrifuge units and be operational within a year.⁵¹ This capability matches that described by Kokoski earlier or one to two weapons worth of material per year. These concerns supported by the United States and European states prompted the UN Security Council to act. The world powers clearly fear the instability in the international order that the addition of a "rogue" state with nuclear capabilities might bring.

The United States has declared Iran to be actively engaged in a clandestine effort to provide its military with nuclear weapons.⁵² The Iranian government continues to deny this claim but has constantly reserved their right to insure their security. The United

⁵¹Gregory L. Schulte, U.S. Permanent Representative to the United Nations Office in Vienna and the International Atomic Energy Agency, *Statement on Reporting Iran to the Security Council*, Vienna: U.S. Mission to International Organizations in Vienna, February 4, 2006, http://vienna.usmission.gov/sp_rep_iran3-ar.html (accessed October 9, 2009). IAEA reports led to the UNSCR statement warning Iran on March 30, 2006. See also Ambassador Gregory L. Schulte, U.S. Permanent Representative to UN Vienna and the International Atomic Energy Agency's 22 March 2006 *Statement on the IAEA report to the UNCR*: "The Director General reported that Iran has now stockpiled 85 metric tons of uranium hexafluoride and continues to produce more. According to estimates by the International Institute of Strategic Studies, 85 metric tons is enough, if enriched, to produce ten nuclear weapons. The Director General also reported that Iran has begun enrichment and plans to start installing 3,000 centrifuges by the end of this year. According to IISS estimates, a 3,000-centrifuge cascade can produce enough material for a nuclear weapon in less than a year. Even a smaller cascade can serve as the first installment toward a large-scale breakout capability or as a testing ground for undeclared cascades assembled in covert locations." Also some organizations are cautioning against overstating the threat or accelerating the timeline for political purposes. See also David Albright and Corey Hinderstein, *The Clock is Ticking, But How Fast?* Washington, DC: The Institute for Science and International Security (ISIS), March 27, 2006. <http://isis-online.org/publications/iran/clockticking.pdf> (accessed October 4, 2009) and David Albright and Jacqueline Shire, *Misconceptions about Iran's Nuclear Program*, Washington, DC: The Institute for Science and International Security (ISIS), July 8, 2009, <http://www.isisnucleariran.org/static/297/> (accessed October 9, 2009).

⁵²For an in depth assessment of the Iranian nuclear program and the potential consequences, see Mark Fitzpatrick, *The Iranian Nuclear Crisis: Avoiding Worst-Case Outcomes*. (Oxford: Routledge for the International Institute for Strategic Studies, 2008).

States has been an active partner in the multilateral talks to determine exactly what nuclear capability Iran is developing and to prevent Iran from developing a nuclear weapon. Why does Iran see a need to have nuclear weapons? Do regional security concerns fully explain the effort or are there other factors? Understanding the Iranian ruling elite will help explain their motivation to join the nuclear club and provide a means for U.S. elites to evaluate the options under consideration as negotiations continue.

IRAN'S NUCLEAR CHOICES: THE ROLE OF STRATEGIC CULTURE AND NPT COMPLIANCE

Understanding the Iranian leadership and its views on security requires unraveling a complex and unique combination of political, religious and social dynamics that have developed since 1979. One long time observer describes Iran as led by a “ruling clerical caste, which is deeply divided among ‘hard-liners,’ ‘reformers,’ and quiet ‘traditionalists,’” who work within an Islamic state structure that has an “extraordinary concentration of executive and supervisory powers in the hands of the appointed supreme clerical leader.”⁵³ The hard-liners are firmly in control and have been able to suppress any serious political opposition and resist any ideological shift within the country. The population has been marginalized in the political process and is not likely to become radicalized against the state.⁵⁴ The leadership of President Mahmud Ahmadinejad has hardened the control of the ruling elite and refocused the population on the religious

⁵³ Geneive Abdo, “Iran’s Internal Struggles” in Henry D. Sokolski and Patrick Clawson, eds., *Checking Iran’s Nuclear Ambitions* (Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, 2004).

⁵⁴ Ibid., 41-45. Abdo points out the power of the hard-liners was most prominent after the 1997 election of reformist Khatami as they found means to prevent him from instituting reforms. These were primarily through the power of judiciary and the security apparatus to nullify any of the reform legislation supported by Khatami.

values of the revolution.⁵⁵ Given the concentration of power in a relatively small elite combined with the low likelihood of any internal overthrow of the regime, theoretical explanations of strategic ruling elites first described during the Cold War about the Soviet Union's leadership are useful.

Describing the decision making process within the Soviet Union in a RAND study sponsored by the U.S. Air Force in 1977, Jack Snyder provided a theoretical construct of a state leadership similar in function today's Iran. Snyder defined the concept of strategic culture "as the sum total of ideas, conditioned emotional responses, and patterns of habitual behavior that members of a national strategic community have acquired through instruction or imitation and share with each other with regard to nuclear strategy."⁵⁶ Snyder believed that "strategic cultures, like cultures in general, change as objective conditions change."⁵⁷ But even as conditions change, the state's strategic culture would retain "a large residual degree of continuity. Individuals are socialized into a mode of strategic discourse and acquire a fund of strategic concepts that evolve only marginally over time.... Culture is perpetuated not only by individuals but also by organizations."⁵⁸

This strategic culture impacts policy decision making as the state's elites discuss the issues privately and publicly and adjust as required to fit their circumstances. Even at the height of the Communist era, publications within the Soviet Union exhibited some level of debate that was not just for propaganda purposes.⁵⁹ These elites are also constrained by how they are arranged in the bureaucratic structure of their state and by

⁵⁵ Sherifa D. Zuhur, *Iran, Iraq, and the United States: The New Triangle's Impact on Sectarianism and the Nuclear Threat*, (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, November 2006).

⁵⁶ Jack L. Snyder, *The Soviet Strategic Culture: Implications for Limited Nuclear Operations* (Santa Monica, Ca.: RAND, 1977), 7.

⁵⁷ Ibid., 9.

⁵⁸ Ibid.

⁵⁹ Ibid., 7.

shared views and experiences especially in relation to the strategic dilemma their state faces. In the days of the superpower confrontation, these dilemmas were more distinct than today but the overall concept of strategic culture still holds. Given that “unique historical experiences, distinctive political and institutional relationships, and a preoccupation with strategic dilemmas” form the basis for a strategic culture, how a state reacts to external events or how a state plans to react to external events should be expected to take unique form to that state.⁶⁰

Iran’s Islamic ruling clerical caste exhibits all of the characteristics Snyder defined and operates in similar fashion to the former Soviet Union’s leadership at the height of the Cold War. Responses to invasion as in the Iran-Iraq war (1980-1989), suppression of moderate student protests, frustration of a moderate president’s approved legislation as well as the support of a hard-line non-cleric as President of the Republic in Ahmadinejad are all visible evidence of an active strategic culture in Iran. The external security issues as seen by the controlling elites in Iran place them in a strategic dilemma of needing to sustain the state they control while addressing the threats they see on their borders and beyond. As they have few reliable state allies in the region, Iran has turned to Pakistan, Russia, and China for political support in the UN in trade for their oil supply. The revenue gained from oil is sufficient to allow them to develop indigenous capabilities to enrich uranium for weapons while maintaining a hold on domestic life. Iran could argue that the region has been full of threats to their country for decades but with the removal of Saddam this argument seems to be less convincing. However, given the results of three conventional wars led by the United States against its neighbors in the last 15 years and no immediate signs of a complete U.S. withdrawal from the region, the

⁶⁰ Ibid., 38.

ruling elites in Iran could be seen to be making a rational if internationally condemned strategic choice to pursue possession of nuclear weapons.

Nuclear weapons provide a range of options to a state not available to those without them. Even the possibility of a state possessing nuclear weapons without any actual proof is sufficient to cause a potential adversary to reconsider its security options in relation to the emerging nuclear power. This is certainly an appealing situation to a state that considers itself “living in a bad neighborhood” as Iran does. Iran may also view nuclear capability as a cheap alternative to revitalizing their late 1970’s conventional weapon systems. The strategic elite also can capitalize on the domestic front as other nations have done by playing on national pride that would accompany the achievement of nuclear status. Iran would likely greet such an event as validating their belief in the historical power of Persians in the region. Nuclear status might also embolden Iran to lobby for a seat on the UN Security Council. However, Iran would also have to consider the potential for further international sanctions or event military action to prevent further nuclear capability development.

From an international relations theory perspective, the Iranian ruling elites likely see themselves as facing the traditional security dilemma. Recognizing that the international system, in the case of nuclear issues, the non-proliferation regime, either cannot or will not guarantee a state’s national security sufficiently, the state will likely choose to defend themselves or in theoretical terms defect from the regime. The most obvious evidence of this Iranian defection is their continued pursuit of nuclear weapons capability. Reinforcing this security concern and assisting the drive to defect is the potential increase in international stature becoming a member of the nuclear weapons

states would potentially provide to Iran. Even on a regional level, an Iran with nuclear weapons would be far more feared and respected. The Iranian security culture might be emboldened enough to believe nuclear weapons would confer great power status on their nation even allowing them the right to demand a permanent seat on the UN Security Council.

Despite the sometimes bleak future the Iranian situation poses, there are avenues that can be used to achieve the necessary discussions that lead to an agreement. One expert has suggested a process built from the Eur-3 discussions with Iran similar to the Six-party Talks on North Korea's nuclear program. These talks would include the United States, Russia and China as well as the current parties. Such talks would include a package of "carrots" as well as "sticks" that would clearly define the benefits and consequences of Iran's future decisions.⁶¹ Previous efforts have not presented a unified effort nor included all of the nuclear capable, UN Security Council members in the effort. Without successfully gaining Russia and China's support, Iran can expect these states will oppose any use of sticks. The worst case path for the future of the NPT would involve Iran, a signatory of the NPT, choosing not cooperate with the IAEA and then withdrawing (or attempting to do so) from the treaty organization as North Korea believes they have done. This would be another clear indication that the original non-proliferation regime has collapsed.

Compliance with the NPT is accomplished primarily through formal inspections of signatories declared nuclear facilities by the International Atomic Energy Agency, a UN controlled organization currently led by Director General Dr. Mohamed El Baradei.

⁶¹ Robert Einhorn, "The Iran Nuclear Issue." *Testimony before the Senate Foreign Relations Committee, May 17, 2006*, (Washington, D.C.: Center for Strategic and International Studies, 2006), 7. <http://www.csis.org/media/isis/congress/ts060517einhorn.pdf> (accessed October 4, 2009).

The IAEA's main function is to monitor the transfer of nuclear technology transfer. One of the provisions of the NPT is the right of nuclear weapons states or other states that possess nuclear technology to provide this capability to other states for peaceful purposes. Unfortunately, most nuclear technology that could be used for peaceful purposes can be and have been used to develop nuclear weapons. The most recent examples were seen in the North Korean nuclear test explosions. As long as nuclear technology use is not fully controlled and transparent to international inspection, nuclear weapons development cheating can occur. If inspections by the IAEA are not universally accepted, one could become very pessimistic about the prospects for further control of nuclear proliferation.

NUCLEAR OPTION STATES: HOW MANY MORE NEW MEMBERS OF THE CLUB?

While nuclear proliferation may seem to be on the verge of growing out of control, the record of states rejecting nuclear weapons since the close of the Cold War is significant. Considering their new security environment, three of the former Soviet republics, Kazakhstan, Ukraine, and Belarus, by 1996 had all of the Russian nuclear systems removed from their territory. South Africa announced in March 1993 that they had developed nuclear weapons but destroyed them prior to signing the NPT in 1991. Libya, long suspected of seeking weapons of mass destruction including nuclear capability, announced in 2003 that they would sign the Comprehensive Test Ban Treaty, accepted unannounced IAEA inspections and gave their entire nuclear weapons development material to the United States. Libya also declared and destroyed its

chemical weapons. Arguments still continue as to the reasons and motives behind Colonel Mu'ammar Qadhdhafi's decision to "come in from the cold," but this particular case does provide a useful example of how states working on the nuclear option can turn back.⁶² Other states including but not limited to Brazil, Japan, South Korea, Taiwan, Syria, Saudi Arabia, Turkey, and Egypt have all looked into acquiring nuclear weapons, some may be actively doing so.⁶³ If we accept the potential of more nuclear proliferation as high, then which states are most likely to break out from the current non-proliferation regime?

Regional security pressures will likely drive the next tier of states to consider or decide to pursue nuclear capability. In North Korea's neighborhood, South Korea and Japan have the ability and in the Koreans case have admitted to past nuclear weapon development activities both government sanctioned and illegal. Japan has long resisted consideration of a nuclear capability due to the lingering impact on their society of the Nagasaki and Hiroshima attacks and has long accepted the protection of the U.S. nuclear umbrella. Recent North Korean testing of missiles and the October 2006 nuclear weapon test have refocused concern on what Japan may decide to do.⁶⁴ A similar concern has been raised about Taiwan who was dissuaded in the 1970's by the United States not to develop nuclear weapons.⁶⁵

⁶² Sammy Salama, *Issue Brief: Was Libyan WMD Disarmament a Significant Success for Non-proliferation?* (Monterey, CA: Center for Non-proliferation Studies, Monterey Institute of International Studies, September 2004). http://www.nti.org/e_research/e3_56a.html (accessed October 4, 2009).

⁶³ For a review of the logics used by these states see Kurt M. Campbell, Robert J. Einhorn, and Mitchell Reiss, eds., *The Nuclear Tipping Point: Why States Reconsider Their Nuclear Choices* (Washington, D.C.: Brookings Institution Press, 2004).

⁶⁴ Associated Press, "Japan says it could build a nuclear bomb," *Washington Post online edition*, November 29, 2006. http://www.washingtonpost.com/wp-dyn/content/article/2006/11/29/AR2006112901641.html?nav=rss_world (accessed June 14, 2010)..

⁶⁵ Associated Press, "Senior Taiwanese official says island will not develop nuclear weapons," *Taipei Times*, October 12, 2006, 12:19 PM GMT, <http://www.taipetimes.com/News/front/archives/2006/10/13/2003331530> (accessed June 14, 2010).

In Iran's region, their efforts may have been spurred by envy or threat but other states have seriously reconsidered their security situation. Iraq's non-nuclear situation is now well known but Syria, Egypt, Saudi Arabia, and Turkey, have Israel or Iran or even the United States on their minds depending on the state. Syria has long been suspected of developing weapons of mass destruction as a counter to Israeli conventional and undeclared nuclear capabilities but has not had a significant effort to develop nuclear weapons.⁶⁶ An emerging example of the proliferation problem at the state level, Egypt has had some difficulty deciding which way to go but recently may have chosen to follow the Iranian example.⁶⁷ Saudi Arabia is likely doing a similar calculus.⁶⁸ Turkey, where there is no evidence of a nuclear program⁶⁹ but has a history of allowing NATO nuclear weapons to be placed there, has openly urged the United States to enter direct talks with Iran on the nuclear issue instead of allowing the three EU states negotiate.⁷⁰ Could Turkey's next move be to ask for help with nuclear weapons as well? Adding Israel,

⁶⁶ Nuclear Threat Initiative website, *Country Brief: Syria*, http://www.nti.org/e_research/profiles/Syria/index.html (accessed October 9, 2009).

⁶⁷ William J. Broad and David E. Sanger. "Restraints Fray and Risks Grow as Nuclear Club Gains Members," *The New York Times*, October 15, 2006, 1. http://www.lexisnexis.com/us/lnacademic/results/docview/docview.do?docLinkInd=true&risb=21_T7553967373&format=GNBFI&sort=null&startDocNo=1&resultsUrlKey=29_T7553972256&cisb=22_T7553972253&treeMax=true&treeWidth=0&csi=6742&docNo=1 (accessed October 9, 2009) According to the article: "Egypt, which long ago sought to build nuclear arms, may be starting to rethink its earlier renunciation. The 1998 nuclear tests by India and Pakistan shook Cairo. 'Egypt's leaders had placed their bet clearly in favor of the Middle East and the world moving away from nuclear weapons,' said Robert J. Einhorn, a former senior State Department non-proliferation official. 'But here was a disquieting indication that movement might be in the opposite direction.' Recently, the international atomic agency found that Egypt had kept some of its old and new efforts cloaked in secrecy, including a continuing project to acquire uranium ore in the Sinai desert. In September, Cairo announced plans to revive its stalled program to build reactors for generating nuclear power. It gave no sign of whether it, like Iran, planned to make reactor fuel on its own."

⁶⁸ Ibid.

⁶⁹ James Martin Center for Non-proliferation Studies, Monterey Institute of International Studies. "Weapons of Mass Destruction Middle East, Turkey," *CNS website*, 2009. <http://cns.miis.edu/wmdme/turkey.htm> (accessed October 4, 2009).

⁷⁰ Demir, Metehan. "Turkey Warns US about Iran Nukes," *The Jerusalem Post, On-line edition*, December 22, 2005. <http://www.jpost.com/servlet/Satellite?cid=1134309625651&pagename=JPost%2FJPArticle%2FShowFull> (accessed October 4, 2009).

Pakistan and India to the mix with constant U.S. conventional military presence for the next several years can provide significant reason for some states to proliferate. One does not need to be too creative to imagine a number of scenarios where confrontations could easily lead to a nuclear exchange in the not too distant future in either SW Asia or SE Asia.

Given these volatile regions identify some of the problems with the current non-proliferation regime, we can begin to see the need to define the requirements for a renewed NPT based arms control regime that places states as the responsible actors and each would be equally transparent and secure in controlling all aspects of nuclear development and deployment whether for civilian or military purposes. This is a sizeable problem but not beyond the realm of the possible to solve. One aspect of this effort would be to ultimately reduce the numbers of weapons available to minimum levels and where possible eliminate some states' programs permanently. Consolidation of weapons programs under the nuclear weapons states and the IAEA would provide a necessary intermediate goal of 21st Century arms control. Ultimately, what remains to be done is develop a new effective nuclear arms control regime that includes eliminating proliferation totally, discourages new nuclear weapons programs for any reason, provides 100% transparency of all nuclear activities, and takes full advantage of the emerging state and below state level interdependencies and leverage the useful and mutually reinforcing aspects of this global environment such as non-state or trans-state actors who can assist in achieving nuclear transparency and control.

REBUILDING THE GENIE'S BOTTLE: OPTIONS FOR A NEW NON- PROLIFERATION REGIME

How can the non-proliferation regime be rebuilt to meet the challenge of stopping the emergence of a second nuclear age? The IAEA Director General has said that as many as 42 additional nations have the ability to develop and field nuclear weapons should they desire to do so. Is this goal of a new nuclear non-proliferation regime feasible? El Baradei provided some reason for hope.

On the one hand, efforts to control the spread of nuclear weapons through the NPT treaty regime can be viewed as a remarkable success. With the exception of India, Israel and Pakistan, every country in the world has joined the NPT. The vast majority of NPT members have stood by their commitments. And the number of nuclear warheads has been reduced by more than 50 percent from its Cold War peak. On the other hand, in recent years, we seem to have come to an impasse, and many see the NPT regime as faltering. You might say that, while we started on the right track, we have lost our sense of direction. Today we have eight or nine countries that possess nuclear weapons - and more than 20 other members of alliances that continue to rely on these weapons for their security. Some countries are actually announcing programs for modernizing their stockpiles, and some have even spoken of the possibility of using such weapons - all the while insisting that they are off-limits to others.⁷¹

A renewed non-proliferation regime is based on defining and enforcing the “Nuclear Rules of the Road” taking into account the evolved nature of the international state since the end of the superpower confrontation. Part of the calculus of this new regime must be an understanding how deterrence works in an N+1 world should the regime efforts fail to achieve total transparency.

If one accepts that North Korea has crossed the threshold to become a nuclear weapons state, then logically one would also accept that the traditional state-centered

⁷¹ El Baradei. “Globalizing Security: A Challenge for Your Generation,” Commencement Address to the School of Advanced International Studies, Johns Hopkins University, Baltimore, MD, May 25, 2006. <http://www.iaea.org/NewsCenter/Statements/2006/ebsp2006n008.html>, (accessed October 9, 2009).

non-proliferation regime has not been adequate. This regime's purpose has been to prevent nuclear wars through transparency and state control of nuclear capabilities. Nuclear war has been averted but the other requirements have at best been of limited success. Theoretically, the NPT regime has worked to achieve success at the state level by lengthening the shadow of the future for member states through cooperation or at least helping states feel more secure from external threats and as a result of cooperation reduce the desire to defect and acquire nuclear weapons.⁷² This effort was aided by the traditional international system as it provided usually sufficient security assurance to those states that did not possess nuclear weapons.

Even as the Cold War was in progress, not all states were protected by their own or allies' nuclear umbrellas. This incomplete extended deterrence allowed the excluded or uncovered states to seek their own nuclear capabilities. As has been argued earlier, even as the superpower confrontation ended, individual states still has security concerns that in some cases have been heightened in recent years causing the most fearful states to defect from the post-Cold War "security" of the emerging international system. At the same time, actors below the state-centered system began to emerge as significant influences on a range of issues that mattered to states such as environmental, human rights, economic, health and most importantly state security. In the area of security, the traditional security dilemma has in many cases expanded to much more than a territorial concern as was the case in the Cold War. Today, an individual or a small group of individuals can upset the national level functioning of a state through a single act of terrorism. Should this act include a nuclear device the state itself could cease to function and in an extreme case other states could become victims of collateral damage as a result

⁷² See discussion on institutions in Chapter II.

of a misaimed retaliation. A more comprehensive non-proliferation regime must attempt to limit the likelihood of any nuclear event occurring.

If, as Philip Cerny suggests, the traditional security dilemma has changed due to transnationalism, increasing globalization and the rise of sub-state actors results in an international system which is increasingly chaotic and unable fully rely on the use of traditional state based solutions to stabilize itself.⁷³ One can expect that as states defect from the cooperative non-proliferation system to seek security individually the options for great powers would be to become increasingly defensively armed, accept evolving new status quo or intervene individually or collectively. This situation is not far from that which President Kennedy feared. But even if the system has only faltered in a few cases, what can be done to reinforce it?

THE NEW RULES OF THE NUCLEAR ROAD

Can a system be constructed that assists states not to defect from the non-proliferation regime? The simple answer must be yes but this new regime has to be broader than traditional state-based treaty compliance method of the past. Here the ideas of evolving structures of international governance, importance of triangulating democracy, trade and international organizations to achieve peace, and transnational advocacy network building are important. Each is a part of the new international system that has accelerated in the post-Cold War world. These concepts should be adapted to the traditional non-proliferation regime.

⁷³ Philip G. Cerny, "The New Security Dilemma: Divisibility, Defection and Disorder in the Global Era," *Review of International Studies* 26, no. 04 (2001).

Deterrence, as the classical means of states using power to deter another from proliferating, seems to have less of an impact in the new international environment. State power is still useful but has limits as we are now seeing in Iraq. How much classical deterrence has diminished is difficult to tell as the current examples offer little assurance that state political and nuclear capabilities can have the desired effect. However, smaller states possessing weapons seem to be able to deter great powers from selecting military options making these weapons more attractive to them. This situation creates a new balance of power dilemma: smaller states creating a security dilemma for the larger states. Currently, Iran is an example of this relative to the United States.

Concern that the traditional security dilemma may be changing to a new security dilemma where the state is less central, the international system less centralized, and other non-state groups may be providing both threats and security that were previously done in the state system is rising. Transnational processes are not bounded or completely controlled by states. The Khan network is example of negative side of globalization and transnational networks. This criminal activity shows that states will continue to seek nuclear capabilities if necessary from non-state actors when prevented by state non-proliferation objectives. The new regime must develop a range of capabilities that address both the traditional state level concerns and take advantage of the emerging non-state actors and processes.

The basic outline of the new non-proliferation regime includes enhancements to existing treaties, enforcement the new UNSCR 1540⁷⁴ and other state level agreements,

⁷⁴ UN Security Council, "United Nations Security Council Resolution 1540 (2004)," *UN website*, 2009. <http://daccessdds.un.org/doc/UNDOC/GEN/N04/328/43/PDF/N0432843.pdf> (accessed October 4, 2009), and the UNSCR 1540 Committee website for more details, <http://www.un.org/sc/1540/> (accessed June 14, 2010).

and support for an inspection protocol primarily formed around the IAEA but flexible enough to allow for bilateral arrangements that fulfill the intent of the NPT regime. In addition to the traditional ingredients, the international system would support the development and engagement of non-state organizations in addition to existing international organizations such as advocacy groups and potentially informal groups that could assist in the surveillance and identification of related proliferation activities. From a practical point of view, this new regime would require enhancement of international systems for identifying and cataloguing existing nuclear materials to allow more effective monitoring. In conjunction with these activities on the nuclear issue, a system of confidence building measures and alternative security options for states considering going nuclear should be constructed.

The existing NPT has long been criticized for the problems inherent in attempting to simultaneously control the spread of nuclear weapons technology while supporting the transfer of nuclear power generation capabilities to all of the nations that desire it. As has been well documented, the line between these two activities is hard to distinguish due to the wide range of activities the two efforts have in common. Experts have suggested the NPT can be updated to address this shortcoming. One has provided specific changes that are being discussed. Specifically, Pierre Goldschmidt, Deputy Director General of the IAEA concerned about the United States-India bilateral nuclear technology transfer agreement, believes other states like Russia and China will no longer feel constrained to strike similar deals with Pakistan, Iran or other states. Goldschmidt believes the UN must act quickly to shore up the NPT and has recently suggested the appropriate means to do so.

The single most effective and feasible way to establish the necessary measures is for the UNSC to adopt (under Chapter VII of the UN Charter) generic and legally binding resolutions stating that:

1. if a State withdraws from the NPT after being found by the IAEA to be in non-compliance with its safeguards undertakings, such withdrawal constitutes a threat to international peace and security under Article 39 of the UN Charter; and all materials and equipment made available to such a State, or resulting from the assistance provided to it under a Comprehensive Safeguards Agreement (CSA) will be forthwith removed from that State under IAEA supervision and remain under Agency's Safeguards.
2. If a State is reported by the IAEA to be in non-compliance:
 - a. the non compliant State will have to suspend all sensitive nuclear fuel cycle activities for a specified period of time [but could by all means continue to produce electricity from nuclear power plants], and
 - b. if requested by the IAEA, the UNSC would automatically adopt a specific resolution (under Chapter VII) providing the Agency additional verification authority until it has been able to conclude that there is no undeclared nuclear material and activities in the State and that its declarations to the Agency are correct and complete.⁷⁵

The obvious difficulty is gaining UN and UNSCR support for change is the fact that the major nuclear weapons states are the main targets of these new constraints.

Goldschmidt also suggests that adjustments to the rules governing the Nuclear Suppliers Group who are a multilateral state level group aimed at curbing technology transfers.⁷⁶

Independently, the Nuclear Supplier Group could adopt a rule whereby nuclear material and equipment would only be exported if the facilities where they are to be stored or used are covered by both a Comprehensive Safeguards Agreement and an INFCIRC/66-type safeguards Agreement. This requirement would block a recipient State from withdrawing from the NPT and claiming the right to do whatever it wants with the items

⁷⁵ Pierre Goldschmidt, "“Is the Nuclear Non-Proliferation Regime in Crisis? If So, Why? Are There Remedies?” A Presentation to the Charlottesville Committee on Foreign Relations," ed. Carnegie Endowment for International Peace, (2006), 8-9.
http://www.carnegieendowment.org/static/npp/Goldschmidt_CCFR_May_2006.pdf (accessed October 4, 2009).

⁷⁶ The NSG “consists of 30 nuclear suppliers and seeks to control exports of nuclear materials, equipment, and technology, both dual-use and specially designed and prepared.” From the Federation of American Scientists website. <http://www.fas.org/nuke/control/nsg/index.html> (accessed October 4, 2009).

previously delivered or the materials derived there from.⁷⁷

Unfortunately, the problem of influencing states to conform to international standards remains. It is hard to imagine the UN or a state who opposed the United States-India deal attempting to sanction the United States or taking more drastic action. The other states understand this hard rule of the international system. But are there other levels on which state behavior could be influenced? If so, how would that work?

FUTURE OPTIONS: BACKING AWAY FROM THE TIPPING POINT

Campbell and Einhorn have offered five recommendations for dealing the current international environment that has caused a number of states to potentially reach the “tipping point” for going nuclear which can serve as a means of assessing this paper’s outline for a new non-proliferation regime.⁷⁸ First, they suggest the international community take all necessary steps to prevent North Korea and Iran from going nuclear. Given that North Korea has barely crossed the weapon threshold, this advice is still valid. Next they suggest the United States must take the lead in addressing the regional security concerns discussed earlier in this paper. As the United States has lost some of its superpower strength, the need for a new U.S. strategic roadmap on the nuclear front is just as evident as the regional concerns the United States has in Iraq.⁷⁹

In that region, the continuing war in Iraq and Iran’s security concerns driving the ruling elites to reach for nuclear weapons are directly related. Whether the future opponent is the United States, Israel or Iraq, when combined with their limited

⁷⁷ Goldschmidt, 9.

⁷⁸ Campbell, Einhorn, and Reiss, eds., *The Nuclear Tipping Point: Why States Reconsider Their Nuclear Choices*, 328-32.

⁷⁹ Ibid., 332-36.

conventional military might, Iran has significant reasons to consider nuclear weapons. Working with allies and other cooperative states as well as those who feel a rising security dilemma, the United States could be on the threshold of a new opportunity to pull several states back from the nuclear decision point. One could easily make the argument that both multilateral nuclear reduction efforts (Six-Party Talks on the North Korean Issue and the EUR-3 Talks with Iran) can be resolved to the international community's benefit and that the United States holds the keys to both future agreements.

In their third recommendation, Campbell and Einhorn suggest the United States could lead the effort to fill the hole in the NPT on misuse of dual capable nuclear processes by organizing an international effort to centralize nuclear fuel production, distribution and recovery.⁸⁰ By placing the fuel cycle process in international control, those states that need the fuel but are considering their own fuel cycle capabilities would have no reason to do so except for weapons material production. This concept fits well with this paper's call for increased controls of these materials and would increase the transparency of a state's nuclear intentions. Improvements in verification, intelligence and analytical capabilities that lead to better understanding and transparency of nuclear programs, their fourth recommendation, would clearly help prevent more Iraq scenarios where decisions are made based on incomplete data that have severe global consequences.⁸¹ Sharing of national intelligence and better cultural based assessments would improve decision elites' understanding of the "ground truth" of another state's intentions. Campbell and Einhorn point out that their study shows the common

⁸⁰ Ibid., 336-42.

⁸¹ Ibid., 342-44.

understanding on Japan's intentions by the United States was not in line with reality.⁸²

The United States should determine the means to share relevant intelligence information with other states in order to expose nuclear concerns far before they reach the crisis stage.

Finally, Campbell and Einhorn suggest that the reduction of the salience of nuclear arms is fundamentally in the security interests of the United States. They argue also that states that decide to renounce nuclear weapons and eliminate their programs find the inertia to restart a new program difficult to overcome.⁸³ This paper argues that state level and non-state level efforts to control nuclear programs would be focused on the goal of slowing and removing the incentives to start or restart nuclear weapons programs. While achievement of total nuclear disarmament will likely be an unattainable goal, reducing the incentives for strategic elites to seek these capabilities while offering increased security that economic interdependence affords is a necessary responsibility of the United States and the other nuclear weapon states. Another option to seek more effectiveness in the nuclear non-proliferation regime will likely be found in those communities with specific interests in achieving disarmament. Epistemic communities have achieved success in establishing and maintaining regimes in other areas. The future success of the NPT regime will require multilateral support with a strong state leader such as the United States but in an increasingly interdependent global system, these communities will be an important element of the ability of states to work together successfully.

⁸² Ibid., 344. "The study on Japan, for example, revealed that there has been more internal consideration of the nuclear option than is commonly thought."

⁸³ Ibid., 344-45.

EPISTEMIC COMMUNITIES IN NUCLEAR ARMS CONTROL: IMPORTANCE TO REGIME SUCCESS

As an example of the wide number of engaged states and international organizations, the power of the NPT, with the sustainment of its controls on nuclear materials and processes, is likely more than just the sum of its member governments' policies and enforcement actions. In order to sustain a complex regime like nuclear arms non-proliferation, concerned groups and individuals will be important to any chance for long term success. Peter Haas provides an example of a seemingly intractable problem that individual governments and existing international organizations were unable or unwilling to cooperate in achieving an effective, long lasting solution. As Europe industrialized after 1945, pollution of the Mediterranean became endemic. Over time, an epistemic community formed to address the issue.

Haas believes that while regimes have been studied extensively for how they are created and maintained, they are the potential to be more than just rules and norms for states to follow.⁸⁴ Haas believes regimes could be a vehicle for international learning resulting in convergent state policies. His research indicates that the current literature needs to focus on more than political order and economic growth that regimes foster. Researchers need to look at the transformative processes initiated or fostered by regimes. Haas states some regimes come from shared knowledge instead of domestic or international interest groups.⁸⁵

As an example of the full potential of regimes, Haas describes the Mediterranean Action Plan (MAP), a regime for maritime pollution control. He believes the MAP

⁸⁴ Haas, "Do Regimes Matter? Epistemic Communities and Mediterranean Pollution Control."

⁸⁵ Ibid., 377.

shows that a regime can alter the balance of power in as it did in Mediterranean governments by empowering a group of experts, who then helped develop convergent state policies that complied with the regime. This success was achieved in those countries with MAP experts who had direct access to political decision makers. These governments became the strongest supporting nations of the highly successful regime. The success of the MAP regime required careful balancing of various competing interests: industries, farmers who pollute and fishermen.⁸⁶

The issue MAP addressed was primarily a collective goods problem, pollution from one country washing up on another's shore. MAP sought restrictions to control pollution while being carefully balanced to prevent any country from gaining an economic competitive advantage.⁸⁷ Political mistrust and economic downturns worked against regime success but MAP achieved its goals through the persistence and embedding of experts within the member nations.⁸⁸ Haas cites Oran Young and Robert Keohane who explain the positive power of a successful regime: "the most compelling argument for a regime's importance in promoting international order is the fact that compliance is achieved even when the regime's norms and principles run counter to the short-term interests of the participants (or the hegemon)."⁸⁹

Haas describes a regime as consisting of legal, assessment, management, and administrative components. The MAP regime meets Krasner's definition of a regime: "...sets of implicit or explicit principles, norms, rules, and decision-making procedures

⁸⁶ Ibid., 377-78.

⁸⁷ Ibid., 378.

⁸⁸ Ibid., 379.

⁸⁹ Ibid.

around which actors' expectations converge in a given area of international relations.⁹⁰ Principles are beliefs of fact, causation, and rectitude. Norms are standards of behavior defined in terms of rights and obligations. Rules are specific prescriptions or proscriptions for action. Decision-making procedures are prevailing practices for making and implementing collective choice."⁹¹ The MAP regime has annual intergovernmental meetings that review parties' attempts to draft and enforce national legislation for pollution control as recommended by the regime.⁹² One key regime success indicator is the fact that it has resulted in no increase in pollution.⁹³

Haas analyzes of the role of new actors such as the pollution experts and the process that resulted in national compliance. Ecologists and marine scientists (formed an epistemic community) set the international agenda for MAP, guided home nations to support the international pollution control efforts and put strong controls in place at home.⁹⁴ The most supportive states were where community members were most influential. These individuals were able to get environment ministries to change from being coordinative to regulatory, the key to success. Haas notes that not all states changed.⁹⁵ The MAP epistemic community set ecological principles as their core beliefs about cause and effect relationships. Their holistic approach to environment led to a broad definition of pollution that allowed a number of interpretations and leveling of state interests.⁹⁶ The community worked political conflicts carefully and in gaining support from ministries allowed them to promote their vision of pollution control that was

⁹⁰ Krasner, *International Regimes*, 2.

⁹¹ Haas, "Do Regimes Matter? Epistemic Communities and Mediterranean Pollution Control," 381.

⁹² *Ibid.*, 382.

⁹³ *Ibid.*, 383.

⁹⁴ *Ibid.*, 384.

⁹⁵ *Ibid.*, 388.

⁹⁶ *Ibid.*, 385-86.

broader in scope and more clearly focused than that of the individual ministries had been.⁹⁷ Amazingly, most ministries were not challenged by industry.⁹⁸

In contrasting this analysis with more conventional analyses of regimes and policy change, Haas notes the MAP regime ran counter to normal explanations for the forming of convergent state policies such as foreign pressure (coercion), public opinion, and the rational anticipation of future benefits for a unitary government.⁹⁹ This regime and compliance with it were not imposed and persistence of regime was not due to hegemonic support through bargaining, toleration of defections, or staunch enforcement of regime rules.¹⁰⁰ Haas also states regime compliance did not stem from popular mass politics nor was it a result of anticipation of future benefits or from guarantees that other states would not free ride.¹⁰¹ Given all of the expected limitations of regimes offered in the literature, the Mediterranean Area Plan was indeed successful. While states will need assistance from epistemic communities to enhance the effectiveness of the NPT regime, multilateral efforts as with any “team sport” will require a lead state to set the agenda and encourage participation and to sustain progress toward the NPT goals. Until recently, the one best positioned state, the United States, was missing in action.

U.S. LEADERSHIP IN THE NON-PROLIFERATION REGIME: THE MISSING ELEMENT

A new nuclear non-proliferation regime needs to be developed based on acknowledgement of the limitations of the current NPT and related regime structure.

⁹⁷ Ibid., 387-9.

⁹⁸ Ibid., 392.

⁹⁹ Ibid., 399.

¹⁰⁰ Ibid.

¹⁰¹ Ibid., 399-400.

This new regime will take advantage in strengthened written agreements that provide better inspection and enforcement provisions leading to increased transparency of state and non-state actor nuclear activities both civilian energy production and military uses. This new regime would also acknowledge and take full advantage of the role of non-state actors in expanding the nuclear reduction and security enhancement agenda. Increased interdependence of political, economic and social activities within and among states should be accepted as a key component of the new regime. Traditional international state-based fora and supporting agreements are the foundation of any regime but sub-state actors can potentially provide the enabling capabilities that increase transparency of nuclear programs, reduce related proliferation activity and ultimately increase the potential proliferating state's level of confidence in its security. The key to revitalization of this regime is the engagement of the central state in the nuclear arena, the United States.

Writing in 2004, William Walker was concerned about a disruption to the former world order as a result of the terrorist attacks to the United States and other nations since the end of the Cold War.¹⁰² His primary objective was to seek U.S. engagement in the 2005 NPT Review Conference. With the U.S. policies relative to Iraq, he believes the United States had potentially caused a rebirth of distrust among states that will encourage further proliferation of WMD and nuclear technology in particular. Walker offers liberal views on the history and role of nuclear weapons in the world order. He describes the current world situation as one where the United States should seek to gather in the “great powers” to re-establish a regime where they work together “to the task of restraining the

¹⁰² William Walker, *Weapons of Mass Destruction and International Order*, Adelphi Paper (Oxford, U.K. ; New York: Oxford University Press, 2004).

political, military and terrorist usage of WMD” as an alternative to the current policies of the Bush Administration. Walker believes the world order is based on how states deal with the concept of enmity. He believes that politics is the only means to control enmity. World order, one marked by states adherence to established norms and administered through institutions, can be reestablished by “constitutionalism.” He calls for the great powers (which can be defined as the nuclear nations) to work together with the leadership of the United States to return to the order before 9/11 and advance toward the elimination of chemical and biological weapons and reduction of nuclear arsenals to a minimal level.

Walker believes the transition of the U.S.S.R. to current Russia was aided by adherence to international norms that define his concept of constitutionalism. Walker views constitutionalism as “embodied (in) the conviction that the nuclear order was the property of all states, not just the great powers, and that they collectively possess rights to define legitimate behaviour.”¹⁰³ This transition is evidence to him that a specific order is needed to assure the world that no one state’s behavior would operate outside expectations of the other states. Walker also cites the UN passage of Security Council Resolution 1540 on non-proliferation as an opening for the Bush Administration to reengage in multilateral cooperation. This resolution has implicitly acknowledged the state as the only rightful possessor of WMD capabilities and that given the difficulty of one state may have in controlling these capabilities, it nonetheless expects each to do so. UNSCR 1540 also “amounts to a proclamation, issued by the Security Council, that all states should support the non-proliferation norm: ‘the proliferation of nuclear, chemical and biological weapons, as well as the means of delivery, constitutes a threat to

¹⁰³ Ibid., 12-13.

international peace and security.”¹⁰⁴ Walker sees this as a good step but expressed grave concern that the United States had not signaled strong support for it.

Walker sees the overall issue of potential proliferation as revolving around the twin needs of legitimacy and efficacy. Quoting Kissinger’s thesis, Walker states that any legitimate order depends on constant upkeep and reaffirmation by the participants. He sees this new order as operating on two levels; one among the great powers and the other with all of the states. He also offers that this new order will require the United States to return to respecting the four primary principles that legitimized the Cold War order:

- 1) reciprocal obligation or the requirement to exercise restraint and uphold order,
- 2) work toward elimination of all weapons or at least for nuclear constrain
production and deployment,
- 3) supremacy of diplomacy over war,
- 4) *pacta sunt servanda* or the adherence to international law.¹⁰⁵

Walker’s assessment of the current WMD environment offers important insights into the broad spectrum of reactions to the effects of a unipolar world. His work is an interesting piecing together of theory and history to form a suggested new world order that is an adaptation of the old bi-polar world but acknowledges the predominance of the United States. In Walker’s view the United States must lead by forging a stronger consensus that is not possible to accomplish from an aggressive and unilateral foreign policy approach. The election of a new president and the arrival of a new foreign policy agenda which includes nuclear arms control as a top priority are already showing gains that Walker would approve.

¹⁰⁴ Ibid., 75.

¹⁰⁵ Ibid., 70.

The 2005 NPT Review conference was unsuccessful in its effort to advance the goal of the NPT. One reviewer saw the key issue behind a lack of further movement of the review as the U.S. position shift from non-proliferation support to a single state pursuit of counterproliferation. The United States had been focused on coalition building of “self-selected coalitions of the willing,” and is seen as having “weakened some of the essential infrastructure and tools that the international community needs for combating WMD and terrorism.”¹⁰⁶ The 2005 NPT Review highlighted the requirement for good ideas and proposals to be backed by “innovative, pragmatic strategies and active presidents willing to use the rules and procedural tools to their maximum possibilities in order to achieve useful, regime-building outcomes.”¹⁰⁷

The international environment had dramatically shifted in between the 2000 and 2005 NPT Reviews with the most obvious event being the September 11, 2001 terrorist attacks on the United States. The immediate response of the United States to these actions as well as the invasion of Iraq in 2003 ostensibly to prevent Saddam Hussein from using WMD to threaten other states had a dramatic impact on international relations. One of the byproducts of these events was the rise of concern for terrorist groups gaining access to nuclear weapons or nuclear devices like a “dirty bomb” capable of spreading nuclear radioactive material in an urban area.

Additionally, the NPT states need to seriously address the need for modernization of the NPT rules in order to allow necessary transparency and increased civil society participation.¹⁰⁸ The upcoming 2010 NPT Conference will be the best moment for the

¹⁰⁶ Rebecca Johnson, “Politics and Protection: Why the 2005 NPT Review Conference Failed,” *Disarmament Diplomacy* 80(2005): 31.

¹⁰⁷ *Ibid.*, 27.

¹⁰⁸ *Ibid.*

United States and other leading states to address these issues. Given the disappointing results of the 2005 NPT Review and the shift in outlook of the U.S. government on the nuclear issue front, the 2010 NPT Conference provides the United States with a new and time critical opportunity to diplomatically but firmly assume a leadership role in nuclear issues of proliferation and disarmament. President Obama has set out his agenda on nuclear disarmament beginning with the 2009 Prague speech¹⁰⁹ and has continued to support efforts to replace the now lapsed 1991 START Treaty with a new agreement with Russia to further reduce and account for the two largest nuclear arsenals. His complete agenda is compatible if somewhat optimistic with the pillars of the NPT.

In his Prague Speech, in addition to the call for the new START agreement with Russia, President Obama has called for a number of important nuclear initiatives to be completed including the ratification of Comprehensive Test Ban Treaty (CTBT) which has yet to be approved by the U.S. Senate. Obama has also recommended the negotiation and ratification of a Fissile Material Cutoff Treaty (FMCT) which would essentially stop any further production of the most essential component of any nuclear weapon. In conjunction with this effort and in support of the NPT civilian nuclear power pillar, President Obama has called for the establishment of a cooperative civilian nuclear fuel bank. Additionally, he supports increased funding for inspections as required by the NPT and other treaties which would add needed resources to the IAEA's efforts and provide essential transparency and confidence building to the non-proliferation regime.

An essential component of the NPT regime is the prevention and if necessary punishment of nuclear proliferators. President Obama has called for increased

¹⁰⁹ Obama, "Remarks by President Barack Obama, Hradcany Square, Prague, Czech Republic, April 15, 2009."

international support for application of consequences for rule breaking by states such as North Korea and Iran. One of the key issues within the proliferation area which the United States has repeatedly expressed concern is the prevention of the transfer of vulnerable nuclear materials to more states or even terrorist groups. The United States believes that efforts to control these risks lie within existing international institutions and can be assisted by newer programs like the Proliferation Security Initiative and the Global Initiative to Combat Terrorism. Showing a willingness to assert U.S. leadership in the nuclear issue area, President Obama has sponsored an international nuclear summit to discuss the future of nuclear disarmament.¹¹⁰ Equally important to the establishment of U.S. leadership on the issue of disarmament generally is the need for consistent and persistent support to the upcoming 2010 NPT Conference as well as all future NPT events.

The 2010 NPT Conference has specific issues that must be addressed in order for the non-proliferation regime to be strengthened and the goal of disarmament achieved. One of the most important issues to be resolved for a robust non-proliferation regime to appear is gaining long sought agreement from 22 non-nuclear weapon states to bring into force comprehensive safeguards as identified by the IAEA. Eight of these states have yet to even to submit written agreements for consideration by the IAEA Board of governors. Iran's continuing compliance issues are of deepening concern for the IAEA as well as the NPT states.¹¹¹ One observer of the 2009 PreCom which provides the agenda for the 2010 NPT Conference sees the most important result of the event is not another statement of

¹¹⁰ Barack Obama, "Statement by President Obama on the 40th Anniversary of the Nuclear Non-proliferation Treaty," *The White House website*, 2010. <http://www.whitehouse.gov/the-press-office/statement-president-obama-40th-anniversary-nuclear-non-proliferation-treaty> accessed March 10, 2010.

¹¹¹ Patricia Lewis, "Life at 40: Prospects for the NPT and the 2010 Review Conference," *Arms Control Today* (March 2010).

commitment to the principles of the NPT but the need for development “and completion of convincing action plans and apply the requisite resources for meeting proliferation challenges and moving toward a world free of nuclear weapons.”¹¹² This requirement is one that the most influential states of the international community need to seek to lead with the United States having the greatest obligation among them if in fact President Obama intends to place his state’s action behind his words.

FORGING A RENEWED MULTILATERAL SUPPORT FOR NPT: UNITED STATES TO LEAD

Recent statements of the President and Vice President backed by actions such as the new START agreement and the 2010 Nuclear Posture Review indicate that the United States is once re-energizing U.S. Nuclear Arms Policy and acting as a leader in the international community toward the NPT goals. If one accepts as the NPT preamble statements, “Considering the devastation that would be visited upon all mankind by a nuclear war and the consequent need to make every effort to avert the danger of such a war and to take measures to safeguard the security of peoples, Believing that the proliferation of nuclear weapons would seriously enhance the danger of nuclear war,” then given the current security environment, a rational acting nuclear weapons states would have difficulty seeing the requirement for nuclear weapons on purely security concerns. Additionally, if one accepts the power of one state to influence the nuclear issue area as dramatically as the United States has, then one should expect other states including Russia also seek to influence as well. What is needed in this era of globalization where polarity has decreasing explanatory power is an agenda set by one of

¹¹² Rebecca Johnson, "Enhanced Prospects for 2010," *Arms Control Today* (June 2009): 21.

the more powerful states that can lead others to cooperate and ultimately engage all states in a common goal, in this case nuclear arms reduction leading to disarmament. This research has suggested both a theoretical and a practical framework for achieving the non-proliferation goals of the NPT, a stated goal of all but a handful of states and now the restated goal of the United States. The United States in the last year has called for a renewed agenda of arms control and non-proliferation leading toward eventual disarmament beginning with President Obama's April 2009 speech in Prague and continuing through the May 2010 NPT Review Conference. This short period has witnessed a new START Treaty being signed by the U.S. and Russian presidents, the completion of the third U.S. Nuclear Posture Review which called for a renewed focus on non-proliferation to prevent nuclear terrorism, an unprecedented U.S. hosted Nuclear Security Summit where 47 nations committed to securing the world's nuclear material within the next four years and the NPT Review Conference. After more than a decade of little to no progress on nuclear arms control and a number of disturbing developments in proliferation of nuclear technology and even nuclear testing, this renewed focus on the nuclear issue is both supported by this research and cautiously welcomed by the international community. What remains to be seen is whether or not these steps will continue to build into a sustained march toward the NPT goals. If the United States is to retain its leadership position as this research recommends, a broader policy framework which includes the current U.S. stated policies and more is required.

The United States will need to work to reinforce and sustain non-proliferation regime which is the foundation of the needed actions required to achieve nuclear disarmament and to assist the international environment to remain "nuclear arms free."

As a part of this effort, the United States will need to simultaneously support overall security of all states while improving bilateral relations with Russia and China in order to gain their cooperation on regional issues. This is both a part of the President's stated policy from the Prague Speech and is a prominent part of the 2010 Nuclear Posture Review.¹¹³ As this dissertation argues, the United States as the "strongest" power based (neorealist framed) state, is best equipped to assist in increasing complex interdependence among both power based and normative states. This unique position also provides the United States with opportunities to offer solutions to regional security issues in cooperation with other power based states like Russia and China. The central focus of the U.S. effort should be to lengthen the shadow of the future for power based states such as Russia, China, India, Pakistan, Iran, North Korea as well as their neighbors. As the level of nuclear arms held by the United States and Russia falls to a level nearly equal to the other major nuclear weapons states, the regional issues become the only significant state level security concerns that would prompt their elites to require nuclear weapons as a counter to those threats. At time unique but multilateral formations of states such as those currently dealing with the Iranian and North Korean issues will be required with support of the United States key to their success.

Even if successful in developing consensus among power based states, the United States will have to also offer support to normative based states (neoliberal institutionalist framed) through appropriate for a which will remind power based states of their international obligations and the benefits available in other areas than military security from cooperation. If the United States is successful in dealing with only a limited amount

¹¹³ Department of Defense. "Nuclear Posture Review Report," *Department of Defense website*, 2010, xi, 47. <http://www.defense.gov/npr/docs/2010%20Nuclear%20Posture%20Review%20Report.pdf> (accessed June 15, 2010).

of states on both nuclear issues and regional conflicts, those normative based states that do not see any benefits could potentially determine that a change to power based views and associated military solutions is the best means of lengthening their shadows of the future. As the world's largest economic power, the United States, despite its current economic downturn, is most able to leverage its substantial economic and political power to limit the requirement for military power in these states. While the advantages of conventional military power will likely become more apparent as nuclear weapons are eliminated, the United States will need to become adept at leveraging the rising international credibility gained from all efforts to shift the international community from conflict to cooperation. The series of activities on nuclear issues currently underway should eventually result in the United States being recognized as the only state to have recently offered a public plan to reach nuclear disarmament and acted on those stated intentions. This state leadership should result in the United States gaining international moral authority and respect reversing a decade of decline in both.

ENGAGING RUSSIA AND CHINA: KEY TO MULTILATERAL SUCCESS

To succeed in shifting the international agenda from primarily focusing on security threats which nuclear weapons represent the ultimate response to them, the United States will need to continue to engage Russia and China. As has been argued in this dissertation, the return to prominence of arms control between Russia and the United States will likely have the beneficial impact of restoring a long neglected strategic relationship formerly between opponents. As the United States considers how to continue to engage Russia, the renewed relationship should be update to an appropriate form that

fits with the current environment. From a security perspective, the United States needs to assist its NATO Allies to develop a more useful relationship with Russia as has been suggested by the NATO Secretary General.¹¹⁴ If multilateral security relationships as successful as NATO have had normalizing impacts on its members, then adding Russia to the seats at the table in Brussels would seem an appropriate goal. If the Alliance remains distrustful of the Russia's policies, then the price of admission should reflect the changes desired on the part of both Russia and its members alike. Without some willingness to incorporate Russia into the "Euro defense" discussion in a serious and permanent way, continued divergence on both policy and action will most likely continue. This effort also would have significant advantages when the focus is shifted to resolving other regional conflicts as Russia is a part of the equation in virtually every one of them.

A similar arrangement with China is not as simple to develop as their region has no similar NATO structure. However, China has been essential to the process of engaging with North Korea on their nuclear program. China's own nuclear program while limited in scope compared to others, the opaqueness of their policies, doctrine,

¹¹⁴ In a recent speech, NATO Secretary General Anders Rasmussen outlined his vision for an improved NATO/Russia relationship, "But continuing NATO's Open Door policy is only part of the answer to Europe's consolidation. We also need a new relationship with Russia. Indeed, I firmly believe that a much improved relationship between NATO and Russia would be the best reassurance of all, to all our nations. That is why I have invested a lot of time and effort, ever since I took office, in building better relations with Russia. There has been progress in a number of areas, including our joint review of common threats and challenges. But there is a lot of work still left to do. We continue to have our differences, not least about NATO's Open Door policy. There are also profound concerns, all across our Alliance, about Russia's policy vis-à-vis Georgia. We think Russia sends the wrong kind of signal by conducting military exercises that rehearse the invasion of a smaller NATO member. Let me stress, NATO is not a threat to Russia and will never invade Russia. Nor do we consider Russia a threat to NATO. That is why Russia's new military doctrine does not reflect the real world. It contains a very outdated notion about the nature and role of NATO. But we must not let these differences hold the entire NATO-Russia relationship hostage. After all, NATO and Russia also have many common interests – in Afghanistan, in combating terrorism, and in preventing nuclear proliferation. We need a NATO-Russia relationship that allows us to pursue these common interests, and which will not de-rail every time we disagree. I will continue to work for such a strong, trustful NATO-Russia relationship. And I am confident that NATO's new Strategic Concept will underline the determination of all our nations to make it a reality." Anders Fogh Rasmussen, "NATO's New Strategic Concept - Global, Transatlantic and Regional Challenges and Tasks Ahead." Warsaw, Poland: NATO, 2010. http://www.nato.int/cps/en/natolive/opinions_62143.htm (accessed April 7, 2010).

force modernization and targeting creates difficulties when other states consider arms control. The recent U.S. hosted Nuclear Security Summit invitation was accepted by China which along with the upcoming NPT Review Conference allows the United States two opportunities to encourage discussion on the future of nuclear weapons in Chinese thinking. Given the significant level of interdependence of the U.S. and Chinese economies, shaping of the international security agenda to allow China to participate actively, to be understood and to be engaged will have lasting benefits both for the region as well as globally. Essential to a wider engagement of China by the United States is the use of multilateralism such as is being done on the North Korean issue. Without a specific international institution that focuses on regional issues important to China and her neighbors, the United States will need to carefully seek opportunities to start and continue multilateral dialogs that assist in lowering tensions in the region and begin to develop positive relationships both among the regional states but also globally. Long standing conflicts such as the Kashmir issue, border disputes, terrorism, human rights issues have not been resolved through bilateral means but may yield to a renewed multilateral effort backed by the United States.

Engagement of Russia and China must be more than just on a security level to be successful but the current nuclear “moment” allows a significant opportunity to attempt to broaden engagement with these key states from one of avoiding conflict to one of resolving conflict. Engagement with these two states should be done on several parallel levels, economic, political, security and social with only loose linking of expectations. Quid pro quos should not necessarily be expected in the short run to avoid the “linking of issues” problem experienced by Carter when he tied advancement of human rights in the

Soviet Union to further arms control negotiations. What can be expected is the development of a deeper interaction between the states on a range of issues that is designed to at least minimize misunderstandings and open up opportunities for cooperation.

Beyond the immediate goal of reducing strategic nuclear arms, the wider issue of the U.S. role and support in efforts to secure nuclear material and reduce weapons below the strategic system level remains the more critical issue impacting the health of the NPT regime. The NPT regime remains weakened or under stress from proliferators, non-signatories and breakout states. A lack of complete security on materials and tactical nuclear systems contributes to this problem. Despite a great deal of work to deal with these problems through programs such as the Proliferation Security Initiative and the Global Initiative to Combat Terrorism, a lack of US support to the 2005 NPT Review Conference provided mixed signals to the international community on the degree of U.S. support to the goals of the treaty. Through the past decade, the U.S. backed both efforts to control North Korea and Iran but had a more inconsistent record with respect to other states' nuclear programs such as Pakistan and India. With a return to a more focused and comprehensive approach to nuclear issues, the United States will need to insure actions including appropriate funding support follow words. The U.S. sponsored Nuclear Security Summit would seem to be an appropriate "informal" pre-NPT Review Conference to gage nuclear weapons states positions, particularly Russia and China, for reinforcing the NPT and widening future nuclear security discussions. If the U.S. nuclear agenda is to progress, the 2010 NPT Review Conference would seem an important moment for the U.S. to positively engage.

Assuming the U.S. remains for the immediate future the most powerful state in the international system, what can the U.S. do to improve the maintenance of the nuclear security regime and the international security environment? As was mentioned earlier, the ball is rolling toward implementing the recommendations of President Obama's Prague Speech. The key treaty elements of this program are now beginning to take shape including the new START agreement signed on the one year anniversary of President Obama's Prague Speech, a push to ratify the Comprehensive Test Ban Treaty (CTBT) and a call to negotiate and ratify a Fissile Material Cutoff Treaty (FMCT). The CTBT and the FMCT once completed would essentially place a permanent limit on state's ability to produce new nuclear material for weapons and constrain new weapons testing. These two processes are seen as essential to further limiting the entrance of any new nuclear states. In support of these normative measures for the international community, President Obama called for increased support for inspections, primarily through funding of the IAEA, the development of a cooperative civilian nuclear fuel bank to assist in achievement of the NPT goal of supporting peaceful uses of nuclear energy while limiting opportunities for proliferation and consideration of stronger consequences for rule breaking of the non-proliferation regime. One example of his commitment to this last policy was seen in the President's direct discussions with the Chinese leader Ho Jin Tao during another of his stated goals, the U.S. hosted Nuclear Security Summit in April 2010, where he sought a Chinese commitment to support additional sanctions against Iran's nuclear program.

Additionally the President's nuclear arms policy agenda includes support to strengthening the global regime to stop proliferators with specific emphasis on reversing

North Korea's nuclear program and preventing further proliferation from that state while seeking to engage Iran in a multilateral dialog. At present, the latter effort seems to be developing into a classic carrot and stick approach as Iran is unwilling to either engage in such a dialog or slow its progress toward achieving nuclear weapons capability which they continue to categorically deny is the aim of their nuclear program. Beyond dealing with these two states, the U.S. President's ultimate policy goal is to prevent terrorist groups from possessing a nuclear capability. To achieve this end, the United States is supporting all efforts to secure all nuclear material that could be transferred to such groups by 2014. During the Washington Nuclear Security Summit at least two states offered to have the United States to secure their material immediately while the conference concluded with a 47 state commitment to the U.S. goal of complete security in four years.¹¹⁵ These policy initiatives demonstrate two parts of the central argument of this dissertation in action: U.S. leadership in the international community on the nuclear issue and the potential power of multilateral efforts like the Nuclear Security Summit.

The United States has also stated several policy changes to demonstrate the seriousness and long term nature of the commitment being made to the NPT goals. The President has stated his full support for having durable international institutions continue to assist states in reaching a world free of nuclear terror, most notably in Prague, identifying the Proliferation Security Initiative and Global Initiative to Combat Terrorism as examples. The actions of the United States at the NPT Review Conference will no doubt continue to provide clear support for that multilateral international institution and

¹¹⁵ Chile, Mexico and Ukraine have committed to immediately transfer their civilian HEU for disposal. See Daryl G. Kimball, "New Start Good for U.S. And International Security, Deserves the Senate's Support," *Arms Control Association Website*, 2010. <http://www.armscontrol.org/pressroom/NEWStartStatement>. (accessed April 15, 2010).

its non-proliferation regime. The recently released 2010 Nuclear Posture Review Report provides support to the United States nuclear agenda and echoes the President's Prague speech.

The 2010 Nuclear Posture Review while aligning with the Prague Speech nuclear agenda was the product of much internal debate between the White House and the Department of Defense. In the end, the review reaffirmed the importance still remaining for U.S. security of the nuclear deterrent. The review also placed constraints on the United States that previous reviews had not been willing to do. The 2010 Nuclear Policy Review focused on five objectives that frame U.S. nuclear arms policy:

1. Preventing nuclear proliferation and nuclear terrorism,
2. Reducing the role of U.S. nuclear weapons in U.S. national security strategy;
3. Maintaining strategic deterrence and stability at reduced nuclear force levels;
4. Strengthening regional deterrence and reassuring U.S. allies and partners; and
5. Sustaining a safe, secure, and effective nuclear arsenal.¹¹⁶

At the center of these objectives is the explicit restatement of the U.S. commitment "to bolster the nuclear non-proliferation regime and its centerpiece, the NPT, by reversing the nuclear ambitions of North Korea and Iran, strengthening International Atomic Energy Agency Safeguards and enforcing compliance with them, impeding illicit nuclear trade, and promoting the peaceful uses of nuclear energy without increased proliferation risks."¹¹⁷ The Nuclear Policy Review also reaffirmed the Prague goals of aggressively

¹¹⁶ Department of Defense, "Nuclear Posture Review Report," vi.

¹¹⁷ Ibid., vii.

pursuing arms control efforts including the new START agreement, “ratification and entry into force of the CTBT and negotiation of a verifiable Fissile Cutoff Treaty.”¹¹⁸

Included in the Nuclear Policy Review actionable policies was the clarification of circumstances where nuclear weapons would not be used, specifically, the United States “is now prepared to strengthen its long-standing ‘negative security assurance’ by declaring the United States will not use or threaten to use nuclear weapons against non-nuclear weapon states that are party to the NPT and in compliance with their nuclear non-proliferation obligations.” This provision has already spurred criticism for departing from the long standing position of “having all options on the table” when dealing with potential aggressors but as has been earlier discussed, this policy change is fully in line with the concept of providing states considering their security from a purely power based view a strong incentive to resist selecting nuclear weapons as a means to do so. Equally important to reestablishment of the leadership role for the United States, the Nuclear Policy Review makes clear the U.S. interest in a permanent extension of the non-use of nuclear weapons that has held for 65 years.¹¹⁹

Among the specific initiatives described in the 2010 Nuclear Policy Review Report, the United States has committed to a deepening of bilateral dialogs with Russia and China on nuclear issues to seek “strategic stability,” conduct follow-on analysis that will identify the next set of strategic arms reductions for negotiation with Russia, work with Russia to deal with non-strategic nuclear weapons both deployed and non-deployed, and implement any reductions to the nuclear arsenal “in ways that maintain the reliability

¹¹⁸ Ibid.

¹¹⁹ Ibid., ix.

and effectiveness of security assurances to our allies and partners.¹²⁰ In a clear indication of the United States' multilateral intentions, the Nuclear Policy Review Report states that allies and partners will be consulted on the appropriate approach to post-New START negotiations. The Nuclear Policy Review Report concludes that while the conditions to achieve a world without nuclear weapons do not yet exist, the United States believes that NPT goal is achievable through working actively to create them.

GETTING TO UNITY OF EFFORT: EXPANDING MULTILATERAL NUCLEAR DISARMAMENT EFFORTS

United States must also begin to shape the long term security environment in terms of progress toward nuclear disarmament beyond the above steps. Specific issues to be addressed both in pursuit of above objectives and disarmament in the long run must solidify the multilateral nature of the effort which seems to be the goal of the emerging United States nuclear arms agenda. As this dissertation has shown, bilateral negotiations have limits that can be stronger in the long run than the short term achievements of their agreements. The conditions for a stronger and more dynamic multilateral effort with the original five nuclear weapons states are in place. The United States leadership is essential to moving this group beyond any lingering Cold War rooted political, military or other relationship.

The long term plan for strategic arms reductions should include an effort to bring the P5 to a common negotiation which has yet to be suggested formally. These states control all but less an estimated 500 of the world's nuclear weapons and no longer threaten other members of this group. Combined with their status on the UN Security

¹²⁰ Ibid, xi.

Council, they should seek out means to follow the renewed leadership of the United States on strategic nuclear weapons. The April 2010 Nuclear Security Summit was attended by the leaders of these states and as discussed earlier each has committed to the goal of securing the world's nuclear material and are engaged either directly or indirectly with the North Korean and Iranian issues. This working relationship should be strengthened and made routine to build confidence and trust between them ultimately removing any risk of accident or miscalculation among them. Such an arrangement is a natural outgrowth of the U.S. Nuclear Policy Review recommendation to further develop the Russia and China bilateral relationships with the United States.

As the original nuclear club shows maturity and forward thinking on concentrating their collective efforts to move toward the NPT goals, they will also need to work to merge arms control efforts with disarmament and non-proliferation agenda. The United States has already identified the initial steps required and has demonstrated a significant change in direction from the immediate past. Ultimately, other states must cooperate. As this dissertation describes, the example of one state followed by other power based states, which each of the P5 are, opens the potential for cooperation toward the NPT goals. What remains as a significant challenge for the United States is to continuously and steadfastly reinforce the gains each state will derive from the new nuclear agenda. As the United States begins to achieve success in lengthening the shadows of these states, engagement of the normative based states should quickly align all but the few outlying states in working to achieve the NPT goals. The speed at which the 47 states attending the U.S. sponsored Nuclear Security Summit is a strong indicator of the potential of this concept to succeed. The willingness of Russia and China to work

to develop “smart sanctions” for Iran shows progress on gaining support from power based states as well.

A range of follow on discussions and activities focused on confidence building measures that lead to consensus building where these states work toward common goals such as was done in the immediate Cold War period experiences of the Conventional Forces in Europe Treaty and the NATO Partnership for Peace is the obvious next step. Here again the United States is best positioned to organize and lead these activities. Once the nuclear agenda shows significant progress the next layer of issues particularly the resolution of lingering regional security issues will become most obvious and important to resolve. Without unity of international effort, lengthening the shadow of the future for Israel, Iran, North Korea, India and Pakistan and their neighbors will remain problematic.

As the United States attempts to begin resetting and eventually maintaining norms for nuclear non-proliferation, many if not all states will reexamine their need to claim the right to build and deploy nuclear systems. In order to sustain this renewed regime, the United States should continue to seek to reestablish moral leadership by returning to negotiation table to revive, complete or rebuild nuclear arms control agreements with Russia in particular while asserting leadership in multilateral non-proliferation and disarmament action plans.¹²¹ This effort should be extended to broaden the arms control focus of the bilateral efforts through the 2010 NPT Review in order to strengthen and support the best multilateral and nearly universal effort to reach a further reduction in nuclear arms and eventually reach the goal of total disarmament.

¹²¹Stephan Wagstyl, "Obama and Medvedev Agree Arms Cuts," *Financial Times*, July 6, 2009. http://www.ft.com/cms/s/0/6afd36b4-6a12-11de-ad04-00144feabdc0.html?ftcamp=rss&nclink_check=1 (accessed December 12, 2009).

This ultimate NPT goal can be reached through support of international institutions which in turn can influence states to conform to universal norms like the UN Charter as well as specific norms contained within the NPT. Ultimately nuclear non-proliferation and disarmament will succeed only with the universal acceptance of the principles, norms and rules with an understanding of the existing power relationships of the nuclear states. Among the nuclear states, the United States has a unique position in terms of resources, political will and moral responsibility to assist all states in achieving the goals of the NPT. The United States has a long tradition of negotiations both successful and failed to draw upon to offer better options for achieving nuclear disarmament through support of transparency, trust building and multilateralism. The 2002 withdrawal by the United States from the Anti-Ballistic Missile Treaty provides an important reminder of the limitations of bilateral arms control agreements and the potential of multilateral agreements especially the NPT to succeed. The next chapter will focus on this hallmark agreement of the Cold War period which highlights a number of important issues from the earlier nuclear arms control era.

SUMMARY

The keystone of the nuclear non-proliferation and disarmament regime is the Nuclear Non-proliferation Treaty of 1970. The three goals of the agreement, no state to state transfers of nuclear weapons (Article I), sharing nuclear technology for peaceful purposes (Article IV), and nuclear disarmament (Article VI) have been almost universally accepted in principle by all but a handful of states. In general, these goals have been respected and continue to be respected by the vast majority of states. As with any

multilateral agreement, the NPT has both strengths and weaknesses which have direct impact on the successful achievement of its goals.

This case study of the NPT in the contemporary context contained a discussion of the weaknesses in the treaty specifically the IAEA inspection and verification protocols are only as effective as states are willing to accept them. A discussion of the current Iranian nuclear issue highlighted many of the important problems within the nuclear non-proliferation regime and the difficulty with reaching total nuclear disarmament. One of the important elements in understanding the complexity of the Iranian issue is viewed through the concept of how states develop a strategic culture and are influenced by their strategic elites. These elites still must work through the calculus of deterrence as the key concept to their rationale for developing and deploying nuclear arms. As the added complexity of achieving multilateral norms may at times be seen as opposing national interests, other means must be sought for convincing states through their elites that the loss of perceived power in adherence with such a norm is beneficial in the long run. A strengthening of the non-proliferation regime will depend on assisting these elites to understand the full impact of acquiring and deployment of nuclear weapons. The near term goal of any effort to stem emergent nuclear states would be to find appropriate means to engage their leadership in dialog focused on regional security issue resolution. The normative power of the NPT can be realized as states work together to this end.

One potential source of increasing the normative impact of the NPT regime are epistemic communities. Epistemic communities have achieved such gains in other issue areas such as the environment and international law of the seas and may provide an important new dimension toward strengthening the nuclear non-proliferation regime

leading toward nuclear disarmament. One of the key features of an effective regime lies in how states are persuaded to accept a loss of freedom to take actions within the international environment for the gains offered by conformance to the regime's norms. The leadership of a single state in the non-proliferation regime is seen as essential with the United States being the best candidate for the position. The research conducted for this case study indicates that the NPT remains the best international agreement in support of a regime that promotes non-proliferation and eventual disarmament, requires a means to effectively deal with the differing state views of the role of nuclear weapons and will rely on the emergence of a single state leader, most likely the United States, that can set and persuade compliance with regime norms, rules and procedures. Engagement with Russia and China will be essential to building a multilateral consensus. Efforts to implement both the CTBT and the FMCT should be among the short term goals of a renewed NPT agenda that the United States has identified as policy commitments. 2010 NPT Review Conference provides an obvious opportunity for the United States to seek to lead the international community toward the goals of the NPT.

CHAPTER IV

THE ANTI-BALLISTIC MISSILE TREATY: A CASE STUDY ON THE LIMITS OF
BILATERAL ARMS CONTROL AGREEMENTS

While the importance of the NPT to the global good of eliminating nuclear weapons cannot be overstated, the success of its multilateral effort will eventually draw support from the long history of bilateral negotiations on strategic nuclear weapons between the United States and Russia. Today, these states continue to see value in a renewed set of negotiations between the two as they wrestle with the legacy of the arms races of the Cold War between them. The first agreement between these first two nuclear weapon states, the Anti-Ballistic Missile Treaty, provides an appropriate and specific case for review of how two states can negotiate and eventually agree to a treaty that would last for over three decades. The ABM Treaty also highlights the fragility of a bilateral agreement as it was eventually abandoned, first by the United States, as it decided in 2002 to pursue missile defenses to deal with potential breakout states like North Korea and Iran. Russia would follow suit shortly after. This case provides both positive and negative lessons on the importance of U.S. leadership in efforts to control nuclear weapons.

This chapter examines a case study of the ABM Treaty which highlights the limitations of bilateral arms control agreements in order to contrast them with the value of multilateral agreements and their associated normative regimes. While some specific features of agreements between two nations are valuable to any arms control effort, bilateral arms control agreements are at the same time easier to establish than multilateral

agreements but are also by their nature easier to abandon. The narrow, single weapon system focus of the treaty contributed to the ease with which it was negotiated and ratified. Despite the thirty year duration of the ABM Treaty, in the end, it was abandoned by the United States in 2002 as no longer suitable to that party's security interests. Merging bilateral arms control efforts into a wider and more binding multilateral disarmament effort is the second element of this dissertation's argument. While multilateral efforts to control nuclear arms are preferred theoretically, bilateral agreements particularly between the United States and Russia are frequently the only means to start an arms control or reduction process.

OVERVIEW

Given the nature of the international security environment of the Cold War period and the relatively small number of nuclear weapons states and other nuclear states, bilateral nuclear arms control agreements, primarily between the United States and the former Soviet Union, now the Russian Federation, have been used to control the nuclear arms of the two largest nuclear arsenals as well as to reach accommodations on nuclear related issues. While a certain amount of trust and cooperation between the two parties is afforded by such arrangements, other states that might be impacted by the results have no voice in how the agreement is negotiated or carried out. The largest number and most prominent series of bilateral nuclear agreements have been completed between the United States and Russia. One of these agreements, the ABM Treaty, provides an excellent example of the limitations of a bilateral nuclear arms control treaty and offers important features that any successful multilateral nuclear disarmament regime would incorporate.

Given the eventual abandonment of the ABM Treaty in 2002, an agreement that lasted over 30 years, prevented a defensive strategic arms race, and provided a useful channel for communications between the two most powerful nuclear states, one could conclude that the treaty had no value. While the action of the United States to depart from the agreement reinforces the key weakness of a bilateral treaty, most observers of the treaty have consistently declared it the most successful agreement of the Cold War. This research and case study suggests specific features of the ABM Treaty were both successful and useful for any future nuclear arms agreement focused on achieving lasting progress toward the goal of disarmament beyond just limiting two of the nuclear states. Among these useful features are the importance of the negotiations themselves in establishing a relationship between potential belligerents which in turn offers the opportunity to build understanding, trust and confidence in the words and actions of the parties; the establishment of the requirement for inspection and verification processes that can be adapted to deal with efforts to defeat them; and a permanent forum to air concerns or requests for modifications to the agreement as circumstances change over time.

The ABM Treaty, an agreement between the United States and the U.S.S.R., ratified by the appropriate parliamentary functions of both signatory states and supported by subsequent governments including the successors to the U.S.S.R., represents first demonstration of U.S. willingness to abrogate an international agreement which had in fact led to other mutually reinforcing agreements on nuclear disarmament. The ABM Treaty was developed in conjunction with the strategic arms limitations negotiations that began as an outcome of the détente between the United States and the U.S.S.R. during the

Nixon Administration and remained in force until the United States unilaterally withdrew in the winter of 2001-2002.

The historical record would seem to indicate that the U.S. withdrawal from the ABM Treaty has reinforced other nations' concerns of the validity of previous U.S. treaty obligations especially in the area of nuclear issues, lessened cohesion within the international community to develop, agree and enforce similar agreements and likely increased the difficulty in reestablishing an increasingly more binding non-proliferation regime. Both the historical record and international relations theory support the value of continuing and reinforcing arms control agreements like the ABM Treaty and that national leadership along with their supporting elites are critical to their initial negotiation, ratification and sustainment. Multilateral agreements like the NPT, which by their very nature, limit the issue of withdrawal, can be strengthened by incorporating processes similar to the best features of the ABM Treaty. With the goal of identifying appropriate improvements for the NPT from the legacy of the ABM Treaty, this chapter will detail the treaty's history, review the major issues it addresses, and provide a review of the valuable features of this agreement that should be adapted to strengthen the NPT regime. As this dissertation argues, nuclear disarmament can best be achieved through a sustained multilateral effort that is based on universal cooperation, that addresses the concerns of both power focused and normative focused states and is led by the United States as the best positioned state to do so.

HISTORY OF ABM TREATY

One of the key concerns of states from the dawn of state organized armies is that of arms races or an escalation of the development, procurement and employment of

systems of equal or greater quantity or systems that are of superior quality in terms of capability of similar but then made obsolete by the newer weapons. In the period just prior to the start of negotiations of the ABM Treaty, the United States and the U.S.S.R. were engaged in a nuclear arms race that would lead both states to possess a staggering level of destructive power that continues to the present day in a much lower level of quantity. At the time, nuclear capable intercontinental ballistic missiles (ICBMs and their submarine launched equivalent or SLBMs) were of varying capabilities in terms of warhead lethality and range of the delivery system. One aspect of these missiles was common. Each contained a single warhead. This characteristic allowed a relatively simple calculation on the part of each defending state in terms of considering the requirements for an active missile defense system.

A system capable of protecting any nation from an attack will have a number of technical issues to address to be effective. Key to the eventual debate over the various systems envisioned and fielded by both the United States and the U.S.S.R. was the extent each was capable of defending. If a missile defense system is capable of defending the targets an opponent wishes to strike, then the opponent has to consider develop additional forces or improvements to his existing offensive capabilities to overwhelm the defense. This is a formula as old as warfare itself. Even a modest system of missile defense was seen as potentially triggering a buildup of defensive systems and offensive systems to assure the effectiveness of a first strike and survival of a second strike capability. Other arguments raised to suggest an anti-ballistic missile system is not viable include the cost and technical complexity of any system. The history of missile defenses in the nuclear

age is one where all three: potential for arms races, technical feasibility and affordability have been constants features of the on-going debates.

Both the United States and the U.S.S.R. developed and deployed anti-ballistic missile systems with the Soviet system in varying upgrades remaining in place around Moscow to the present day. The negotiated U.S. system was never fully operational. Later advancements in warhead technology specifically the advent of multiple independently targetable re-entry vehicles allowed each missile to carry as many as 10 separate nuclear devices that could destroy an array of targets. As this technology was deployed in both the U.S. and Soviet ICBMs and SLBMs, ABM systems of a limited nature such as those negotiated under the ABM Treaty were seen as increasingly of only a symbolic value.

Prior to the deployment of MIRVs, a single ABM system either for protection of a capital city or an ICBM deployment field was seen as a way to prevent a costly defensive arms race to deploy nation or regional ABM systems. An arms race to deploy vast defensive systems capable of negating the other side's offensive strike capability was, in turn, thought to lead to an increase in deployment of offensive systems to offset any defensive advantage. Despite this calculus, the ABM Treaty represented a positive step toward breaking the arms race cycle and affording the United States and U.S.S.R. a touchstone agreement that would serve to show both the world and each other that arms control was possible.¹

In 1967, the United States offered the Soviet Union an initial attempt at an ABM treaty which was rejected. This rejection occurred during the largest buildup of ICBMs

¹ Sarah J. Diehl and James C. Moltz, *Nuclear Weapons and Non-proliferation: A Reference Handbook*, 2nd ed., Contemporary World Issues (Santa Barbara, Calif.: ABC-CLIO, 2008), 16-17.

by both sides and continuing series of global conflicts including the Vietnam War and the Arab-Israeli Six Day War. The United States was committed to building an ICBM force of 1,054 missiles by the end of that year. The Soviets, whose ICBM buildup pace was consistently underestimated by the United States, would deploy some 570 missiles in the same period. President Johnson's Secretary of Defense, Robert S. McNamara was convinced that the total capability of the Soviets including submarine and bomber delivered nuclear weapons would not reach a size sufficient to overwhelm the U.S. land-based systems. Many within the United States were not as sure. At the same time, the Soviets were believed to be constructing a sophisticated civil defense system which included an anti-ballistic missile system to protect Moscow.²

Faced with the knowledge his predecessors had been only able to delay deployment of an ABM system due to a lack of technical capability, President Johnson measured growing pressure from the Joint Chief of Staff and the Congress for such a deployment and decided he did not want the issue to become a part of the 1968 election campaign. Within his administration, his Secretaries of State and Defense, Dean Rusk and McNamara, held a common vision to pursue arms control and gaining an agreement on limiting defensive systems such as ABMs was a continuation of the results achieved in earlier agreements and in the spirit of the soon to be signed NPT.³ Meeting with Johnson in December 1966, McNamara offered a compromise plan for Congress in which "a contingency fund for ABM preproduction expenditures, linked to two conditions: (1) there was no commitment to a specific deployment schedule or plan, and (2) deployment would be contingent on the results of an effort to negotiate an ABM deployment freeze

² James E. Goodby, *At the Borderline of Armageddon: How American Presidents Managed the Atom Bomb* (Lanham, Md.: Rowman & Littlefield, 2006), 76-77.

³ Carter, *Success and Failure in Arms Control Negotiations*, 106.

with the Soviet Union.”⁴ Within months as Johnson and his Secretary of Defense’s power to influence within the government and the world at large waned as a result of the growing dissatisfaction over the Vietnam War, the President met with the Soviet premier who was visiting the UN during the Arab-Israeli War in June 1967.⁵

While Soviet Premier Alexi Kosygin was focused on the Mid-East war, President Johnson was able to have McNamara present his case for limiting ABM deployments. The Russian insisted that ABM systems were defensive in nature and that they should be linked to offensive nuclear systems. While the President and McNamara made the U.S. position was the same as the Soviets, Kosygin returned to the UN and announced that the Soviet system was purely defensive in nature to protect the Soviet people. Johnson and his administration interpreted the Soviet view as unwilling to negotiate on arms reductions of any kind and submitted a budget which included the U.S. ABM system as a defense against the emerging Chinese threat and “add protection against the remote possibility of an accidental launch” from the Soviets.⁶ This position was reinforced by the first explosion of a Chinese thermonuclear device the same month of the failed ABM discussion.⁷ On September 18, 1967, McNamara announced the decision to deploy a limited ABM system called Sentinel and was based on an Army air defense missile, NIKE-X, modified to intercept incoming nuclear warheads.⁸

As the time to sign the Nuclear Non-Proliferation Treaty arrived, the United States and the U.S.S.R. had agreed to begin negotiations on limiting strategic nuclear

⁴ Ibid., 78.

⁵ Goodby, *At the Borderline of Armageddon: How American Presidents Managed the Atom Bomb*, 78-79. President Johnson and Premier Kosygin met in Goldsboro, NJ on June 23 and again June 25, 1967. McNamara briefed the Premier at lunch on the 25th.

⁶ Diehl and Moltz, *Nuclear Weapons and Non-proliferation: A Reference Handbook*, 120.

⁷ Ibid., 119-20.

⁸ Matthew Bunn, *Foundation for the Future: The ABM Treaty and National Security* (Washington, D.C.: Arms Control Association, 1990), 13.

weapon systems. President Johnson announced the beginning of the negotiations as he signed the NPT on July 1, 1968.⁹ As April Carter notes, the United States and the U.S.S.R. were able to consider beginning the SALT negotiations as they slowly realized they could agree to disagree on related issues while seeking mutual agreement on ABMs. From the 1950s onward, both states were pursuing national interests in relation to each other's military capabilities which added to their perception of threats to those interests. Ideology, domestic audiences, emerging conflicts tended to drive the agenda each state pursued or at times derailed those agendas. As seeking a nuclear balance became a primary objective of each state, the stage was set for potential agreement on limiting specific strategic nuclear systems. The SALT negotiations would be delayed into the Nixon Administration when just such an event occurred with the Warsaw Pact invasion of Czechoslovakia in August 1968. Another was the Presidential Election Campaign in which Nixon openly campaigned that he would protect the American population from Soviet attack. By protection, he saw the deployment of an ABM system as part of his ability to show he would deliver on campaign promises and retain the support of the conservative wing of the Republican Party.

ARMS RACING AND THE IMPACT OF TECHNOLOGY ADVANCES: THE MIRV PROBLEM

The Johnson Administration also contributed to the technology portion of the nuclear question by approving and eventually completing a successful test of a multiple independently retargetable vehicle (MIRV) equipped ICBM. MIRVs ultimately would prove critical to the strategic calculus of offensive versus defensive nuclear systems. A

⁹ Carter, *Success and Failure in Arms Control Negotiations*, 106.

MIRVd ICBM or SLBM would dramatically increase the number of available warheads the U.S. could use in an attack or retaliation against an adversary. This capability in turn could easily overwhelm a limited ABM system even one on the scale the U.S.S.R. had already deployed. Such a capability could in theory lead to the U.S.S.R. seeking a similar capability having the same effect on the U.S. ABM system being fielded. The theoretical result of deployment of MIRV capable systems could be arms racing to build both more offensive and defensive systems, a potentially massive buildup of the two arsenals.

After the Nixon Administration took power in 1969 during one of the most turbulent security environments in decades, both the United States and the Soviets were interested in efforts that would lead to negotiations on strategic arms limitations. These negotiations were an integral and critical part of Nixon's overall foreign policy. Somewhat unexpectedly and without a specific plan developed by his advisors, the President took the opportunity at the splashdown and recovery ceremony of the first men on the moon Apollo 11 mission to outline what would become the Nixon Doctrine. He "sought to navigate between overextension and abdication" as the U.S. had previously engaged itself in two wars where its vital interests such as survival were not immediately threatened and alliances were not as strong as in the World Wars.¹⁰ The Nixon Doctrine for involvement in any overseas issue would require that the United States follow three criteria: 1) keep all treaty commitments; 2) extended deterrence would apply as the U.S. would "provide a shield if a nuclear power threatens the freedom of a nation allied with us or of a nation whose survival we consider vital to our security," and 3) when a threat

¹⁰ Henry Kissinger, *Diplomacy* (New York: Simon & Schuster, 1994), 707-08.

was non-nuclear in nature, the threatened nation should provide the lion's share in terms of manpower for its defense.¹¹

Each of these criteria reflects the realities of the situation Nixon inherited and his understanding that "East-West relations had reached a dead end."¹² Kissinger believed Nixon saw the need to adapt foreign policy and containment in particular in a way that dropped the requirement for the Soviet system to be converted to democracy as a prerequisite to negotiations. According to Kissinger, "Nixon believed that the process of negotiations and a long period of peaceful competition would accelerate the transformation of the Soviet system and strengthen the democracies."¹³ Seeking to prevent the anti-Vietnam movement from negatively impacting his administration's total foreign policy, Nixon created "an era of negotiations" that "served as a strategy for enabling America to regain the diplomatic initiative" despite the impact of the Vietnam War.¹⁴ The key negotiations that would directly move the public focus in this direction would be with the Soviets on the issue of strategic nuclear weapons with the ABM question squarely within that objective.

On March 14, 1969, the President announced his administration's intention to deploy the Safeguard ABM and turned his efforts to lobbying the Congress to approve funding for the deployment. In early 1969, the Vietnam War intensified the debate on national security within the U.S. public, the Senate and the Administration. The pressures of the international and domestic environments were in part responsible for the reversal of the President's campaign rhetoric where he had stated his support for nuclear

¹¹ Ibid.

¹² Ibid., 711.

¹³ Ibid., 713.

¹⁴ Ibid.

superiority over the U.S.S.R. One indication of the intensity of this debate was the success of the vote for the Safeguard funding bill which was passed with a majority of a just a single vote.¹⁵ That vote was cast by Vice President Spiro Agnew in his role as President of the Senate breaking a tie. In his efforts to rally Senate support for the ABM funding, Nixon had used the idea that the Safeguard ABM could be used as a bargaining chip during the strategic nuclear arms reduction negotiations to come with the Soviets. The problem the President faced how to convince the Soviets that the U.S. backed ABM deployment when in fact Americans had wide spread of views of the value of an ABM system. The Soviets, while having a greater control on government decision making, also were not united on the utility of such a defense. Despite a seeming lack of unified domestic support for ABM, the leadership of both of the superpowers saw the advantages of reaching an agreement on strategic nuclear systems in general.

SALT I AND ABM

The start of initial strategic arms limitation talks that were rebuffed in 1967 were further delayed beyond the Johnson Administration with the Soviet invasion of Czechoslovakia in August 1968. When the negotiations began on November 17, 1969, the United States viewed the talks as an integral part of the Administration's concept of détente. Détente with the Soviets in Nixon and Kissinger's common view was tied to the Nixon Doctrine adding arms control to the issue areas of political and economic cooperation. The talks themselves were conducted in two channels, one open to public view and the other in secret. Open negotiations were held in alternating venues of Helsinki and Vienna over seven

¹⁵ Bunn, *Foundation for the Future: The ABM Treaty and National Security*, 14.

sessions led on the U.S. side by the Arms Control and Disarmament Agency Director Gerald Smith and Deputy Foreign Minister Vladimir Semenov.¹⁶

In a pattern of negotiation that would become a hallmark of the Nixon-Kissinger team, parallel secret negotiations were conducted under Nixon's direction in a similar manner to his efforts to reach a conclusion of the Vietnam peace talks. For the nuclear arms control talks, the secret rounds were between Kissinger and the Soviet Ambassador to Washington Anatoli Dobrynin and key Soviet officials in Moscow. This channel would be the one that enabled agreement over time but the communications on each side internally was not similar. The Soviet leadership in Moscow kept their negotiators in Vienna and Helsinki updated on all of the content of the secret negotiations. On the U.S. side, Kissinger kept some the details of the secret negotiations from Smith.¹⁷

Recent declassification of the communications between Kissinger and Nixon provide a wider view of the somewhat dysfunctional inner workings of the negotiations. One of the key signs of the complex nature of the talks can be seen in several documents. As the negotiations continued to be unresolved, Kissinger's preparatory memo to Nixon before the scheduled summit in May 1972, when the strategic arms agreements were to be completed, provides interesting insight on the pressures they faced. Kissinger provided Nixon a number of issues to raise with the Soviets including holding them partly responsible for limiting the North Vietnamese from any military advances as well as outlining the specific issues remaining to be resolved on SALT and ABM.

¹⁶ Carter, *Success and Failure in Arms Control Negotiations*, 107-08.

¹⁷ Ibid. See also Gerald Smith, *Doubletalk*.

While several issues slowed the SALT I negotiations, the discussions on ABM revolved around limits or a total ban that would require a roll back of the limited systems already in place and those additional ones in development. The Soviets had deployed their initial ABM system to defend Moscow. The United States had one ABM system nearing completion and another approved for construction, both defending ICBM launch silo fields. The United States wanted to limit Soviet anti-aircraft systems from being modified allowing a relatively inexpensive but effective ABM capability that some believed would be capable of a limited nation-wide missile defense. The crux of the U.S. concern centered on the capabilities of Soviet anti-aircraft radars which led to the provisions in Article V.¹⁸

1. Each Party undertakes not to develop, test, or deploy ABM systems or components which are sea-based, air-based, space-based, or mobile land-based.
2. Each Party undertakes not to develop, test or deploy ABM launchers for launching more than one ABM interceptor missile at a time from each launcher, not to modify deployed launchers to provide them with such a capacity, not to develop, test, or deploy automatic or semi-automatic or other similar systems for rapid reload of ABM launchers.¹⁹

These restrictions would become the central focus of debate a decade later as the United States considered the possibilities of new anti-warhead defenses in the Reagan Strategic Defense Initiative (SDI).

Another important technical advance in nuclear weapon technology, the issue of MIRV capable missiles would remain among the unconstrained systems in the final language of the SALT I agreement. The impact of the limitations of the ABM Treaty would remain felt by both sides as each continued to build new strategic nuclear systems on a pace far above that of the previous decades continuing well into the 1980s. The

¹⁸ Ibid., 110.

¹⁹ See Appendix B, 310.

fuller extent of the SALT I treaty and later strategic arms negotiations will be treated in depth in a following chapter. The key accomplishment of the ABM Treaty was the prevention of a defensive nuclear arms race which in turn theoretically kept the offensive arms buildups that did occur from being far larger.

THE ABM TREATY BECOMES A REALITY

By the time the ABM Treaty was signed at the end of a United States-U.S.S.R. summit in Moscow on May 26, 1972, both sides achieved what they desired. Neither side believed missile defenses would sufficiently protect their respective populations from either a first or retaliatory strike but both firmly saw the danger of having to match the adversary move for move. At the same time, each was able to retain sufficient freedom to continue to move ahead on offensive systems. Nixon himself believed that this situation was a necessary precondition to any future limitations by laying bear to both sides the continuing threat of the loss of both sides' populations should a nuclear exchange occur. The continuance of this dual extant threat of incomprehensible destruction known as Mutual Assured Destruction, or MAD, would in Nixon's belief place both sides in a position to mutually accept the need find a way to eventually eliminate this situation. Arms control offered the only sane option despite the lingering belief on some portions of U.S. society for the need for a missile defense.²⁰

Once completed, the ABM Treaty contained several important features as well as gaps that would become the focus of later debates within the international community and drive decisions by the states involved that would test the limits of arms control. Key

²⁰ Goodby, *At the Borderline of Armageddon: How American Presidents Managed the Atom Bomb*, 93.

limitations on systems for intercepting incoming nuclear missiles were described and defined in such a way as to prevent either state from rapidly expanding the very limited defenses allowed while also prohibiting the use of the agreed capabilities from any more than a small area defense against attack. Said another way, the ABM Treaty prohibited either the United States or the U.S.S.R. from building a national ABM system. As had been the norm in the buildup of offensive systems from the 1950's onward, serious concerns of a "breakout" capability to build such a national coverage were addressed in the treaty. At the time of signing, the treaty was contained sufficient language to address the likely cases where either side could develop a capability that was not in violation of the letter of the agreement. Later disputes over the treaty would fall into one of two categories: reinterpretation, as with the U.S. SDI developments, and perceived or outright violations of the provisions, such as the Soviet radar at Krasnoyarsk.

The preamble of the ABM Treaty provides a clear intent to limit ABM systems as means to lower the possibility of war breaking out, reduce future arms races and assist in achieving additional agreements on limiting strategic nuclear arms.²¹ The United States and U.S.S.R. also acknowledged their obligations as signatories of the NPT "to achieve at the earliest possible date the cessation of the nuclear arms race and to take effective measures toward reductions in strategic arms, nuclear disarmament, and general and complete disarmament, desiring to contribute to the relaxation of international tension and the strengthening of trust between" them.²² Article I prohibits a national ABM system and limits the deployment of any ABM system to those allowed in Article III. Article II defined an ABM system as having interceptor missiles, launchers, radars and

²¹ See Appendix B, 325.

²² Ibid.

specified the systems to be those in any state after development. Development is addressed in Article IV which limited the number of test launchers on mutually agreed test ranges.

The key limiting provisions of the treaty in terms of the systems allowed are contained in Article III. Each side was allowed two systems with an effective range of 150 kilometers, one covering the national capital and the other an ICBM field. The later 1974 agreement would cut this to one system per nation, either a national capital or ICBM field defense system. Russia has retained their Moscow area ABM system through numerous upgrades to the present day.²³ The United States would abandon their North Dakota based ICBM field defense system within a year of its declared operational capability, partly due to the concern over the concept of the use of the nuclear armed interceptors. Despite some technical successes with the U.S. system, the political problem of additional nuclear warheads residing potentially near major cities would likely have prevented any large scale deployments of ABM missiles even if the treaty had not been accepted.²⁴ When combined with the large cost of deploying these systems, a nationwide U.S. ABM capability probably never could have been achieved at the time and remained a source of debate through later developments such as SDI and the current limited missile defense systems.²⁵

²³ Ibid.

²⁴ See Time Magazine coverage from late 1960's to 1970 showing the growing anti-ABM views in Congress which continued to build until Congress voted to shutdown the system in 1975. For example, TIME, "Defense: Round 2 on ABM," *TIME*, Monday, March 9, 1970. <http://www.time.com/time/magazine/article/0,9171,878771,00.html> (accessed December 9, 2009).

²⁵ Bunn, *Foundation for the Future: The ABM Treaty and National Security*, 17. Bunn cites the Arms Control and Disarmament Agency information on Safeguard as costing some \$15 billion less than a 1989 proposal by the George H.W. Bush Administration for building four ABM sites. The planned Safeguard program had a total of 12 sites proposed. Bunn believes the conservative figure for the avoidance of an offensive-defensive arms race as a result of the ABM Treaty at \$100 billion.

The type of ABM system allowed was specified as land based through the negative language of Article V. The treaty did not allow development, testing or deployment of “ABM systems or components which are sea-based, air-based, space-based, or mobile land-based.”²⁶ Modernization of allowed systems was allowed under Article VII. As it was the key to limiting future ABM developments, Article V would be the primary source of the “broad” interpretation of the treaty by the United States in the Reagan Administration as SDI was pursued. The negotiations on both sides were constantly seeking to attain some slight advantage over the other particularly in this area.²⁷ Multiple launchers and rapid reload systems for ABMs were also prohibited.

One of the most effective provisions of the treaty which can serve as a model for other agreements is Article XII which established an effective and permanent forum to discuss issues that impact the continuance of the agreement. While not as intrusive as verification requirements of later agreements, the Standing Consultative Committee provided a forum between the signatory states to assist in confidence building to support the treaty, where issues of implementation, compliance, or ambiguities in the treaty itself could be identified and addressed. Effectiveness of the committee has been periodically challenged, most notably by the Reagan Administration. The evidence of specific instances where the Standing Consultative Committee was able to raise and resolve significant issues indicates the gains may have outweighed the alternative of some other arrangement. Other later agreements which did not have similar arrangements were not as

²⁶ Appendix B, 326.

²⁷ William Burr, ed. “The Secret History of the ABM Treaty: 1969-1972,” The National Security Archives Website, Washington, DC: George Washington University. <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB60/>, (accessed December 5, 2009). Burr has built a compelling case for the value of the US SALT negotiations delegation and the distrust that Kissinger held for them.

effective and in one instance, the Intermediate-range Nuclear Forces Treaty (INF), the United States would have to request one be implemented.²⁸

The Standing Consultative Committee was of particular importance to support the requirement for a formal review of the treaty every five years as set out in Article XIV. The Standing Consultative Committee continued to meet at least twice annually and at each five year review reconfirmed the parties' intent to continue their commitment to the "aims and objectives of the treaty" and that the Standing Consultative Committee was the appropriate forum to continue to promote the provisions of the agreement. The Standing Consultative Committee did so for thirty years until the U.S. withdrawal in 2002.²⁹ While the NPT has a process to review both violations and process improvements, the nearly constant contact between the United States and Russia afforded by the Standing Consultative Committee offers a potential set of process improvement options to increase the frequency and duration of NPT regime parties' interaction. Despite the value added of the Standing Consultative Committee, the limited nature of its charter prevented an appropriate level of trust to be developed to prevent the party states from seeking to develop capabilities that violated the treaty's intent if not its wording.

STRESS OF THE REAGAN STRATEGIC DEFENSE INITIATIVE ON THE ABM TREATY

In less than a decade after the ABM Treaty went into effect, the U.S. system had been discarded and the strategic arms buildup including modernization of existing and

²⁸ Bunn, *Foundation for the Future: The ABM Treaty and National Security*, 77.

²⁹ Ibid., 168. Bunn provides a summary of the six major follow on agreements reached between the parties which included issues of procedures for replacing ABM components, statements of mutual agreement of the successful operation of the treaty, and the controversial Soviet radar at Kamchatka.

fielding of new strategic systems on both sides was well underway. The extent of the buildup in nuclear weapons was matched with conventional arms increases on both sides as well. As Ronald Reagan reached the presidency, the voices for a new ABM defense were once again rising. The weaknesses of SALT I had allowed both sides to take advantage of the emerging technological advances in both missile and warhead technology. In the 1980s, the debate over ABM systems would take on three distinct themes: indications that the Soviets were violating the treaty with the main controversy over a radar system that did not conform, the Reagan Administration's "broad" reinterpretation of the agreement and the development of linkage between the Strategic Defense Initiative and the desire to reach an accord on limiting offensive nuclear systems.³⁰

The growth of the overall military capability of the Soviet Union and the growing unease over their aggressive foreign policy especially highlighted by their invasion of Afghanistan in 1980 resulted in a series of U.S. decisions to begin development of new ABM systems including capabilities on ship, on the ground, in the air and space. As Article V specifically prohibited most of these options, the Reagan Administration had committed itself to strategy far different to the Nixon approach but grounded in the practicalities of maintaining negotiations in pursuit of arms control. The main focus in this area early in the Reagan years was a continuation of that of the Carter Administration before it in this regard: focusing on either matching or limiting fielding of strategic and now sub-strategic systems allowed under the "seams" in the SALT I and II treaties agreement. These specific issues will be addressed in detail in the following chapter.

³⁰ Richard D. Burns, ed. *Encyclopedia of Arms Control and Disarmament*, 3 vols., vol. II (New York: Scribner's, 1993), 922.

What reentered the debate both in the government and in the public was the idea of ABM systems but of a different concept than that of previous administrations.

For the preceding decade, many among the politically conservative elites within the United States were convinced that the concept of détente was totally ineffective when measured against the continuing buildup of Soviet offensive arms. President Reagan's own campaign rhetoric in both the 1980 and 1984 elections reflected these views. The renewed interest in defending the nation stemmed from the deep seated belief among these elites including Henry Kissinger that protection of the nation's population overrode any other considerations. With the invasion of Afghanistan following the Iranian takeover of the U.S. Embassy in Teheran, a wounded Carter Administration was followed by a president who directed a number of public and secret actions to redress perceived and actual security weaknesses.

Among the secret directives that were written in 1982-1983, as the Reagan Administration continued to build national power, were three that formed the key ideas of how the United States would regain its balance with the Soviet Union and in time defeat its goals. One presidential scholar noted that the Reagan Defense Department's five year planning directive and three National Security Decision Directives established U.S. policy to make every effort including support to underground movements to undermine Soviet control in Eastern Europe (NSDD-32), set forth an economic warfare strategy against the U.S.S.R. (NSDD-66), and declared as a U.S. policy objective to make every effort to complete a "roll-back of Soviet influence around the world, and ultimately a change in the Soviet system itself, to be a key U.S. policy objective."³¹ While the debate

³¹ Andrew E. Busch, "Ronald Reagan and the Defeat of the Soviet Empire," *Presidential Studies Quarterly* 27, no. 3 (1997): 454. Most of the Reagan Era directives in this subject area are now available in

over the effectiveness of the U.S. efforts to counter the Soviet Union economically continues, the aim of the Reagan Administration to do everything imaginable to counter the efforts of the “Evil Empire” was evident.

The Strategic Defense Initiative (SDI) began as an idea of Ronald Reagan long before he entered the White House. He held firm personal beliefs of the moral responsibility of the United States to oppose Communism and these beliefs became visible as he campaigned for President. Reagan had also believed in the technical prowess and superiority of the United States. These beliefs combined when he had discussions with Edward Teller who suggested the United States could construct a robust and sufficient nuclear defensive shield.³² Although Reagan was elected by a substantial margin, a growing and vocal opposition to his hawkish proposals spurred significant public support for disarmament. One example is the letter declaring nuclear weapons immoral from the American Catholic bishops in 1983. SDI was born to deal with this significant political issue while maintaining the President’s position as being strong on defense. When SDI was announced, the program was described as a research program which fit within the parameters of the ABM Treaty.³³

Citing the fatal flaws in the SALT II Treaty, Bud MacFarlane, Reagan’s National Security Advisor oversaw a series of events leading to the Presidential announcement of SDI in March 1983. Beginning with an advocacy meeting where the Chairman of the

unclassified form even if more sensitive portions remain unavailable to the public. Despite the numerous redacted portions within the documents, the clear intent and policy objectives of the Defense Department and the Reagan Administration are clearly visible. The most comprehensive visual collection available on the Internet is available through the Federation of Atomic Scientists. NSDD 32, 66 and 75 are contained in the collection and are accessible as copies of the original declassified documents. See <http://www.fas.org/irp/offdocs/nsdd/index.html> (accessed November 27, 2009).

³² Goodby, *At the Borderline of Armageddon: How American Presidents Managed the Atom Bomb*, 140.

³³ Ibid.

Joint Chiefs of Staff General Vessley recommended a national ballistic missile defense be developed based on an input from the Chief of Naval Operations. MacFarlane then tasked his U.S. Air Force staff officers on the National Security Council to prepare a presidential speech to be given before the month was out. He also won rapid endorsement and advocacy from the White House science advisor. Next, the President met with the Secretaries of Defense and State and discussed the timing and content of the speech. The secretaries despite having been given only a very short notice supported the President. President Reagan announced the initiation of SDI on March 23, 1983 just six weeks after the JCS briefing.³⁴

The key to Reagan's political strategy behind SDI was to gain mutual cooperation from Russia on a level not previously achieved. He believed that SDI represented an opportunity to both reduce nuclear weapons which he abhorred through engagement with the Soviets while achieving a high level of support for his presidency at home. From a nuclear capability standpoint, SDI was envisioned as a cooperative research and development program that both sides would both participate in while reducing the level of offensives weapons. The United States believed that a crossover point could be reached where defensive systems on both sides would be sufficient to negate the others offensive weapons. This concept had not been seriously considered over the course of the nuclear era.³⁵ Unfortunately the Soviet leadership under Andropov, the former head of the KGB now premier, was not willing to trust the United States at the time so the political initiative stalled until Gorbachev rose to power. By 1985, SDI and the idea of

³⁴ Ibid.

³⁵ Ibid.

mutual national ballistic missile defenses was beginning to gain some Soviet acceptance as Michael Gorbachev became Soviet premier.³⁶

While the ABM Treaty did not prevent research into new missile defense systems, the extent to which SDI was to be “researched” clearly generated grave cause for concern within the United States and western countries as well as the Soviets. Specifically, opponents of SDI believed that if these systems could eventually succeed technically, the United States would rapidly deploy a system. Such a deployment was opposed primarily due to the potential to cause an imbalance in the nuclear arena which would in turn trigger both an abandonment of the ABM Treaty and a renewed defensive and offensive nuclear arms race.

DISSENT ON THE HILL: THE 1985 SENATE HEARINGS ON THE ABM TREATY AND THE CONSTITUTION

In the winter of 1985 as the U.S. Department of Defense submitted its budget for the coming year, the Secretary of Defense Casper Weinberger was asked to provide Congress with a description of what the SDI program funds would be used to do. Secretary Weinberger submitted a brief explanation of the actions he had taken to organize the research and what he saw as the objective of the program. First, SDI was a “broad research program” that was

not based on any preconceived notions of what an effective defense system would or should look like. A number of different concepts, based on a range of promising technologies, are being examined, but no single

³⁶ Ibid.

concept or technology has yet been identified as the best or most appropriate one.³⁷

Weinberger believed that the Soviets were rapidly developing a similar capability based on their existing strategic surface-to-air missiles and would field a national defense system in the near term creating both a breakout of the ABM Treaty as well as an imbalance in the defensive arena that the United States could not refuse to match. SDI as he described it would provide “a powerful deterrent to a potential Soviet breakout from the ABM treaty” based on U.S. intelligence of the development of new Soviet radars. He also expressed the Reagan Administration’s belief that SDI would be a clear statement that “the United States takes seriously the Soviet buildup in offensive arms.”³⁸ Weinberger stated that “(e)ffective defenses against ballistic missiles significantly enhance deterrence.”³⁹ He believed that SDI would be an effective defense in preventing the Soviets from even thinking an attack would work.

“Defenses that could deny to Soviet missiles the objectives of an attack, or deny to the Soviets confidence in the achievement of those objectives, would discourage them from even considering such an attack, and thus be an effective deterrent.”⁴⁰

While the technical capabilities of the SDI were still to be proven through research, by 1987, the requirement for such defenses was subject to continuing debate especially on Capitol Hill where both Houses of Congress were in control of the Democrats. One series of Joint Committee Hearings were held to discuss the relationship

³⁷ Caspar W. Weinberger, "From the Report of Secretary of Defense Caspar W. Weinberger to the Congress, February 4, 1985, on the FY 1986 Budget, FY 1987 Authorization Request, and FY 1986-90 Defense Program," *Daedalus* 114, no. 3 (1985): 373.

³⁸ *Ibid.*, 377.

³⁹ *Ibid.*, 374.

⁴⁰ *Ibid.*

of the ABM Treaty to the Constitution. By this time the Reagan Administration was openly suggesting that the negotiation record which was not fully released to the Senate held important clarification information that would allow the development of SDI. The only remaining Senator on either the Foreign Relations Committees who was a part of the 1972 ratification process, Claiborne Pell, Chairman of the Foreign Relations Committee, suspected that the Reagan Administration was too broadly interpreting the Treaty by authorizing the development of systems deployable in other than a fixed ground site as allowed in the treaty.⁴¹ Senator Joseph Biden believed the Bush Administration was potentially violating the ABM Treaty or at least reinterpreting the treaty without the constitutionally required advice and consent of the Senate.⁴² During testimony before the Committees, experts from both government and academia provided both eyewitness and scholarly research to confirm the appropriate interpretation of the treaty and those specifically new ABM systems of any type could be researched but that only land based systems like a laser could be tested. The Reagan Administration was believed to be seeking to develop and deploy a spaced based ABM system which had both the Senate and Premier Gorbachev concerned.⁴³

Some of the most important confirmations to surface in these hearings were the statements President Nixon and Henry Kissinger at the time the ABM Treaty was ratified. Both felt that the treaty allowed the opposing sides to enshrine the knowledge that a strike by one on the other would lead to each side's destruction in part or more. Even the

⁴¹ United States. Congress. Senate. Committee on Foreign Relations. and United States. Congress. Senate. Committee on the Judiciary., *The ABM Treaty and the Constitution : Joint Hearings before the Committee on Foreign Relations and the Committee on the Judiciary, United States Senate, One Hundredth Congress, First Session, March 11, 26, and April 29, 1987*, S. Hrg. (Washington: U.S. Government Printing Office, 1987), 1.

⁴² Ibid., 2.

⁴³ Ibid., 9.

limited defenses on either side would at best allow the other to retaliate in some way while at the same time preventing further arms races. Years later Kissinger would argue that this logic was flawed especially in light of the diffusion of nuclear armed states and that the Cold War concept of nuclear deterrence needed to be reviewed due to the changes in the strategic makeup of the international environment after the fall of the Soviet Union.⁴⁴

Notwithstanding Kissinger's later concerns with the viability of deterrence, the ABM Treaty had strong supporters even on the conservative side of the American spectrum including the Secretary of Defense who testified in support of the treaty's ratification, James Schlesinger. By 1985, the former Secretary of Defense noted the ABM Treaty's power to inhibit the action and reaction, measure to countermeasure relationship that continued to exist on the nuclear level between the United States and U.S.S.R.:

The ABM Treaty has forestalled an explosion of offensive development on both sides. Back in the 1960's when the Soviet Union first started to deploy defenses around Moscow, the United States government was examining expanding offensive forces up to 40-50,000 reentry bodies, or warheads, in order to penetrate those defenses. The ABM Treaty has been the cornerstone of restraint for the last 13 years.⁴⁵

Over the course of the next decade, the SDI and its successors would see a declining funding for its programs, a restructuring of its program headquarters and an eventual rebirth as a different set of capabilities to protect distant theaters where U.S. forces and friendly governments from a limited number of missiles. As the years progressed, the U.S. national leadership focused on other more

⁴⁴ Henry Kissinger, *Does America Need a Foreign Policy? Toward a Diplomacy for the 21st Century* (New York: Simon & Schuster, 2002), 63-70.

⁴⁵ Bunn, *Foundation for the Future: The ABM Treaty and National Security*, 17.

pressing issues such as the invasion of Kuwait by Iraq in 1990 and the subsequent first Gulf War, the collapse of the Soviet Union and the Warsaw Pact. A protracted engagement in Somalia followed by the series of Balkan conflicts culminating in the NATO led air war to defeat Serbian aggression in Kosovo, slowly but certainly reduced our nation's public concern that the United States and Russia would ever attack the other. Despite this seismic shift away from a bipolar world, the concepts of continuing to consult with Russia in the ABM Standing Consultative Committee.

By 1999, the United States was interested in reinvigorating strategic arms reductions talks that would lead to a START III agreement in concept. A feature of these discussions was the distinct disparity between each party's intent. Russia was seeking parity with the United States in terms of offensive weapons. The United States was after a reopening of the ABM Treaty in order to advance development and fielding of a national missile defense capability. This new national missile defense was clearly in violation of the treaty.⁴⁶ As the administration changed, the negotiations continued but eventually stalled as Russia remained concerned over the implications of a U.S. missile defense. With the winner of the 2000 Presidential election, George W. Bush explicitly campaigning on his desire to protect the U.S. population from missile attack primarily from 'rogue' states like North Korea, a cycle for national missile defense of some 32 years was completing.⁴⁷ This history would seem an

⁴⁶ Carter, *Arms Control and Non-proliferation: Issues and Analyses*, 15.

⁴⁷ Alexander T. J. Lennon, ed. *Contemporary Nuclear Debates: Missile Defense, Arms Control, and Arms Races in the Twenty-First Century*, A Washington Quarterly Reader (Cambridge, Mass.: MIT Press, 2002), 85.

interesting full circle journey for the nation, in terms of protecting against a small scale attack and in terms of the individual responsible for defending the requirement for a ballistic missile defense. As the Secretary of Defense who had the responsibility to shut Safeguard down, Donald Rumsfeld would return to manage the newer missile defense program through familiar territory.

BACK TO THE FUTURE: GEORGE W. BUSH WITHDRAWS FROM THE ABM TREATY

Early in his presidency and before the terrorist attacks of September 11, 2001, George W. Bush sounded a similar refrain from the Nixon 1968 campaign as he stated his intention to change how the United States viewed nuclear deterrence and the government's role in protecting the American people from the growing threat of nuclear attack from emerging nuclear states like North Korea. With less than a month completed in his first term, the new administration signaled they would build adequate missile defenses for the nation.⁴⁸ In a speech to the students and faculty at the National Defense University in May 2001, President Bush stated the outline for what would frame his overall strategy for dealing with threats from WMD.

To maintain peace, to protect our own citizens and our own allies and friends, we must seek security based on more than the grim premise that we can destroy those who seek to destroy us. This is an important opportunity for the world to re-think the unthinkable, and to find new ways to keep the peace. Today's world requires a new policy, a broad strategy of active non-proliferation, counterproliferation and defenses. We must work together with other like-minded nations to deny weapons of

⁴⁸ Goodby, *At the Borderline of Armageddon: How American Presidents Managed the Atom Bomb*, 179. The author cites Vice President Cheney telling a Republican political action committee on February 15, 2001 that the US would deploy a missile defense system as soon as possible.

terror from those seeking to acquire them. We must work with allies and friends who wish to join with us to defend against the harm they can inflict. And together we must deter anyone who would contemplate their use. We need new concepts of deterrence that rely on both offensive and defensive forces. Deterrence can no longer be based solely on the threat of nuclear retaliation. Defenses can strengthen deterrence by reducing the incentive for proliferation. We need a new framework that allows us to build missile defenses to counter the different threats of today's world. To do so, we must move beyond the constraints of the 30 year old ABM Treaty. This treaty does not recognize the present, or point us to the future. It enshrines the past. No treaty that prevents us from addressing today's threats, that prohibits us from pursuing promising technology to defend ourselves, our friends and our allies is in our interests or in the interests of world peace. This new framework must encourage still further cuts in nuclear weapons. Nuclear weapons still have a vital role to play in our security and that of our allies. We can, and will, change the size, the composition, the character of our nuclear forces in a way that reflects the reality that the Cold War is over. I am committed to achieving a credible deterrent with the lowest-possible number of nuclear weapons consistent with our national security needs, including our obligations to our allies. My goal is to move quickly to reduce nuclear forces. The United States will lead by example to achieve our interests and the interests for peace in the world.⁴⁹

President Bush provided some glimpses of the preemptive strategy his administration would embrace after 9/11 especially when Iraq became a focus. The core of his policy was later formalized in the 2002 Nuclear Policy Review undertaken by the Department of Defense under Donald Rumsfeld.⁵⁰ Active non-proliferation, counterproliferation, deterrence that includes defenses and a reduction in nuclear weapons became the four pillars of a new strategic framework.⁵¹ The key problem with seeking to break with the past was how to maintain an appropriate relationship with the nuclear weapon states especially Russia.

⁴⁹ George W. Bush, "Remarks by the President to Students and Faculty at National Defense University," White House News Release, May 1, 2001. <http://georgewbush-whitehouse.archives.gov/news/releases/2001/05/20010501-10.html> (accessed February 4, 2010).

⁵⁰ George Bunn and Christopher F. Chyba, eds., *U.S. Nuclear Weapons Policy: Confronting Today's Threats* (Stanford, CA, Washington, D.C.: Center for International Security and Cooperation, Freeman Spogli Institute for International Studies, Stanford; Brookings Institution Press, 2006), 34-35.

⁵¹ Goodby, *At the Borderline of Armageddon: How American Presidents Managed the Atom Bomb*, 180-81.

In a series of meetings through the summer of 2001, the United States and Russian leaders discussed nuclear issues including the U.S. view on departing from the ABM Treaty. President Putin was committed to keeping to the treaty while benefitting from any mutual cooperation in reducing nuclear weapons.⁵² After the 9/11 attacks, the U.S. Administration was unable to accept compromise or even discussion on the ABM aspect of the nuclear dialog with Russia. The 2002 National Security Strategy (NSS) and the companion document, The National Strategy to Combat Weapons of Mass Destruction (December 2002) made the U.S. position clear that strength of the United States would be made sufficient to deal with either terrorists or rogue states who would harm the United States. The NSS set out the U.S. policy of preemption as an act of self defense while making clear the Bush Administration's intent of remaining strong enough "to dissuade a potential adversaries from pursuing a military build-up in hopes of surpassing, or equaling, the power of the United States."⁵³

This position led directly to the decision to withdraw from the treaty by the end of 2001 breaking with a 30 year record of dialog. The impact within the international system of a powerful state essentially turning away from a promise without worrying about the long term impacts on other existing or future agreements is troubling. Given the position of the United States, such a move made future efforts at cooperation on nuclear issues far more complicated. Despite its untimely end, the ABM Treaty experience has valuable components to future non-

⁵² Ibid., 182-83.

⁵³ George W. Bush, *National Strategy to Combat Weapons of Mass Destruction*, (Washington, DC: The White House, 2002).

proliferation and disarmament regimes and multilateral agreements based in international relations theory.

ABM TREATY AND INTERNATIONAL RELATIONS THEORY: EVIDENCE OF ARGUMENT SUPPORT

This dissertation argues that nuclear disarmament is best achieved through an effective non-proliferation and disarmament regime supported by an effective multilateral agreement and international institutions with the sustained support and leadership of the United States. The history of the ABM Treaty demonstrated both the strengths and weaknesses of a bilateral arms control agreement and provides evidence of three key international relations concepts at work to varying degrees. First, power based theories of state interaction suggest the success of the treaty is found in the continuing cost versus benefit analysis each party state gave to it over time. In neorealist terms, the United States and Russia saw this treaty as limiting the other side's ability to achieve a relative gain from the development of an effective national defensive shield. This explanation is also useful in showing why the parties continued to negotiate follow on strategic arms agreements for three decades and beyond. Some have cited this treaty as the cornerstone to the continuation of the NPT and of the nuclear non-proliferation regime itself. Second, the overall normative narrative of international institutions and the power of agreements between states are highly useful in explaining why these two states continued to cooperate through continuous consultation for over 30 years. The lack of additional parties afforded in a multilateral agreement also explains how a state could decide to abandon it. Third, the impact and role of state leadership and their interaction with their

constituents is quite evident in this history. While the power of states in this example cannot be denied, the traditional realist critique is incomplete when one tries to explain the power of the individuals engaged in long term negotiations over the details of this agreement. The normative theories provide additional explanation of how to strengthen bilateral agreements either by widening involvement in the process beyond the two states and considering means to continue to provide better knowledge to state leadership. The last of these three concepts, the importance of state leadership, provides significant explanation for the effectiveness of the treaty and to a certain degree the U.S. withdrawal and later decisions on ballistic missile defense by the George W. Bush and Barack Obama Administrations. What can be learned from the ABM Treaty experience is the need to foster multilateral agreements in order to avoid the main weakness of a bilateral agreement, a lack of normative arrangement that fosters continued cooperation.

SUMMARY

The established nuclear arms control agreements when supported and updated by the states involved can provide an important foundation for other similar agreements, both bilateral and multilateral. The ABM Treaty was an important first step by the two largest nuclear states to limit the opportunities for arms racing especially on the defensive side of the balance sheet. The history of the agreement does show that a defensive arms race was avoided but a similar impact on offensive arms racing did not occur. State leadership was a key factor to the relatively easy achievement of agreement. The narrowness of the treaty terms itself and the lack of additional parties to improve the level of normative binding of the states ultimately led to the U.S. withdrawal. The inability of

bilateral treaties to withstand the divergence of two states interests is the main reason multilateral treaties remain the best vehicle for lasting international efforts to have an impact. As this dissertation argues, state leadership is an essential catalyst to reaching and sustaining any arms control agreement but bilateral agreements are not sufficiently robust to achieve sufficient and irreversible progress toward a goal like nuclear disarmament. While the United States is clearly the best equipped state to negotiate and sustain any similar agreement, such a powerful state can walk away from a long term treaty quite quickly when the President sees a requirement to do so vice renegotiate. Despite this weakness, given the sheer magnitude of the U.S. and Russian nuclear arsenals and the security environment of the Cold War, the long series of bilateral nuclear arms control efforts on their parts allow analysis that shows the progress that can be achieved through direct involvement of state leaders. The requirement for this engagement will continue as long as these states see their relationship as special and separate from a multilateral agreement like the NPT.

The recent return to serious negotiations of limits on strategic nuclear arms that have resulted in the signing of the “new” START Treaty is positive evidence of the continuing value and centrality of this relationship to the goal of nuclear disarmament. As will be discussed in the next chapter, U.S. leadership in this relationship has been the essential ingredient, both positively and negatively, in the U.S. and Russian strategic arms control process. The third and final case study of this dissertation highlights the impact of state leadership on strategic arms control negotiations, agreements and legislative ratification of these agreements. Without the positive leadership of the United

States in this bilateral relationship, further advancement toward the goals of the NPT will be impossible to achieve.

CHAPTER V

STRATEGIC NUCLEAR ARMS CONTROL: A CASE STUDY IN THE IMPORTANCE OF STATE LEADERSHIP

Over the course of the second half of the last century, the United States and the Soviet Union engaged in the largest arms race in human history. At the center of this buildup was the nuclear weapon, the ultimate weapon which would eventually provide each side of the Cold War with sufficient destructive power to potentially end all human life on the planet. A number of events during this era, particularly the Cuban Missile Crisis of 1962, led the leadership of these two nuclear superpowers to seek a relief or at least a means to slow the race toward nuclear Armageddon. In time, these states would simultaneously compete and negotiate around a range of nuclear systems including the Anti-Ballistic Missile systems discussed in the previous chapter. From delivery systems and warheads to providing systems to each other to prevent accidents or mistaken threat warnings, the United States and Russia attempted to both find advantage while limiting the other's capabilities through a series of agreements on strategic nuclear systems. In each of these agreements, U.S. leadership was the key to success or failure of each agreement. The renewed START Treaty signed in the spring of 2010 provides the latest example of how the United States, particularly the President, is essential to progress of strategic nuclear arms reductions by these states. This leadership and the positive results of the bilateral strategic arms control process sets the tone and example for other international nuclear arms control and non-proliferation efforts.¹

¹ This dissertation focuses primarily on the interaction of state leadership between states with the formulation and implementation of nuclear arms agreements. While not a primary focus of the argument or

This chapter examines a case study of the bilateral strategic arms reduction process between the United States and Russia beginning with the SALT negotiations and continuing into the current efforts to ratify the “new” START Treaty. This case study highlights the impact of state leadership on strategic arms control negotiations, agreements and legislative ratification of these agreements. Introduced in the previous chapter, this portion of the research will relate the importance of state leadership as a catalyst for new agreements and in sustaining the arms control process. As discussed in the earlier argument chapter, state leadership is third component of this dissertation’s argument and the key element of any multilateral effort to reinforce the non-proliferation regime, complete interim steps at arms control and sustain an international drive toward nuclear disarmament. Additionally, this case study on strategic arms negotiations between the United States and Russia provides reinforcement of the limits of bilateral agreements as discussed in the previous case study including unilateral withdrawal. The issue of proliferation, both horizontal and vertical forms, will be discussed as the principle issue arms control seeks to avoid and the role state leadership plays in decision making to either allow or prohibit it. While central to the success of achieving agreement, state leadership in bilateral agreements is ultimately less effective in the long run than in similar multilateral settings.

research of this dissertation, domestic politics plays an important role in the approval and acceptance of any nuclear arms agreement. State leadership is always mindful of the positions of their domestic audience and the legislative bodies that reflect these views. In the United States, the Senate has the constitutional power to ratify all international treaties and has exercised their power either directly in voting not to ratify or indirectly as their likely vote is anticipated by the President who refrains from submitting a signed agreement for ratification. Exploration of this aspect of the arms control process would provide for an equally interesting project for future research.

OVERVIEW

Among the longest and most prominent arms control efforts since the end of the Second World War are the series of negotiations between the United States and Russia on limiting strategic nuclear arms. Beginning with the first Strategic Arms Limitation Talks (SALT I) in the Nixon Administration and continuing through to the renewed discussions following the expiration of the Strategic Arms Reduction Treaty (START I) on December 5, 2009, the United States and Russia have been in a lengthy effort to control and reduce their massive holdings in strategic nuclear systems. This strategic arms reduction process has made substantial progress toward achieving the ultimate goal of the NPT, total disarmament. While progress has been slow, a number of significant successes have occurred despite significant swings of the political landscape on the part of both nations as well as the environment around them. This process, which has had a renewed momentum in the last year, displays several key features of a successful arms control process that are supported by international relations theory. This chapter will detail the strategic nuclear arms reduction process of the past four decades, review the major issues associated with strategic arms reduction, provide a review of the contemporary discussions of stages of this process and discuss the related international relations theory, specifically the potential for regional nuclear arms races, as it relates to the importance of future negotiations and strategic arms reduction agreements as well as the impact of state leadership in the arms control process. Any successful multilateral disarmament effort will include the more valuable features of bilateral arms control as demonstrated by the United States and Russia.

SALT I: ESTABLISHING A PRECEDENT FOR ARMS CONTROL

As was discussed in the previous chapter, the decision by the United States and the U.S.S.R. to agree to establish limits on both offensive and defensive nuclear systems embodied in the 1972 ABM Treaty and the accompanying Interim Agreement remain one of the most significant arms control achievements of the nuclear era.² These documents were the culmination of the opening round a more than four decades long dialog between the two states that currently possess 95% of the world's nuclear weapons. The SALT I negotiations were neither comprehensive in terms of the variety of nuclear systems either side possessed nor without detractors within the elites of both signatories. Culminating just short of a decade after the Cuban Missile Crisis, these talks established an effective foundation for slowing and eventually reversing the growing stockpiles of nuclear weapons each possesses. The eventual approval of the agreement was clearly due in large part to active engagement of the U.S. presidents.

While the view from two decades after the end of the Cold War seems to make those events of a generation and a half ago seem somewhat obvious as to their outcome, the constant problem for U.S. leaders was how to balance the requirement to reduce the nuclear threat against the need to check frequently aggressive behavior by the Soviet Union in the international environment. During the turbulent period of the late 1960's, a new president sought to achieve progress toward a new relationship with the Soviets. Richard Nixon, having campaigned on a pledge to equal the Soviets in military might, struck a different tone in his Inaugural Address. Speaking to a nation torn apart by an undeclared war, the new president stated:

² See Appendix C for the text of this agreement.

The greatest honor history can bestow is the title of peacemaker. This honor now beckons America--the chance to help lead the world at last out of the valley of turmoil, and onto that high ground of peace that man has dreamed of since the dawn of civilization. If we succeed, generations to come will say of us now living that we mastered our moment, that we helped make the world safe for mankind.³

While history has not been kind to this president, Nixon and his national security vision were essential in setting the conditions for eventual curbing of both vertical as well as horizontal proliferation of nuclear arms.

From the beginning, SALT was an effort among several to further the broader agenda of détente between the United States and the U.S.S.R. As was discussed in the previous chapter, Nixon sought to engage the Soviets in a series of negotiations that would eventually lead to a change in the Soviet approach to foreign affairs toward peaceful competition.⁴ SALT would be the first negotiation effort since inauguration and would allow the United States to link arms control to the issue of Vietnam. In his public statements, the new president tied beginning SALT to issues at hand in the Middle East but in private Vietnam was his focus. By initiating SALT, Nixon, with Kissinger's assistance, sought to leverage the Soviets in turn to pressure the North Vietnamese.⁵ The Soviet response to this attempt at influence was to remain silent on Vietnam and that SALT or any arms control was not a requirement for them. Nixon and Kissinger believed the Soviets had a much stronger influence on the Vietnamese than was the case and did not fully support arms control in general due in part to the need to maintain domestic political support. This strategy would not appear to be flawed until the period

³ Richard M. Nixon, "First Inaugural Address, January, 20, 1969," *Bartleby.com website*, 2009. <http://www.bartleby.com/124/pres58.html> (accessed December 16, 2009).

⁴ Kissinger, *Diplomacy*, 713. According to Kissinger, "Nixon believed that the process of negotiations and a long period of peaceful competition would accelerate the transformation of the Soviet system and strengthen the democracies.

⁵ Raymond L. Garthoff, *A Journey through the Cold War: A Memoir of Containment and Coexistence* (Washington, D.C.: Brookings Institution Press, 2001), 243-44.

immediately before the signing of the accords in 1972.⁶ What these two emerging superpower states did have in common was a desire to limit the spread of nuclear weapons to other states.

Beginning with the Partial Test Ban Treaty (PTBT) in 1963 and culminating in the signing of the NPT in 1968, the United States and the U.S.S.R. had largely identified a common interest in non-proliferation. Each saw non-proliferation as a means to retain their status in the international environment in relation to each other as well as all other states.⁷ Shifting from the Johnson Administration's use of a larger elite to develop arms control proposals which included the Departments of State and Defense, led by Dean Rusk and Robert McNamara respectively, Nixon chose to have the White House control the preparations for SALT.⁸ As mentioned in the previous chapter, two channels of negotiations were used by the two sides with Kissinger leading the secret talks with Soviet Ambassador Anatoly Dobrynin in Washington and Soviet leaders in Moscow while feeding instructions to the formal negotiation team in Vienna.⁹ Despite this very hands-on approach which stemmed from Nixon and Kissinger's distrust of the Executive Branch bureaucracy, SALT I was at best only partially successful. The dominant issue of the late 1950s and early 1960's, verification, was quickly agreed to be done using "national technical means" or more commonly known as satellites.¹⁰ Most of the issues that were surfaced in the negotiations dealt with which specific systems in the strategic arsenals were to be controlled.

⁶ Ibid., 245.

⁷ Carter, *Success and Failure in Arms Control Negotiations*, 106-07.

⁸ Garthoff, *A Journey through the Cold War: A Memoir of Containment and Coexistence*, 247.

⁹ Carter, *Success and Failure in Arms Control Negotiations*, 107-08.

¹⁰ Ibid., 106.

The key weapons systems in the United States and Soviet strategic nuclear arsenals were long-range bombers, land based intercontinental ballistic missiles (ICBMs) and submarine launched ballistic missiles (SLMBs). Each system had various specific variants in either development or deployment during that period with the United States holding a qualitative and quantitative advantage in warhead technology specifically the multiple independently targetable reentry vehicle (MIRV) capable systems. These MIRVd missile systems allowed possessing force to complicate the defense planning of the opposing force as a single missile could attack a wide number of targets as well as carry countermeasures to confuse and potentially overwhelm any defense. At the time of the SALT I negotiations, the U.S.S.R. was aware of their deficiencies and was working to seek a position where they could either balance their advantages against the United States or at least set limits that allowed them to build up to match the United States. MIRVs were a key concern for both sides in terms of retaining the ability to develop and deploy. Ultimately, both side offered no limits on MIRVs or the development and deployment of the emerging technology of long range cruise missiles.¹¹

The SALT I negotiating teams were determined to reach an agreement while preserving the security interests of their nations. The limits imposed were to be on launchers as opposed to the missiles themselves as efforts to define classes of ICBMs were not successful. Specifically, launchers were defined as the ICBM silos and submarines. Once the agreement was completed, both sides agreed not to build any new ICBM launchers or any new submarines. Older submarines could be replaced with newer

¹¹ Ibid., 110.

ones if an equivalent number of ICBM launchers were retired.¹² While the ABM Treaty was of unlimited duration, the Interim Agreement, as the document codifying the strategic limits was called, was only five years in duration. The United States made its intentions clear by issuing a formal statement after the documents were signed that the agreement represented a first step in a continuing series of negotiations to reach additional and more complete limitations on strategic nuclear systems.¹³ The negotiations centered on three key systems ABM, ICBMs and later SLBMs.

Key provisions of the Interim Agreement included specifics on construction, modernization, verification, and future negotiations. Article I limited the parties from beginning construction of new fixed ICBM launchers after July, 1, 1972. The issue of mobile missiles was discussed in negotiations and in the weeks before the summit deferred by the United States. Article II prohibited conversion of launchers of smaller or older ICBMs for use by newer “heavy” ICBMs. The definition of “heavy” ICBMs would also become a source of contention for the Soviets which would remain to be resolved in future negotiations. The Soviets were interested in preserving their ICBM modernization programs that were still in development and were particularly keen on seeking to catch up to the United States in MIRV development.¹⁴ Modernization and replacement of missiles and launchers was allowed under Article IV. National technical means were the agreement’s verification method “in a manner consistent with generally recognized principles of international law” and interference was not to be accepted. Article V included specifics that interference included covering of any silo or submarine in order to

¹² Amy F. Woolf, Mary Beth Nikitin, and Paul Kerr, *Arms Control and Non-proliferation: A Catalog of Treaties and Agreements*. (Washington, D.C.: Congressional Research Service, 2009).

¹³ Bureau of International Security and Non-proliferation. “Strategic Arms Limitation Talks (SALT I),” *United States Department of State Website*, 2009. <http://www.state.gov/t/isn/5191.htm> (accessed December 18, 2009).

¹⁴ Garthoff, *A Journey through the Cold War: A Memoir of Containment and Coexistence*, 262-63.

prevent satellites from photographing activities that might be in violation of the agreement. Negotiations were to continue through the same Standing Consultative Commission established under Article XIII of the ABM Treaty.

One example of the difficulties in negotiating specific limits in an arms control agreement occurred in April 1972 over the issue of including SLBMs in the agreement. On October 12, 1971, Nixon announced his intention to meet with the Soviets in May of 1972.¹⁵ This set a firm boundary to the negotiations which up to the winter of 1971 had focused solely on ABM and limiting ICBMs which seemed the best path to reaching an agreement even it was not as comprehensive as desired.¹⁶ Gerard Smith, the lead U.S. negotiator, continued to press the Soviets on inclusion of SLBMs in the agreement. The Soviets resisted his repeated attempts with a variety of reasons including their views of existing SLBM capable submarines as a system similar to mobile ICBMs and aircraft carriers with nuclear capable bombers vice ICBMs. Knowing that the United States would have to potentially accept limits on forward submarine basing, the Soviets used this concept as a means to focus discussions away from SLBMs.¹⁷

The true nature of the negotiations was in fact controlled by the respective national leaders. In a move that was indicative of Nixon's view of the Washington bureaucracy, Kissinger was sent to Moscow ostensibly to discuss Vietnam with the Soviets in April 1972, a month before the summit. The State Department and the SALT negotiators were not aware of any prior consultations or preparations for the trip nor was

¹⁵ Gerard Smith, *Doubletalk: The Story of SALT I* (Lanham, MD: University Press of America, 1985), 318.

¹⁶ *Ibid.*, 329-30.

¹⁷ *Ibid.*

Kissinger officially authorized to negotiate with the Soviets.¹⁸ By this time, Kissinger had in fact been passing his views with the agreement of Nixon through the Soviet ambassador to the Soviet leadership with SLBM being one of the key issues.

The meeting in Moscow on April 22, 1972 between Kissinger and Soviet General Secretary Brezhnev was both productive in substance as it was dismissive of the role of their respective SALT delegations.¹⁹ After a cordial discussion, Kissinger was given two SALT related statements from the Soviets to carry home to his president. The first contained four sentences that would become the key principles of the ABM treaty.²⁰ The second offered specifics on the Soviet view of the strategic balance between the two states and stated their concerns over U.S. bases for SLBM submarines located outside of U.S. territory.²¹ This second note was the first official offer after more than two years of SALT discussions on SLBMs. The recommendations of the Soviets would provide the specifics for Article III of the Interim Agreement and the Additional Protocol. Given the outcome, Kissinger's dialog with the Soviet General Secretary at this meeting provides substantial evidence of the relative power of both arms control delegations and state leadership to achieve desired results. Each has an important role to play but in the end, leaders decide on policy matters that relate to national interest.

¹⁸ Ibid.

¹⁹ William Burr, ed. "The Secret History of the ABM Treaty: 1969-1972," The National Security Archives Website, Washington, DC: George Washington University, 2009. <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB60/abm34.pdf> (accessed December 20, 2009). This specific link provides the reader the declassified transcript of the April 22, 1972 meeting between Kissinger and Brezhnev. The discussion on SALT and SLBM can be seen on pages 16-26. Of particular note are the role Kissinger plays and how well the Soviet leader received him. Neither of the principals seems to be concerned of the status Kissinger may have to negotiate SALT terms. The Soviets were extremely interested in reaching an agreement as well as a long term positive relationship with the U.S.

²⁰ Ibid., 17-18. Actual text of the note as it was read to Kissinger in Moscow.

²¹ Ibid., 18-19. Actual text of the note read in Moscow. The discussion between principals at this meeting is indicative of the power to achieve results in arms control agreements in a relatively short period of time.

The issue of SLBMs quantity limits would be explicitly enshrined in Article III of the agreement and in the accompanying Protocol with only a slight modification of the Soviet April 22 note. Specifically, the limits were clearly not an equal numerical tradeoff but the wording of the agreements made no mention of the U.S. basing issue. The modification to the Soviet note, which had called for a U.S. limit of 41 SLBM capable submarines and nine Allied submarines, was to allow the U.S. a total of 44 submarines with as many as 710 launchers. By the very nature of a bilateral agreement, the agreement could not place limits on any third parties so the Soviet desire to limit British and French SLBM submarines went unfulfilled. The Soviets would be allowed to have a total of 62 submarines with 950 launchers. This limit, effectively established in Article III, allowed the parties to retain the number of launchers and submarines that were operational and under construction when the agreement was signed.

The Protocol attached to the agreement and signed at the May 26, 1972 summit along with the ABM Treaty provided the limits on SLBM launchers while the agreement itself contained the limits on ICBM launchers. In addition to the total numbers limits, additional limits on replacement SLBMs were defined:

Additional ballistic missile launchers on submarines up to the above-mentioned levels, in the United States -- over 656 ballistic missile launchers on nuclear-powered submarines, and in the U.S.S.R. -- over 740 ballistic missile launchers on nuclear-powered submarines, operational and under construction, may become operational as replacements for equal numbers of ballistic missile launchers of older types deployed prior to 1964 or of ballistic missile launchers on older submarines. The deployment of modern SLBMs on any submarine, regardless of type, will be counted against the total level of SLBMs permitted for the United States and the U.S.S.R.²²

²² See Appendix C for complete document.

This wording recognized the need for both specific limits without exact numerical equivalents as a first step in achieving future agreements. What success SALT I achieved in terms of establishing a foundation for future negotiations between the two superpowers was limited by the fact that the specifics of the agreement solidified the already distinct advantages the Soviets had in ICBMs and allow them to build a numerical advantage in SLBMs as well. These advantages which in reality did not give the Soviets a strategic advantage such as the ability to prevail in a nuclear exchange, politically the U.S. public and Senate was not likely to readily accept the “simple math” that SALT I achieved. Unfortunately, the United States in particular, would experience increasing difficulty in explaining the disparities to the public and the Senate.²³ The Nixon Administration’s effort to gain the required advice and consent of the Senate for ratification of the ABM Treaty and the Interim Agreement would eventually succeed but would generate the “Jackson Amendment” requiring equity in future agreements.²⁴

The U.S. and Soviet leaders would meet once more in June of 1973 as Russia sought to continue the “spirit of détente.” No new treaty was readily available but the summit produced a signed intent to set both quantitative and qualitative limits within the next treaty which was to be completed before 1975. For the United States, Kissinger desired this deadline in order to get the U.S. Executive bureaucracy to move forward and limit “the endless political posturing at the bargaining table in Geneva.”²⁵ Having successfully tabled any agreement on limiting MIRVs, the Soviets were free to continue testing their new capabilities with the first MIRV capable missile doing so just two weeks

²³ Smith, *Doubletalk: The Story of SALT I*, 377.

²⁴ Woolf, Nikitin, and Kerr, *Arms Control and Non-proliferation: A Catalog of Treaties and Agreements*.

²⁵ Coit D. Blacker and Gloria Duffy, *International Arms Control: Issues and Agreements*, ISIS Studies in International Security and Arms Control (Stanford, Calif.: Stanford University Press, 1984), 257.

after the summit.²⁶ Directing the U.S. position, Kissinger pressed the development of long range nuclear cruise missiles as bargaining option for the future SALT II negotiations.²⁷ The one true accomplishment of this final summit involving Nixon was the limiting agreement, the “Additional Protocol,” which allows both parties only one ABM system.

Two other agreements occurred during the SALT negotiations which were not as contentious as the others but have contributed to the effort to bind the two largest nuclear powers together through cooperation. The agreement on Measures to Reduce the Risk of Outbreak of Nuclear War provided the United States and the U.S.S.R. a more specific agreement to outline the types of events that each side should communicate to the other in order to prevent escalation to nuclear war.²⁸ This agreement was seen as a natural extension and codification of the intent of both in the aftermath of the Cuban Missile Crisis of 1962. The agreement on Measures to Improve the U.S.A.-U.S.S.R. Direct Communications Link dovetailed with the other agreement and provided specific measure for technological upgrades to the “hotline” established in the immediate post Cuban Missile Crisis period.²⁹ This link is still available and tested daily some six decades after its establishment. Without continuing efforts to negotiate, whether between leaders or negotiation teams, no agreements would have been reached. Leaders are often willing to seek agreement on related but minor issues as both a sign of good faith as well as progress.

²⁶ Ibid.

²⁷ Ibid.

²⁸ See Yale Law School. “Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War Between the United States of America and the Union of Soviet Socialist Republics - September 30, 1971,” *The Avalon Project*, 2009, for a full citation of the text of the agreement. http://avalon.law.yale.edu/20th_century/sov001.asp (accessed December 26, 2009).

²⁹ Garthoff, *A Journey through the Cold War: A Memoir of Containment and Coexistence*, 263.

SALT II: THE IMPACT OF USING OF PUBLIC OPINION TO INFLUENCE ARMS CONTROL

Agreement between the U.S and the Soviet Union on the SALT II Treaty followed seven years of negotiations and reflected the growing power of the Senate over the President as well as the shifting political scene both domestically and internationally. SALT II would never be ratified by the Senate due to President Carter's withdrawal of the treaty from Senate consideration after the Soviets invaded Afghanistan in December 1979. The length and complexity of the negotiations, weaknesses in the SALT I agreement, the turbulent domestic political scene in the post-Nixon, post-Vietnam era and Soviet aggressive behavior internationally all combined to weaken support for arms control in general and efforts to negotiate with the Soviets specifically. In the background, both U.S. and Soviet nuclear arsenals were increasing in capability both in quantity and quality of systems limited by SALT I as well as in newer systems not subject to limitations. Mobile ICBMs, nuclear cruise missiles, new bombers, and advanced MIRV capability for missiles of all types dominated the development and deployment programs of both SALT I parties. These follow-on negotiations provide additional visibility into the relationship between arms control and arms racing as well as the impact state leadership have on each.

Immediately after the White House announced the successful completion of the SALT I agreements in May 1972, Secretary of Defense Melvin Laird would assure the Senate Armed Services Committee that the treaty and the negotiation process for SALT II enhanced U.S. security, slowed Soviet missile deployments and possessed adequate verification. He also stated that his support of the agreement was based on his assumption

that Congress would provide full support of current and future strategic programs proposed by the Administration.³⁰ The Soviets during this period seemed to play the role many opponents of arms control in the United States expected them to do: take advantage if not violate the agreement. The seven years of SALT II negotiations were in fact a period of growth for both the United States and the U.S.S.R with the Soviets making every effort to modernize and build up to the limits of SALT I but did not actually exceed those limits.³¹ Confrontation with the Soviets by the late 1970's had taken on a life of its own with the West frequently seeing the Soviet threat as disproportionately large to reality. Even at the negotiation table, the Soviets were not as successful as many believed.³² Importantly, the two states would agree in 1977 to extend the SALT I limits until SALT II was completed.³³

The SALT II Treaty contained a number of important limits that built upon SALT I and dealt directly with issues deferred in the earlier talks. The key failure of the SALT I agreement was a lack of limits on MIRVs.³⁴ Other issues deferred included cruise missiles and heavy bombers. At a 1974 summit in Vladivostok between President Gerald Ford and General Secretary Brezhnev, a basic set of limits were reached that lead to another five years of refinement. The basic framework achieved was in accordance with the Jackson Amendment and set an equal limit of 2,400 ICBM launchers, SLBM

³⁰ Smith, *Doubletalk: The Story of SALT I*, 459.

³¹ Ibid., 461-62. Smith cites Jan M. Lodal, from the Nixon National Security Council, as providing support for this conclusion in 1980, "Events since SALT I do not support the view that the Soviets are cheating, that they are unreasonably pushing the limits of the agreements, that they are attempting to use loopholes to their advantage, or that our verification capabilities are inadequate. Rather, the record demonstrates the strength of our verification capabilities, that we are willing to raise questions related to compliance promptly, and that the basic terms of agreements are being observed."

³² Ibid. Smith lists at least eight specific instances where the Soviets yielded to U.S. positions including the limits on ABM radars, the requirement to link the two agreements, and a longer term for the Interim Agreement.

³³ Woolf, Nikitin, and Kerr, *Arms Control and Non-proliferation: A Catalog of Treaties and Agreements*.

³⁴ Smith, *Doubletalk: The Story of SALT I*, 471-72.

launchers and heavy bombers with the total eventually reaching 2,250 by January 1, 1981. The MIRV issue was directly addressed with limits on MIRV capable missile launchers as well as MIRV capable air-to-surface ballistic missiles which would be dropped by heavy bombers. Cruise missiles would become a major facet of the later negotiations after being saved from the Defense Department budget axe by Kissinger.³⁵

The understanding at Vladivostok limited MIRV systems to no more than 1,320 of the 2,400 equal aggregate limit on strategic nuclear delivery vehicles which included ICBMs, SLBMs, and heavy bombers.³⁶ Each side would also agree to a total ban on construction of new land-based ICBM launchers as well to be determined limits on deployment of new types of strategic offensive arms. Additionally, the key important elements of the Interim Agreement, such as verification, the SSC and the ability to withdraw with appropriate notice, would be a part of the new agreement.³⁷ The treaty end date was also established as 1985, a significantly longer period than SALT I. Despite the obvious momentum of the summit, the issue of MIRV warheads was not addressed. Subsequent negotiations would establish agreement not to modify existing missiles to increase the number of MIRV warheads. New MIRV capable ICBMs would be limited to 10 warheads while new SLBMs were also to be limited to 14 warheads.³⁸

What was evident from the beginning of the SALT II negotiations was the inherent difficulty of achieving an agreement on strategic nuclear arms that met all of the interests of the two parties. Both the United States and the U.S.S.R. sought to reach an

³⁵ Goodby, *At the Borderline of Armageddon: How American Presidents Managed the Atom Bomb*, 97.

³⁶ Department of State. "Treaty Between The United States Of America And The Union Of Soviet Socialist Republics On The Limitation Of Strategic Offensive Arms, "*Department of State Website*, <http://www.state.gov/www/global/arms/treaties/salt2-1.html> (accessed December 20, 2009).

³⁷ Ibid.

³⁸ Woolf, Nikitin, and Kerr, *Arms Control and Non-proliferation: A Catalog of Treaties and Agreements*.

agreement that set both quantitative and qualitative limits on all strategic nuclear weapon systems. From the U.S. side, two competing avenues of approach to the agreement emerged. One saw the firm requirement to reach an agreement based on a calculus of each side's total nuclear throw-weight which these proponents saw as largely in the Soviets favor post SALT I. The other desired to retain the U.S. technological advantages especially in MIRVs and SLBMs. The Soviets prior to Vladivostok were concerned on offsetting their perception of U.S. advantages strategically and geographically.³⁹ The Soviets main concerns were the newest systems being developed in the United States to include the Trident SLBM capable submarine, the B-1 bomber and nuclear capable long-range cruise missiles. At the time, concern for at least freezing the level of capabilities in each state was acute but specific limits on all systems were avoided by both sides.⁴⁰

SALT II negotiations would continue through the Ford Administration and eventually conclude with a signed treaty in 1979 during President Carter's term. One of the key issues from Vladivostok to the eventual signing was how to count Soviet Backfire bombers and the U.S. cruise missiles. Kissinger was able to reach a tentative agreement with Foreign Secretary Gromyko that would have set limits on the numbers of Backfires to be deployed and counting limits on cruise missiles as MIRVs on U.S. bombers. These limits were politically unacceptable in the United States as they were reached during the highly intense political atmosphere of the 1976 Presidential election. A separate three year protocol for these limits would be reached before the SALT II Treaty signed in 1979.⁴¹

³⁹ Carter, *Success and Failure in Arms Control Negotiations*, 137.

⁴⁰ Ibid., 138-39.

⁴¹ Blacker and Duffy, *International Arms Control: Issues and Agreements*, 260.

During the final phase of the SALT II negotiations, changes in the U.S. domestic and international landscapes caused the issue of nuclear arms control to shift from the center of attention in each arena to the periphery. Three main causes for this shift included changes in verification technology, U.S. public views on Soviet motives, and Soviet decisions to continue to build up their strategic capabilities. With the rapid growth and dispersal of MIRV and cruise missile systems, both sides began to lose their ability to use national technical means to verify treaty compliance. Cooperative verification to include on-site inspection became the best means to detect either compliance or cheating. The growing mutual distrust of the parties' motives in many areas made any expansion of intrusive inspections difficult to implement. This distrust was most pronounced on the U.S. side as the Soviets became involved in conflicts in Africa along with their clients the Cubans. These "client wars" activities on the part of the U.S.S.R. in the late 1970's led many in the U.S. Congress who opposed arms control to conclude that if the Soviets were working to expand their power globally after they had agreed to not do so.⁴²

The final issue that ultimately caused a nearly total rejection of arms control with the Soviets was their continued buildup of strategic systems throughout the latter part of the decade. This buildup while obviously approved by Soviet leadership was in part to reach parity with the United States in MIRV and SLBM systems. The buildup had exactly the impact that one might expect on the United States as most intelligence assessments placed the Soviet capabilities as eventually placing the U.S. ICBM force at risk of a preemptive attack. Evidence of this renewed concerns over the Soviet threat can be seen in calls for renewed efforts to construct less vulnerable systems like the MX

⁴² Ibid., 261. On particular focus was the 1972 Basic Principles of Relations agreement in which the U.S. and the Soviets had agreed not to work to gain a unilateral advantage over the other.

system with its 10 MIRV capability and optional rail mobile capability.⁴³ The Soviet invasion of Afghanistan in 1979 provided either part or the complete catalyst for President Carter to remove the signed SALT II from Senate consideration.

One of more interesting stories within the negotiations of the treaty itself is how the changing views of U.S. leadership and the political style of the President impacted the willingness of the Soviets to cooperate. The first meeting between the United States and the U.S.S.R after the Carter Inauguration provides a strong example of the limitations of attempting to influence a negotiating partner in public prior to formally discussing a formal proposal. After a change of leadership in 1977, the White House chose to dominate the strategy and policy determination process for arms control as Nixon had earlier. Jimmy Carter, a former nuclear submarine officer, a strong advocate of human rights and a populist politician, had a good technical understanding of nuclear issues and a strong desire to rally public opinion to his efforts. He chose a process of publically announcing his arms control aims publically before entering into discussions with the Soviets. In his first major policy speech delivered at the United Nations General Assembly, Carter stated the U.S. goals as looking to cap both sides at current technology combined with a substantial reduction in total arms, if no agreement could be quickly reached on these ideas, then the principles of Vladivostok would be accepted.⁴⁴

President Carter made several statements after the UN speech that offered the Soviets sufficient reason to reject any U.S. proposal.⁴⁵ The White House had also kept the wording of this first Carter proposal a secret from all but his inner circle which contained

⁴³ Ibid., 261-62.

⁴⁴ Strobe Talbott, *Endgame: The Inside Story of SALT II* (New York: Harper & Row, 1979), 63-67.

⁴⁵ Ibid., 67.

concessions options if the Soviets showed willingness to negotiate.⁴⁶ When the Secretary of State Cyrus Vance met with General Secretary Brezhnev in Moscow days later, the Soviets firmly rejected the U.S. proposal. They did this on several counts including a rebuke of the Carter's human rights campaign as unnecessary meddling in another state's domestic affairs. The Soviet leadership also believed his UN statements were not respectful of the SALT process in general and the Vladivostok accords specifically.

Several days of talks on SALT II ended in no agreements and two separate press conferences with Vance prior to departing Moscow stating the Soviets rejected the U.S. proposals while offering none of their own. Foreign Minister Gromyko not only reprimanded the U.S. offer but for the first time in any SALT discussion publically revealed the specific limits proposed in the U.S. "comprehensive proposal."⁴⁷ Eventually, the United States would select a dual track approach to negotiations with the Soviets similar to the Nixon-Kissinger era and abandon President Carter's public influence strategy.

The entire affair exposed weaknesses in both a "public approach" to influencing arms control negotiations and the U.S. internal policy development apparatus involving the National Security Council and the State Department. Additionally, this series of events would continue to influence public opinion on the issues of arms control and the U.S. relationship with the Soviets. From a U.S. prospective, as SALT II went forward, momentum for Senate passage was ultimately unachievable due to pressure from those who believed the treaty was flawed as well as from those who believed the Soviets were not capable of living up to their obligations. Public opinion in the end on both sides of the

⁴⁶ Ibid., 68-69.

⁴⁷ Ibid., 70.

political spectrum was divided in the reason to dislike SALT II but united in their disapproval. Ultimately, what was needed was the ability to develop sufficient public support for separating the issues of Soviet behavior in the international environment in areas not related to nuclear arms and the requirement to reduce the number of nuclear arms in the world. The one responsible office for this effort is the President of the United States.

START I: BALANCING OFFENSIVE AND DEFENSIVE NUCLEAR ARMS

After campaigning on a platform to deal with the Soviet threat, Ronald Reagan was committed to returning the U.S. military capability to a position of strength compared to the Soviets after a “decade of neglect.” As was discussed in the previous chapter on the ABM Treaty, Reagan would seek a set of capabilities to protect the American people from any missile attack with the 1983 Strategic Defense Initiative. In the immediate post-inauguration period, the Reagan Administration developed a program of defense improvements designed to place the United States in a position of strength in order to provide advantages in negotiations with the Soviets.⁴⁸ This position would cause the United States to refrain from returning to arms control for 18 months. The negotiations would continue with interruptions twice by the Soviets through Reagan’s two terms and complete during George H. W. Bush’s term. The first Strategic Arms Reduction Treaty (START I) would be signed by the United States and the Soviet Union on July 31, 1991.⁴⁹

⁴⁸ Blacker and Duffy, *International Arms Control: Issues and Agreements*, 272.

⁴⁹ Woolf, Nikitin, and Kerr, *Arms Control and Non-proliferation: A Catalog of Treaties and Agreements*. See Appendix D of this dissertation for the text of the agreement.

The START I treaty ratification process and implementation would survive the demise of one of the signatories and continue to be the basis for significant reductions in nuclear arms for nearly two decades. The United States was first to approve the treaty with the Senate giving its consent on October 1, 1992. The Russian Parliament, the Soviet successor, while consenting to ratification on November 4, 1992, had reservations on exchanging the instruments of the treaty until the three former Soviet republics that had possessed Soviet nuclear weapons did so as well.⁵⁰ START has also served as the basis for follow-on negotiations that have the potential of achieving the desired goals of the Nuclear Non-Proliferation Treaty. The United States and Russia exchanged the instruments of ratification on December 5, 1994 signaling the beginning of the enforcement of START I with a 25 year duration.⁵¹ At the time of this writing, the START I Treaty has expired but the parties are working to rapidly develop and approve a follow on agreement.

The follow on to SALT, START I achieved significant reductions in both numbers of warheads and delivery systems including ICBMs, SLBMs and heavy bombers. While actual missiles removed from service were not required to be destroyed, their associated launchers were. Limits allowed each side to deploy up to 6,000 attributed warheads on these systems where attributed numbers were those warheads designated by the owning state to be carried by a particular system. This means of defining counting

⁵⁰ Ibid. Kazakhstan, Belarus and Ukraine were the states in question. Kazakhstan ratified in June 1992 and joined the NPT as a non-nuclear weapon state in February, 1994. Belarus ratified START and NPT in February 1993, joining NPT as a non-nuclear weapon state in July 1993. Ukraine had a more difficult transition to non-nuclear weapons state status as it possessed the third largest inventory of nuclear systems after the fall of the Soviet Union with 176 ICBMs, 44 nuclear bombers, 1,900 strategic nuclear warheads and approximately 2,275 tactical nuclear weapons. (See the Nuclear Threat Initiative website at http://www.nti.org/e_research/profiles/Ukraine/Nuclear/index.html for more information.) By 1996, all Ukrainian nuclear warheads had been transferred to Russia for elimination. Ukraine's parliament had completed accession to START and NPT by November, 1994.

⁵¹ Ibid.

limits actually allowed each side to carry as many as 3,000 more warheads than the limit as some weapons carried on bombers were not subject to the 6000 warhead limit. For ICBMs and SLBMs, START I limited each side to a maximum of 4,900 warheads. START I also for the first time contained a limit on “heavy” ICBMs at 1,540 warheads. Given the levels of total warheads each possess at end of the Cold War, these limits were a logical continuation of the relationship that was undergoing dramatic changes. The likelihood of such dramatic reductions was far from the position of each of the parties when in the aftermath of SALT II and the election of Reagan.

President Reagan entered office without any positive desires to continue the arms control agenda of previous administrations. His defense budgets continued to build on the initial increases Carter had approved in an attempt to win support for SALT II and resurrected the cancelled B-1 bomber as a part of a renewed modernization of the nuclear triad. Public and congressional reaction was increasingly less enthusiastic with each new proposal for new weapons unless the Reagan Administration was willing to also engage in arms control.⁵² The combined difficulty of providing sufficient resolution of the basing mode of the new MX ICBM to assure its survivability and the growing issue of intermediate nuclear forces in Europe to congressional satisfaction led Reagan to announce his proposal for renewed strategic arms talks called START. Reagan’s team sought to refocus the center of the negotiations away from reducing launchers to reducing missiles and warheads.⁵³ At the same time, Soviet leadership was unable to effectively control the agenda of arms to meet either side’s expectations.

⁵² Blacker and Duffy, *International Arms Control: Issues and Agreements*, 272-73.

⁵³ Ibid.

At the end of the SALT II process, the Soviets were interested in continuing negotiations as a means to limit the likely deployment of intermediate range nuclear missiles in Europe by NATO. Soviet leaders had grown increasingly upset at the nearly continuous anti-U.S.S.R. rhetoric in Reagan's speeches from the election campaign onward. In one notable speech given by Reagan to a religious group in the United States in 1983, the president characterized the Soviet Union as an "evil empire."⁵⁴ In a similar manner to Carter's populist public speaking as a means to influence the negotiation process, Reagan sought the support of external audiences to influence the Soviets. At the same time, he elected to continue deployment of nuclear IRBM and ground-launched cruise missiles to Europe proposed during the last year of the Carter Administration.

The Soviet reaction to both the style and substance of these U.S. policies was to commit to deployment of their own systems as a counter. European nations, especially Germany, found themselves caught between their commitments to the NATO alliance and the growing outrage of their publics. The INF negotiations would provide a parallel tension to the larger issue of strategic arms reductions for the first five years of the Reagan Administration. April Carter in her analysis of this period places the responsibility for the eventual impasse reached in INF and START between 1983 and 1985 on the parties' national leaders. Their purpose for the negotiations was not compatible with the goals of negotiations because "the real problem of the INF and START negotiations was not the openness with which the talks were conducted, but the propagandistic intent of the heads of government and the basic unwillingness to make

⁵⁴ For a full transcript and associated video and audio of the speech, see Reagan, Ronald. "Evil Empire Speech, March 8, 1983," *Miller Center of Public Affairs website*, 2009. <http://millercenter.org/scripps/archive/speeches/detail/3409> (accessed December 27, 2009). The Miller Center of Public Affairs, University of Virginia, Charlottesville, VA has one of the most extensive multimedia collections of U.S. Presidential speeches available free to the public through the internet.

genuine concessions.”⁵⁵ Carter cites each side’s “essentially bargaining in public” during this period as damaging and a merging of the two talks in a less public forum as a more successful alternative. One could also attribute a great deal of Reagan’s position to his personal beliefs and the domestic political pressure to maintain his “negotiate from a position of strength” policies.

With a change in Soviet leadership to Michael Gorbachev in March 1985, a new approach to nuclear issues was achieved leading to an agreement on elimination of an entire class of U.S. and Soviet nuclear systems with the Intermediate Nuclear Forces Treaty. The parties would eventually complete the destruction of all missiles and associated support systems with a range of between 300 and 3400 miles by May 1991.⁵⁶ Some 1750 Soviet and 846 U.S. missiles would be eliminated under a program with the most extensive verification protocol in any agreement to that time. Verification measures included sharing of data, up to 20 short notice on-site inspections of agreed facilities and “a continuous portal monitoring” capability at one assembly plant in each country. The United States agreed to use the same facility in Russia that had been established in START I.⁵⁷ The INF Treaty negotiations after 1985 provide a counterpoint to the previous period and offer an example of the positive impact leadership can have on arms control negotiations.

The key to the new atmosphere in which the INF and START I were concluded was the attitude of the new Soviet General Secretary who was deeply concerned with issue of the destructive power of nuclear weapons. Michael Gorbachev was not a

⁵⁵ Carter, *Success and Failure in Arms Control Negotiations*, 198.

⁵⁶ Woolf, Nikitin, and Kerr, *Arms Control and Non-proliferation: A Catalog of Treaties and Agreements*.

⁵⁷ Ibid.

technical expert on nuclear arms but saw the possibility of asymmetrical disarmament as a means to break out of the dead end the Cold War and the most recent arms talks had reached. Beginning with the summit in Geneva between Gorbachev and Reagan in the fall of 1985, the Soviet leader chose to direct the Soviet state toward a position of acceptance of the growing international climate of globalization. In this new world, according to Gorbachev's vision nuclear arms had no proper role.⁵⁸

The events of Chernobyl and the German pilot flying unnoticed through Soviet airspace eventually landing in Red Square offered the General Secretary the necessary moments to first release the Soviet nuclear community and next the Soviet military's respective grasps on arms control and disarmament. Unlike his U.S. counterpart, the General Secretary had the necessary power to force the Soviet bureaucracy to accept his vision. With this power in mind, Gorbachev consistently offered proposal after proposal that called for more rapid reductions on the Soviet side than the United States was willing to reciprocate leading up to the momentous Reykjavik Summit in 1986.⁵⁹ In the Soviet case, leadership was emerging as at least a catalyst of reforms that were needed.

Some have argued that this period has ample validation of either Reagan or Gorbachev's leadership as key to the eventual demise of the Soviet system. The common theme held in the United States was that the Reagan military buildup was unmatched by the Soviets. Others believe Gorbachev's leadership vision was the principle reason for the unraveling of the Soviet state. The Soviet leadership was taking steps even before Gorbachev took power, as early as 1983, to find areas of accommodation with the United

⁵⁸ Vladislav M. Zubok, "Gorbachev's Nuclear Learning," *Boston Review*, April/May 2000, <http://www.bostonreview.net/BR25.2/zubok.htm> (accessed December 27, 2009).

⁵⁹ Carter, *Success and Failure in Arms Control Negotiations*, 209.

States including release of political prisoners, cultural exchanges, and a long term grain deal.⁶⁰

The return of Reagan for a second term combined with an increasingly strong movement away from conservative elements within the Soviet leadership forced the Soviets to continue to find ways to improve relations. This effort was a reaction of the Soviet leadership to the dramatic shift by Reagan to confrontation with the Soviets while they had believed, as far back as the beginning days of détente that the U.S.S.R. would eventually emerge as the global leader not the United States. The new Reagan positions resulted in a dramatic re-evaluation of how the Soviets would deal with more than just the military or economic dimensions the international situation changes posed by Reagan but to deal with what they now saw as a direct challenge to their political existence.⁶¹

By the time Reagan announced SDI in 1983, the Soviet leadership recognized how poorly their technological abilities were developing in comparison to the United States as they had been working on a similar system since 1976 with little success.⁶² Internally, voices of reform began to criticize the “adventurism” of the Brezhnev era citing the Soviet-Cuban operation in Angola, the deployment of SS-20s and the Afghanistan invasion as evidence of why the Reagan position in the United States came to exist. Military spending to match the U.S. challenge in the early Reagan period was already seen as a dead end as Gorbachev came to be the Soviet General Secretary.⁶³

⁶⁰ Robert G. Patman, "Reagan, Gorbachev and the Emergence of 'New Political Thinking'," *Review of International Studies* 25, no. 4 (1999): 589.

⁶¹ *Ibid.*, 591-95.

⁶² *Ibid.*, 596.

⁶³ *Ibid.*, 599-600.

REAGAN AND GORBACHEV: A NEW FRIENDSHIP LEADS TO PROGRESS

Shortly after the start of the second Reagan Administration in 1985, the two states agreed to once again begin to negotiate in Geneva on the three central issues in arms control at the time: INF, strategic weapons and space weapons. Begun as a comprehensive negotiation in March 1985, the two states quickly decided to divide these talks into three working groups with each taking on one of the issues. The discussions on space weapons were the most contentious with the beginning Soviet position calling for a complete ban. The other talks started with both sides at the same positions as when the talks were suspended in 1983 with the Soviet walkout. Negotiations did not progress well during the year despite a number of new proposals from both sides in each working group.⁶⁴ As had been the custom in the past, both leaders sought summitry as a means to bring about movement in arms control. Two summits were crucial to the developing of new arms control agreements and fostered the growing friendship of Reagan and Gorbachev: Geneva in November 1985 and Reykjavik in October 1986.

Reagan was first to initiate a dialog with the new General Secretary when he sent him a letter on March 11, 1985 the day of Gorbachev's election to the position. Sending Vice President Bush to deliver the letter, Reagan spoke of his "hope" for "a more stable and constructive relationship between our two countries."⁶⁵ He went on to say that he viewed the Geneva negotiations as "a genuine chance to make progress toward our common ultimate goal of eliminating nuclear weapons."⁶⁶ Gorbachev's advisors were

⁶⁴ Carter, *Success and Failure in Arms Control Negotiations*, 207-08.

⁶⁵ The National Security Archive, "To the Geneva Summit Perestroika and the Transformation of U.S.-Soviet Relations," *National Security Archive Electronic Briefing Book No. 172*, George Washington University, Washington, DC, November 22, 2005, Document 2, March 11, 1985 Letter from Ronald Reagan to Mikhail Gorbachev, <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB172/Doc2.pdf> (accessed January 2, 2010).

⁶⁶ Ibid.

suggesting a positive but not hasty response within an effort on the Soviets part to confirm “our active approach to reviving the détente processes.”⁶⁷ The first of two summits to achieve their mutual aims occurred in Geneva on November, 19-20, 1985 and did little more than allow the leaders to begin to develop a personal relationship that would prove important to later agreements.

Each believed that he would convince the other to agree to his view with Reagan seeking to preserve SDI and push the Soviet on human rights. Gorbachev hoped to gain some acknowledgement of the need to ratify SALT II and with it agreement to hold to the ABM Treaty. The latter effort would effectively make SDI illegal.⁶⁸ In the end, the leaders agreed in principle to seek a 50% reduction in strategic arms and a step toward a full INF agreement.⁶⁹ On the SDI issue, Reagan began to understand Gorbachev’s basic concern about space weapons and offered to share the technology with the Soviets. Senior observers on both sides believed this was a strategic error on Gorbachev’s behalf as he remained too focused on abolition of space weapons.⁷⁰ Today, this summit can be viewed as the opening moment of the “new détente” each sought, placed each leaders’ believe that nuclear weapons should be eliminated in the center of the discussion and lead to the INF and START Treaties.⁷¹

The period following the Geneva summit was not as successful as the leaders had hoped. Negotiations in Geneva gained little during the winter and spring of 1985-1986.

⁶⁷ The National Security Archive, “To the Geneva Summit Perestroika and the Transformation of U.S.-Soviet Relations,” *National Security Archive Electronic Briefing Book No. 172*, George Washington University, Washington, DC, November 22, 2005, Document 3, Alexander Yakovlev, “On Reagan,” Memorandum prepared on request from M.S. Gorbachev and handed to him on March 12, 1985, <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB172/Doc3.pdf> (accessed January 2, 2010).

⁶⁸ Ibid., see the text of the webpage, <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB172/index.htm> (accessed January 2, 2010).

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ Carter, *Success and Failure in Arms Control Negotiations*, 209.

In a speech in January, 1986, the Secretary General proposed the elimination of all nuclear weapons by the turn of the century. In his plan, the proposed Geneva summit 50% cut would be accomplished first along with a complete elimination of all INF weapons. Gorbachev suggested British and French nuclear weapons be frozen at current levels during this first stage of the eliminations. Reagan's response was less than enthusiastic as he dismissed most of the Soviet proposal as not useful to their discussions, detailed past problems of treaty compliance on the part of the Soviets and the problem of conventional force asymmetries that would occur as the nuclear arms were eliminated.⁷² Reagan did propose a staged elimination of INF missiles which the Soviets in Geneva rejected during later negotiations. Other international events including the U.S. bombing raid on the Soviet client Libya and the ongoing Soviet occupation of Afghanistan served as incentives to slow arms control negotiations.⁷³

When the Soviet leader wrote to Reagan proposing a summit in October which would be held in Reykjavik, negotiators were incentivized to provide their leaders with something to offer the other side. Recently released documentation of the summit from both sides has confirmed several significant beliefs expressed at the time and outline in stark detail the opportunities missed that would not appear again for quite some time. First, with the call coming in September for an October meeting, the U.S. administration was unable in the time available to provide the President with a firm set of proposals for the Soviets. The opposite was true in the Soviets case with Gorbachev arriving and delivering specific sets of reductions and timelines.⁷⁴ Along with a lack of proposal

⁷² Ibid., 208.

⁷³ Ibid., 209.

⁷⁴ Svetlana Savranskaya and Thomas Blanton, eds., "The Reykjavik File: Previously Secret Documents from U.S. and Soviet Archives on the 1986 Reagan-Gorbachev Summit," *National Security*

support to the President, the pre-summit U.S. analysis of the Soviet position did not identify Gorbachev's strong desire to completely eliminate all nuclear weapons which became a key issue during the summit and almost the central agreement. The final and most significant missed opportunity was the unwillingness of the Soviets to yield on SDI at the Summit. The U.S. proposal, to retain testing rights on SDI while eliminating all ballistic missiles in 10 years and eventually all offensive weapons, was rejected by the Soviets at the summit. At one point in the talks, the Soviets told the U.S. team that to accept the proposal would demand an "exceptional level of trust" that they were not prepared to give. Soviet records provide confirmation that within two weeks after the summit Gorbachev had reconsidered their position on SDI but were unable to get U.S. agreement as the Reagan Administration was distracted by other events.⁷⁵ In the end, SDI was in the end the only issue that prevented agreement to fully disarm in 1986 at Reykjavik.⁷⁶

Post summit, Allied and military staffs reaction to the potential of a total disarmament raised by Reykjavik was almost completely negative with Margaret Thatcher, Britain's Prime Minister making a trip to Washington to personally express her concern to Reagan.⁷⁷ In public, the United States and the U.S.S.R. traded accusations on whether or not the United States had accepted the total ban. At the negotiations in

Archive Electronic Briefing Book No. 203, The National Security Archive, George Washington University, Washington, DC, October 16, 2006, <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB203/index.htm> (accessed January 2, 2010).

⁷⁵ Ibid. Iran Contra scandal became the main media story shortly after the summit. For more specifics on the Soviet reversal on SDI, see Document 28, "USSR CC CPSU Politburo session. Reykjavik assessment and instructions for Soviet delegation for negotiations in Geneva, 30 October 1986, 5 pp," <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB203/Document23.pdf> (accessed January 2, 2010).

⁷⁶ Paul Lettow, *Ronald Reagan and his Quest to Abolish Nuclear Weapons*, (New York: Random House, 2005), 246.

⁷⁷ Carter, *Success and Failure in Arms Control Negotiations*, 210. Thatcher was concerned that a total elimination of ballistic missiles on the part of the US would require Britain to "follow suit," as she believed "that total disarmament was an impossible and dangerous goal." (from text)

Geneva, proposals to reach agreement on the INF ban accelerated. Eager to gain a “win” in the foreign policy arena and divert attention from growing scandals within his administration, Reagan would meet Gorbachev again in December of 1987 in Washington to sign the INF Treaty, the first nuclear treaty to completely and verifiably eliminate an entire class of nuclear weapons.⁷⁸ START I negotiations would not regain significant momentum during Reagan’s term.

The lesson of the Reagan era of the START process would seem to be the power of the national leader’s personal vision and involvement on both sides of the negotiation or summit table. Winning office on a political platform of returning America to a position of strength and leadership in the world, Ronald Reagan had little trust in the process of nuclear arms control. By the end of his second term, not only would a significant arms control agreement be signed but the critical groundwork for future agreements was completed. Significant during this period was the rapid transformation of the leadership view on the part of the Soviets embodied in Gorbachev’s Perestroika and his shared belief of the absolute requirement to “liquidate” nuclear arms of all kinds. Despite the obvious impact of a “renewed détente,” the fleeting moments of potential dramatic gains in disarmament are subject to the powerful forces of history, distrust and lack of transparency.

START II: CONTINUING THE WORK WITH A NEW PARTNER

One of the fastest agreements from initial negotiation to approval, the START II Treaty was signed by President George H.W. Bush in the last weeks of his presidency and Russian President Boris Yeltsin on January 3, 1993 in Moscow. START II was able

⁷⁸ Ibid., 211.

to deal with one of the long deferred and much debated issues within the strategic arms control efforts between the two nuclear powers: MIRVs on ICBMs. SALT II had included limited provisions to control MIRVs at 10 maximum for ICBMs, this only served as a rationale for each side to build up to those limits. As SALT II was never ratified by the United States, the question of limiting MIRVs as a means of slowing arms racing remained open. START II would call for the total elimination of MIRVs on ICBMs, limited SLBMs to 1,750 on each side. The treaty also set limits on the total attributable warheads to a total number between 3,000 and 3,500.⁷⁹ The treaty would eventually be overcome by events with Russia placing approval contingent on United States providing assurances to continue the ABM Treaty and the unilateral withdrawal from it in 2002.

The realities of the changed international environment, the rise of the formidable U.S. advantage in conventional modern warfare as demonstrated in the 1991 ejection of Iraq from Kuwait, and the economic conditions in both the United States and the new Russian Federation combined to forge an uneven momentum for nuclear force reductions in the 1990's. START II would serve as a useful framework for reductions toward the defined limits while offering a quick start for further reductions. In terms of reductions, START II would be complied with by both sides to a limited extent while each sought to find ways to continue to modernize key systems. After the election of George W. Bush in 2000, the United States would seek to limit the amount of transparency and irreversible reductions within its nuclear force. Russia's reductions would keep pace due in large part to the elimination of the strategic systems in the three newly independent republics.

⁷⁹ Woolf, Nikitin, and Kerr, *Arms Control and Non-proliferation: A Catalog of Treaties and Agreements*.

Full compliance with START II would “de-MIRV” both parties ICBM forces by 2003. The United States would completely eliminate all 50 of its 10 MIRV capable MX Peacekeeper ICBM launchers while removing all but one of the warheads on the 500 missile Minuteman fleet. The Minuteman system was capable of up to three warheads per missile. The “downloaded” Minutemen would no longer have the ability to rapidly return to a MIRV capability. Russia would eliminate all launchers for the SS-24 and SS-18 ICBM, the removal of the latter being the long sought goal of the United States. In a similar “de-MIRVing” program, Russia would reconfigure 105 SS-19 ICBMs, a 6 warhead missile, to a single warhead configuration with the option to eliminate these missiles completely.⁸⁰ In addition to ICBMs, each side would limit SLBMs as well.

The planned U.S. fleet contained of 18 Trident capable submarines, each with 24 missiles. After the treaty signing, the United States reduced the SLBM capable fleet by four submarines converting these boats to non-nuclear missions. The missiles on the remaining 14 submarines would be downloaded from eight to five warheads each.⁸¹ With a far smaller SLBM fleet, Russia, having relied on a larger ICBM fleet with a significant amount of MIRVs, committed to SLBM reductions as well. For Russia, their SLBM cuts when combined with the rest of their reductions would place them well below the 3,500 warhead limit causing them to seek additional limits in START III.⁸² These lower limits from their point of view would allow a rough parity to be achieved. These limits were built on the solid foundation fostered by the Reagan-Gorbachev “new détente” that would begin to diminish as the international situation underwent dramatic changes.

⁸⁰ Ibid.

⁸¹ Ibid.

⁸² Ibid.

Despite the slower pace of START negotiations during 1987, both states sought out incremental agreements beyond the INF Treaty that would allow a sense of continuing confidence building essential to each side's agenda. These efforts would continue despite the dramatic events that would eventually lead to the fall of the Soviet Union. Along with the establishment of a robust inspection protocol with the INF Treaty, the states signed the Agreement on the Notification of Missile Launches in May 1987. This agreement lessened the likelihood of increased tensions due to a misidentified launch as it required each side to provide 24 hours of advance notice of any test launch of an ICBM or SLBM.⁸³ By the fall of 1987, shortly after the INF Treaty went into force, both sides had completed joint monitoring of one of each side's underground nuclear tests. These joint monitoring operations would lead to both states ceasing to conduct underground tests. The last Soviet test would occur in 1988 and the United States in 1992.⁸⁴

DEALING WITH THE FALL OF THE SOVIET UNION: ARMS CONTROL SLOWLY MOVES FORWARD

Despite these advances which resulted in a slowing of each sides' previous arms buildups, the most significant issue impacting the START negotiations was the rapid pace of the fall of the Communist Block beginning with the fall of the Berlin wall in 1989. While the impact of the changing of the governments in Eastern Europe was not inevitable, Soviet leadership could not overcome the democratic forces sweeping away the older order. Just as communism had failed to fully adapt to the forces of globalization

⁸³ Diehl and Moltz, *Nuclear Weapons and Non-proliferation: A Reference Handbook*, 134.

⁸⁴ Ibid.

in economic, social and political, the Soviet state was unable to resist the call for a new openness. During this critical period of multiple formations of political power in the former Soviet Union, negotiations on one of the very sources of power of the state, nuclear arms were of limited value.

With the rapid end of the Soviet Union beginning with the August Coup and ending with Gorbachev's stepping down on Christmas Day 1991, a new period of relatively quick negotiations and agreements would occur culminating with the signature of START II by Presidents Bush and Yeltsin on January 3, 1993. Full consideration of START II by the U.S. Senate was delayed until START I went into force at the end of 1994. Ratification was further delayed due to a protracted internal debate over the relevance and future of the Arms Control and Disarmament Agency with its functions eventually delegated to the State Department. The U.S. Senate would ratify the START II Treaty by a vote of 87-4 on January 26, 1996.⁸⁵ The Russian approval would take even longer.

Once the Russian political status became clear and well established, the Duma provided the appropriate legislative body for consideration of treaties. In a more democratized environment, a broader discussion of arms control agreements became the norm. The Russian attitude did not in the end change dramatically as the Duma saw START II in a similar light as all past agreements between Russia and the United States. The Duma became concerned with a combination of the economic burden START would place on the Russian Federation and future the status of the ABM Treaty. The United States in this period continued to seek agreements that would allow further research on

⁸⁵ Woolf, Nikitin, and Kerr, *Arms Control and Non-proliferation: A Catalog of Treaties and Agreements*.

space based defense systems which many Russian politicians saw as illegal under the ABM Treaty. The United States for its part offered Russia a delay in the required systems elimination deadlines in START II which in turn would lower the costs over time for Russia. Seeking to further incentivize in order to reach agreement, the United States agreed to negotiate further reductions in a START III agreement after START II came into force.⁸⁶

As the effort slowed to gain START II ratification in 1997, Presidents Clinton and Yeltzin would seek to negotiate a START III agreement with an even further set of reductions below the START II limits.⁸⁷ Events of 1999, particularly the request by the United States to negotiate amendments to the ABM Treaty and the U.S. led NATO war against Serbian aggression in Kosovo, heightened tensions between the two START partners and further delayed Duma action. By early in 2000, President Yeltzin was able to convince the Duma to approve the treaty but only after providing assurances that the Russian Federation was committed to withdraw from the ABM Treaty should the United States do so. As a double edged sword, Russian law prevented allowing the treaty to enter into force until the United States had ratified their amendments to the ABM Treaty. Fearing defeat in the Senate, the Clinton Administration would never submit these amendments for approval. As the George W. Bush Administration that followed would return to a similarly negative view of arms control in general and a positive view of the value of missile defenses as in Reagan's first term, START II never had a chance at ratification. With the U.S. withdrawal from the ABM Treaty in 2002, the Russian

⁸⁶ Ibid.

⁸⁷ Ibid.

government announced its withdrawal from START II and its intention of not following through with the negotiated reductions.⁸⁸

START III: FAILURE TO AGREE BUT PROGRESS

As was discussed earlier in this chapter, both states were eager in early post Cold War period to rapidly reduce the number of operational offensive nuclear systems. Russia's objective for these reductions was primarily based on their economic status and a desire to retain a sufficient, minimal force for their future. The best path to achieve this objective was to set START II aside and move to lower limits. The Clinton Administration, with a strong desire to attain the long time U.S. objective of elimination of Russian MIRVd ICBMs, wanted to hold negotiations on START III after START II came into force. In *To Agree or Not to Agree*, Lisa Baglione points out that due to Yeltzin's poor health and the falling perception of Russian power during this period, Clinton was in a unique position where he did not have to be forceful with Russia on arms control.⁸⁹ Several rounds of START III negotiations were conducted between the 1997 agreement and the end of the Clinton Administration in 2001 with no final agreement being reached. START III would have established another lower level for deployed warheads at 2,000 to 2,500 but it would never enter into force due to the demise of START II. In a significant development in the negotiations, for the first time in an offensive arm treaty language was included to destroy delivery vehicles and warheads in an effort "to promote the irreversibility of deep reductions including prevention of a rapid

⁸⁸ Ibid.

⁸⁹ Lisa A. Baglione, *To Agree or Not to Agree: Leadership, Bargaining, and Arms Control* (Ann Arbor: University of Michigan Press, 1999), 144-45.

increase in the number of warheads.”⁹⁰ Despite some evidence of progress, Russia would delay any serious nuclear talks until the Bush Administration took power in 2001.

By the time George W. Bush took office, the on-going effort to reduce the world’s two largest strategic nuclear inventories now embodied in the START treaties had achieved great progress in reductions even without formal treaty ratification. Since the height of the Cold War, the United States had reduced their deployed strategic nuclear warheads from 10,563 in September 1990 to 7,519 in July 2000 in compliance with START I protocols. Russia had made similar strides with a reduction from 10,271 to 6,464 warheads in the same period. The 1997 Helsinki summit which saw both nations agree to pursue further reductions in line with START III levels of 2,000-2,500 deployed strategic warheads remains the starting point for the current negotiations. Almost a decade ago, the Russian government had proposed further reductions to 1,500 warheads which the United States did not accept.

SORT: AGREEING TO REDUCE WITHOUT EXACTING RULES

During a summit of the G-8 in Genoa, Italy in July 2001, Presidents Bush and Putin announced the beginning of a new round of nuclear negotiations. When they met again in November of that year, Bush announced that the United States “would reduce its ‘operationally deployed’ strategic nuclear warheads to a level of between 1,700 and 2,200 warheads in the next decade.”⁹¹ Putin wanted to negotiate within the formal arms control

⁹⁰ Arms Control Association, “U.S.-Soviet/Russian Nuclear Arms Control Agreements at a Glance,” *Arms Control Association website*, March 2010.
<http://www.armscontrol.org/factsheets/USRussiaNuclearAgreementsMarch2010> (accessed June 6, 2010).

⁹¹ Woolf, Nikitin, and Kerr, *Arms Control and Non-proliferation: A Catalog of Treaties and Agreements*.

process in order to reach “a reliable and verifiable agreement.”⁹² These talks would result in the Moscow Treaty known officially to the United States as the Treaty on Strategic Offensive Reductions (SORT). Bush and Putin signed the treaty on May 24, 2002, after less than a year of negotiations.⁹³

The basic limits of the treaty established a reduction in strategic nuclear weapons to a range vice a specific limit of between 1,700 and 2,200 warheads by December 31, 2012. A relatively rapid and intense ratification period occurred in both nations’ legislatures. In less than ten months, on March 6, 2003, the U.S. Senate gave its advice and consent to ratification. On May 14, 2003, the Russian Duma followed suit with the Treaty then entering into force on June 1, 2003.⁹⁴ The resulting agreement offered only the limit proposed by the United States which appears in Article I. The treaty contains most of the features Russia sought, specifically they insisted the treaty become a “‘legally binding document’ that would provide ‘predictability and transparency’ and ensure the ‘irreversibility of the reduction of nuclear forces.’”⁹⁵ Without significant pressure from the U.S. Senate, the Bush Administration would have sought just an exchange of letters vice a formal treaty requiring ratification.

While strategic offensive arms negotiations have always been about achieving a common understanding, since the end of the cold war and the lack of an overt confrontational situation between two opposing political systems, each side has preferred to have agreements that allow for different options for each side to achieve the goals. During the Bush Administration, this “let’s agree for the sake of agreement” approach

⁹² Ibid.

⁹³ See Appendix E of this dissertation for a text of this agreement.

⁹⁴ Amy F. Woolf, "Nuclear Arms Control: The Strategic Offensive Reductions Treaty," (Washington, DC: Congressional Research Service, 2008), ii.

⁹⁵ Woolf, Nikitin, and Kerr, *Arms Control and Non-proliferation: A Catalog of Treaties and Agreements*.

achieved significant reductions but not necessarily due to external pressures as much as fiscal realities. This financial impact on the levels of arms combined with the Bush Administrations distaste for arms control in general to slow any large steps to achieve total disarmament. The rise in impact of non-state actors especially terrorist groups in the international security environment, most prominently evidenced in the September 11, 2001 attacks on the United States, spurred a renewed focus away from state on state nuclear options toward the possibilities of a terrorist nuclear attack.⁹⁶

One of the issues that shadowed the post Soviet period of arms control negotiations and agreements, is the lingering and unresolved confrontational relationship that had existed in the Cold War. The United States had not fully abandoned the concern over what kind of state Russia would become. Two U.S. Nuclear Posture Reviews during this period (1994 and 2002) mentioned the possibility of a terrorist nuclear attack but remained consistent in their views that state threats remained paramount.⁹⁷ In reference to Russia, an unofficial copy of the classified 2002 report contained the following statement:

Russia maintains the most formidable nuclear forces, aside from the United States, and substantial, if less impressive, conventional capabilities. There now are, however, no ideological sources of conflict with Moscow, as there were during the Cold War. The United States seeks a more cooperative relationship with Russia and a move away from the balance-of-terror policy framework, which by definition is an expression of mutual

⁹⁶ See Graham T. Allison, *Nuclear Terrorism: The Ultimate Preventable Catastrophe* (New York: Henry Holt, 2005). This is the most prominent work to date on the topic but a proliferation of non-fiction, fiction works and film have raised the public conscious about the possibility of a terrorist sponsored nuclear event while the factual evidence and theoretical discussion on the likelihood indicate this type of attack as remote.

⁹⁷ Phillipp C. Bleek, "Nuclear Posture Review Leaks; Outlines Targets, Contingencies," *Arms Control Today* 32, no. 3 (2002). http://www.armscontrol.org/act/2002_04/nprapril02 (accessed January 9, 2010).

distrust and hostility. As a result, a [nuclear strike] contingency involving Russia, while plausible, is not expected.⁹⁸

Interestingly, a similar statement was provided in the text on China, a state that during this period was becoming the second largest trading partner of the United States:

Due to the combination of China's still developing strategic objectives and its ongoing modernization of its nuclear and non nuclear forces, China is a country that could be involved in an immediate or potential contingency.⁹⁹

When the 2002 Review was presented to Congress, many were divided on the direction the Bush Administration was taking. Given the growing concern over Saddam's Iraq WMD inspections issues, the long march to a lower level of nuclear weapons became a secondary discussion to the policies that may have been subject to change regarding first use, testing, new weapons development and whether or not the United States would retaliate with nuclear weapons against any form of WMD attack.

Both Russia and China were vocal in their negative reactions to the 2002 Nuclear Posture Review. China demanded clarification from the United States on the Review specifically as it implied targeting of seven countries including them.¹⁰⁰ The excerpted copy of the report mentioned the potential requirement for nuclear weapons use in response to a Taiwan crisis involving China.¹⁰¹ The Russian response was also similar as their foreign Minister called upon the U.S.

⁹⁸ Global Security.org, "Nuclear Posture Review [excerpts], Arms Control page," *Global Security.org website*, 2010. <http://www.globalsecurity.org/wmd/library/policy/dod/npr.htm> (accessed January 9, 2010).

⁹⁹ Ibid.

¹⁰⁰ People's Republic of China, "China Demands Official and More Clear Explanation on US Nuclear Weapon Report," *PRC embassy in Switzerland*, March 12, 2002, <http://www.china-embassy.ch/eng/xwss/t138139.htm> (accessed January 9, 2010).

¹⁰¹ Global Security.org, "Nuclear Posture Review [excerpts].

for an explanation of the report's intent.¹⁰² This hedging of bets by the United States on nuclear reductions seemed to fit within their overall security concerns in the immediate aftermath of the terror attacks of 9/11 but also reflected the lingering concerns of long time Cold Warriors within Bush's inner circle. Russia was most interested in rebuilding some sense of their former global power status but saw nuclear weapons as a necessary component that had to be reduced for economic reasons.

One of the areas that displeased Russia most was the stated U.S. policy to place the warheads removed from the eliminated systems under START and SORT in storage vice elimination. Russia believed this position in SORT would not fit their desire for irreversibility and allow the United States to place these warheads back in service on newer systems in a relatively short time.¹⁰³ The U.S. position was intentionally developed in order to preserve strategic options including those that related to missile defenses, another of Russia concerns as the planning for deployment of such systems outside of the United States was in an advanced stage of development.¹⁰⁴ Domestic pressure in the U.S. Senate proved critical to moving the Bush Administration to accept SORT as a formal treaty requiring advice and consent to ratify it.¹⁰⁵

At the core of the U.S. resistance to formalizing SORT was the counting rules each side would have to agree to enforce. Russia preferred to continue the rules and methods in use under START while the United States wanted a new set

¹⁰² Michael Wines, "Russia Assails U.S. Stance on Arms Reduction," *New York Times*, March 12, 2002.

¹⁰³ Woolf, *Nuclear Arms Control: The Strategic Offensive Reductions Treaty*, 2-3.

¹⁰⁴ *Ibid.*, 3.

¹⁰⁵ *Ibid.*, 4.

of less strict procedures. The counting rules under START were based on an agreement of the number of “assigned” warheads in a specific system such as an ICBM, SLBM or heavy bomber. These rules required one of three choices to reduce the number of warheads to the agreed limits: 1) cut back the number of deployed warheads on missiles, 2) change the number of “attributed” warheads, or 3) destroy the delivery vehicle itself. Determining the total warheads allowed under START was a simple multiplication of the number of systems by their attributed warhead number to determine the overall limit. Under START protocols, elimination compliance required destruction of the missile silo for ICBMs, removal of the launch tubes from the parent submarine for SLBMs and either cutting off the wings and tails or a complete conversion to non-nuclear capability of heavy bombers.¹⁰⁶

The United States had no intention of signing a treaty that would limit any of the options for deployment or reconfiguration of existing systems. One of these “adaptable” systems was the Trident submarine of which four were being converted to conventional and special warfare support missions. Part of the redesign of these submarines included the ability to launch conventional cruise missiles from the tubes that had held the SLBMs. START rules would have required their removal and as a result a major redesign and potentially a new submarine.¹⁰⁷ While the conversion may have had critics of the future utility of the system, by complying with START limits with the conversion, 800 SLBM carried warheads would be eliminated. Additionally, the United States would have

¹⁰⁶ See Appendix C, 320.

¹⁰⁷ Ronald O'Rourke, "Navy Trident Submarine Conversion (SSGN) Program: Background and Issues for Congress" (Washington, D.C.: *Congressional Research Service*, May 22, 2008), 1-2.

two SLBM capable Tridents in for overhaul at any time and did not wish to have these warheads counted as a part of the START limits. Concerns over the cost of permanent conversion of heavy bombers to just conventional roles provided another U.S. reason to avoid START counting rules in any new agreement. If the United States were to use START counting rules, some 4,000 warheads would remain vice the desired 1,700 to 2,200.

Ultimately, Russia saw they would gain no agreement if they insisted on the START counting rules. The Joint Declaration issued at the signing on May 24, 2002 stated that the verification of the agreement would be the subject of a continuing discussion between the two parties. This position was “negotiated” with a skeptical Senate Foreign Relations Committee by then Secretary of State Powell. At the hearings on the subject, Powell assured the committee that “sufficient opportunities to collect needed data” existed through the “growing level of cooperation” as evidenced by the Nunn-Lugar Cooperative Threat Reduction Program.¹⁰⁸ Despite their initial diverging views of the need for formal arms control agreements, United States and Russia continued to reduce their respective deployed systems in line with the existing agreements with only minor levels of concerns over deviations. As long as each side reaches the 2,200 warhead limit by December 31, 2012, the only specific requirement of the treaty will be achieved.

SORT is the first in the on-going series of strategic arms treaties in which the United States does not attempt to shape the Russian force structure or insist on a verification regime. The new treaty also contains no language referring to the

¹⁰⁸ Woolf, “Nuclear Arms Control: The Strategic Offensive Reductions Treaty,” 8.

START II agreement which both sides have de facto abandoned. Key in the demise of START II is the loss of the complete elimination of Russian MIRVd heavy ICBMs that the United States had sought for so long.¹⁰⁹ Of additional growing concern in both states beyond the strategic nuclear arms reductions issues are what to do about non-strategic nuclear weapons. An estimated 8,000 of these weapons may exist in Russia with a portion stored where there is a risk of theft or attack. The Bush Administration noted these concerns but took no steps to enter into discussions to limit these weapons with Russia.¹¹⁰

In terms of verification, a Bilateral Implementation Commission was included in the agreement but had no real purpose or actionable agenda with no agreed verification protocol. Russia and the United States did form a strategic offensive transparency working group for a period. Each side had been effectively using the START verification regime which may have served well enough for SORT purposes. The SORT working group would eventually be replaced by the current channel of discussions to deal with the now expired START Treaty. These discussions were initiated shortly before the end of the Bush presidency.¹¹¹ The Obama agenda seems to be one of reaching another reduction agreement to replace START and go beyond the limits of SORT. The new president has stated his ultimate goal as being total disarmament in line with the NPT.¹¹² The table below provides a summary of the major agreements discussed in this chapter.

¹⁰⁹ Ibid., 9-10.

¹¹⁰ Ibid., 15.

¹¹¹ Ibid., 18.

¹¹² Christi Parsons, "Obama wins passage of nuclear non-proliferation resolution at UN," *Los Angeles Times*, September 25, 2009.

Selected Strategic Nuclear Arms Control Agreements					
	SALT I	SALT II	START I	SORT	New START
Deployed Warhead Limit	Limited Missiles, Not Warheads	Limited Missiles and Bombers, Not Warheads	6,000	1,700-2,200	1,550
Deployed Delivery Vehicle Limit	U.S.: 1,710 ICBMs & SLBMs; USSR: 2,347 ICBMs & SLBMs	2,250	1,600	Not Applicable	700 vehicles 800 launchers incl non-deployed
Status	Expired	Never Entered Into Force	Expired	In Force	Signed
Date Signed	May 26, 1972	June 18, 1979	July 31, 1991	May 24, 2002	April 8, 2010
Ratification Vote, U.S.	88-2	NA	93-6	95-0	
Date Entered Into Force	October 3, 1972	Not Applicable	December 5, 1994	June 1, 2003	

Table 1: Selected Strategic Nuclear Arms Control Agreements¹¹³

A NEW START: A YEAR AFTER PRAGUE, A NEW AGREEMENT

With the expiration of START I in December 2009, the United States and Russia were under additional pressure to demonstrate their mutual commitment to further strategic arms control. Negotiations continued into 2010 with an agreement announced on March 26th that each side intended to lower the agreed limit on operationally deployed weapons to 1,550.¹¹⁴ According to the White House, “The Presidents agreed that the new Treaty demonstrates the continuing commitment of the United States and Russia – the world’s two largest nuclear powers – to reduce their nuclear arsenals consistent with their obligations under the Nuclear Non-Proliferation Treaty. Such actions invigorate our mutual efforts to strengthen the international non-proliferation regime and convince other

¹¹³ Arms Control Association, “U.S.-Soviet/Russian Nuclear Arms Control Agreements at a Glance,” March 2010, Arms Control Association Website, March 2010. This table is adapted from a similar table included in this article.

<http://www.armscontrol.org/factsheets/USRussiaNuclearAgreementsMarch2010> (accessed June 9, 2010).

¹¹⁴ See Appendix F of this dissertation for a text of the new START agreement.

countries to help curb proliferation.”¹¹⁵ With formal agreement set for April, 2010 near the timing of President Obama’s global nuclear security summit, this new START treaty contains limits significantly below the limits established in START I and by the Moscow Treaty of 2002. Specifically the new START treaty specifies limits of:

- 1,550 deployed warheads, approximately 30% lower than the upper warhead limit of the Moscow Treaty;
- 800 deployed and non-deployed intercontinental ballistic missile (ICBM) launchers, submarine launched ballistic missile (SLBM) launchers, and heavy bombers equipped for nuclear weapons; and
- 700 for deployed ICBMs, SLBMs, and heavy bombers equipped for nuclear weapons.¹¹⁶

The White House has reported that the verification regime for the new treaty “will provide the ability to monitor all aspects of the Treaty.”¹¹⁷ Ratification of the agreement in each state remains problematic but given renewed emphasis on improving relations between the party states and the practical nature of the current security environment the reductions will likely occur in any case.

Today, further arms control discussions begun in the George W. Bush Administration continue to work on the right answer to how low the next limit should be. The April 2010 new START bilateral agreement that is designed to replace the lapsed START I agreement has set a new limit of 1,550 warheads. While the full details of the new treaty remain to be finalized, the new agreement is similar in approach to that of the

¹¹⁵ Office of the Press Secretary, "Readout of the President's Call with Russian President Medvedev," *The White House website*, 2010. <http://www.whitehouse.gov/the-press-office/readout-presidents-call-with-russian-president-medvedev-0> (accessed March 28, 2010).

¹¹⁶ Ibid.

¹¹⁷ Ibid.

Moscow Treaty of 2002 in terms of setting limits. What is likely to emerge is a less intrusive level of inspection and verification procedures as START I where teams from each side were present in each other's nuclear disassembly facilities. Advancements in national technical means combined with an agreed on site inspection protocol are seen Preliminary assessments of the agreement have been generally positive as it is seen as advancing U.S. national security interests, allowing the U.S. to retain a viable nuclear deterrent force, and enabling sufficient warning through on site inspections of any significant violations in order to allow time for an appropriate response.¹¹⁸

This important breakthrough in the bilateral arms control relationship demonstrates the importance of state leadership in furthering the agenda of arms control and non-proliferation. The new START agreement allowed President Obama to elevate the importance of the U.S. relationship with Russia and reestablish bilateral arms control as an important ingredient in a wider agenda of global nuclear non-proliferation. For those concerned with the security of the United States, the new treaty is expected to reduce the Russian strategic nuclear arsenal available to potentially target U.S. nuclear capabilities by 30%. Inspections and agreement not to interfere with each other's national technical means will provide each side with additional transparency and predictability of each other's strategic force deployments. One key concern of the past now less so are Russian mobile missile units which are better understood in terms of locations and doctrinal deployments based on 20 years of U.S. observation since START I. On the wider non-proliferation and arms control agenda, the United States and Russia have

¹¹⁸ Steven Pifer, "New Start: Good News for Arms Control," *Arms Control Today*, 2010. http://www.armscontrol.org/act/2010_05/Pifer (accessed June 17, 2009).

actively demonstrated their support of the NPT and can now press other states to follow their lead.

GOING BEYOND BILATERAL AGREEMENTS: PROSPECTS FOR MULTILATERAL ARRANGEMENTS

While United States and Russian policies have continued to differ over the past decade, other states have reacted to the changing strategic environment especially the U.S. position on continuing to develop missile defenses. Seeing a different world after the Cold War, the other major nuclear states whose strategic warhead inventories are well below even the Russian Proposal, China (about 300 strategic warheads), France (less than 500), and the United Kingdom (less than 200) continue to re-evaluate the role nuclear weapons play in their defense strategies.¹¹⁹ Progress certainly but complete elimination of nuclear weapons by any of the original five is still too distant to see. Despite the dramatic changes in the international environment since the end of the Cold War including the increasing can be expected which in turn can only serve to reinforce other nations' desire to retain a nuclear deterrent and give emerging nations reason to continue their efforts.

During the period of the end of the Clinton Administration through the beginning of the George W. Bush presidency, the relationship between the United States and other nuclear powers was not supportive of nuclear arms control. As had happened frequently in the Cold War, events on the international stage heavily influenced the climate for

¹¹⁹ For a complete discussion of France, UK and European nuclear issues, specifically for France, Chapter 7, Pascal Boniface, "France and the Dubious Charms of a Post-Nuclear World," and for UK, Chapter 8, Stephen Pullinger, "The Future of Britain's Nuclear Deterrent," in Haglund, ed. *Pondering NATO's Nuclear Options: Gambits for a Post-Westphalian World*, 151-85.

seeking to limit nuclear weapons. The growing strain of U.S.-Sino relations that continued into the 21st century beginning with the accidental bombing of the Chinese Embassy in Belgrade during the Kosovo War (1999), the collision of a U.S. surveillance plane and a Chinese fighter, statements by President Bush identifying China as a “strategic competitor” vice the previous Clinton view of China as a “strategic partner” made any nuclear arms control effort that involves China problematic. The on-going cooling of U.S.-Russian relations that began with NATO’s campaign against Serbia, continued with U.S. statements against Russian military actions in Chechnya, the U.S. policy of fielding a “National Missile Defense” had all served to make the likelihood of serious continuance of talks to reduce nuclear or other arms small. The national missile defense issue has caused China to state that they would consider developing additional nuclear arms that would counter theater or national missile defenses.

The potential still exists for a multi-national effort to develop mutually acceptable avenues to reduce and eliminate nuclear weapons as the NPT envisions but recent events have clouded any prospects. As far as Russian-U.S. bilateral agreements, the NATO campaign against Serbia derailed any near-term hopes for START II. Continuing disagreements on the impact of the stated desire of the United States to deploy a national missile defense system raised questions of the viability of the ABM treaty until George W. Bush ended the debate. China remains unwilling to enter any nuclear arms talks until the United States and Russia agree to cut their arsenals to a level below 500 warheads or roughly equivalent to their capability. U.S. efforts to field a national missile defense or to provide even a theater missile defense for Taiwan would likely push China into building a larger nuclear force. After talking past each other for almost a decade, a change in U.S.

leadership seems to offer the possibility of a new discussion. France and Britain settled on limited nuclear options a decade ago and are likely to delay any direct debate on nuclear issues until discussions on European defense integration mature.¹²⁰ The United Kingdom reacted favorably to the new START Agreement of 2010 with British Foreign Secretary David Miliband stating, "As soon as it becomes useful to do so, the U.K. stands ready to include our nuclear arsenal in a future multilateral disarmament process."¹²¹ What remains of primary concern in the nuclear arms control arena is the potential for a renewed level of arms racing between a number of states for similar reasons as those that propelled the two primary opponents in the Cold War. The May 2010 NPT Review Conference will no doubt provide the United States an opportunity to widen the discussion on future nuclear reductions to the N5 within view of the international community.

CONTROLLING FUTURE ARMS RACES: THE LEGACY OF THE COLD WAR ERA

If the bilateral negotiations history of the U.S. and Russia has yet to reach a conclusion, what can one derive from it? As was discussed in the ABM Treaty chapter previously, these agreements are more fragile than multilateral agreements and are most directly impacted by state leadership. One could argue that the current concerns over the emerging nuclear states have their roots in the unresolved disarmament of the NPT Nuclear Weapon States. Other views of the drive for nuclear capability see these states desires tied to issues of sovereignty, extant or perceived extant threats, regional

¹²⁰ Iqbal F. Quadir, "Pakistan and Global Nuclear Issues," *Dawn*, October 22, 2000.

¹²¹ Matt Spetalnick, "Obama, Medvedev Seal Deal on Nuclear Arms Pact," *The Washington Post*, Saturday, March 27, 2010.

hegemonic desires or a combination of these. Within each of these situations lies both the potential for continued horizontal and vertical proliferation or arms races. Both forms are directly influenced by state leadership both as they occur and as they are reversed.

There is ample evidence to discount the issue of dramatic horizontal state proliferation compared to the world that President Kennedy warned against four five decades ago. Proliferation to non-state actors has been frequently stated as the greatest concern in the nuclear arena today. To date, the record on the ground would argue that surveillance and enforcement of existing legalities has limited this possibility. Vertical proliferation or arms races between existing and emerging nuclear states would seem to be the greater likelihood at the state level. The case presented in this chapter shows a complex but useful series of events to determine the potential international relations framework to address this issue. The issue remains on how to assist both nuclear and emerging nuclear states to adhere to the principles of the NPT. State leaders will be responsible for the decisions made that result from their assessment of the security environment and the responses they should provide to perceived threats.

MOVING FORWARD: UNITED STATES, THE NEW START AND BEYOND

For the immediate future, the United States must continue to responsibly negotiate beyond the recently agreed new START treaty continuing reductions in two largest nuclear inventories (U.S. and Russia) adding international verification while increasing irreversibility and transparency. This negotiation should begin immediately to capitalize on the momentum of this “nuclear moment.” The history of successful strategic nuclear arms control negotiations does not favor pauses in their process. The 2010 Nuclear Policy

Review suggests the United States is committed to further reductions and inclusion of sub-strategic weapons which are the most likely objects of theft, accident or other incident. What has become apparent in the last forty years of arms control and reductions especially in the post Cold War experience is that the economic component of the process dominates. The Nunn-Luger efforts and others have provided both the model and economic path to remove any incentives to resist reductions due to a lack of host nation funding. The United States needs to find the resources to continue these efforts to conclusion in a manner that eliminates any fluctuation based on shifts in political support. The most important by product of this modernized bilateral relationship is sustained “adult like” behavior on the part of both states which in turn serves as example to all states of need to continue toward goals of the NPT and uphold the related international agreements. U.S. State Department has reportedly been given this guidance from the President but at the moment there is uncertainty as to Russian willingness to build on the current momentum. One means of gaining Russian support for the nuclear agenda would be a further “embrace” of Russia in the European security discussion. The NATO Secretary General has suggested the Alliance move rapidly toward doing so.¹²²

As the relationship between the P5 modernizes, the United States must be willing to take the lead under international supervision serve as the recipient of any international nuclear materials for conversion from military use or to prevent such use. If a state wishes to retain nuclear material, the United States needs to be ready to provide any assistance required to insure these materials remain secure and out of military use. The nearly immediate acceptance of assistance from Mexico, Ukraine and (another state, see

¹²² Anders Fogh Rasmussen, “NATO's New Strategic Concept - Global, Transatlantic and Regional Challenges and Tasks Ahead.”

news) during the Nuclear Security Summit shows the requirement and the United States needs to be prepared to respond with all available speed. This was the standard during the immediate post Cold War period when the three former Soviet Republics denuclearized and should be fully embraced in this renewed period of nuclear non-proliferation activity. If the United States is unable or unwilling to do so, reinforcement of President Obama's stated policy and goals will become very difficult. A similar emphasis on providing other states with experts who can assist in developing the appropriate documents and political rationales for negotiating and ratifying the CTBT and FMCT should be led by the U.S. Department of State. This outreach effort would not only demonstrate the positive nature and commitment of the United States to its stated agenda to the international community, it would potentially provide reinforcement of the value of U.S. leadership to the members of the Senate who would need to be convinced of the need to ratify these treaties.

The United States should also demonstrate leadership by more than calling for more financial support of the IAEA by supporting the placing of this critical UN agency at the center of providing transparency of all states engaged in nuclear programs. As a part of its efforts to widen the multilateral nature of arms control leading to non-proliferation and eventual disarmament, the United States must seek wider international acceptance of IAEA as controlling authority of nuclear arms inspections, verification, destruction, and governing of appropriate procedures for civilian nuclear energy programs. One of the keys to this effort would be increased transparency of U.S. programs to international inspection. The United States need to continue to allow all the same processes it has asked other states to accept on their programs as a clear demonstration of support for the IAEA, a rejection of any "do as I say, no as I do"

attitude. As the 2010 Nuclear Policy Review has stated, the United States does not intend to modernize any existing systems beyond requirements to assure their continued reliability which the IAEA can and should monitor. The United States is committed to both continued security and reliability of its nuclear deterrent and should leverage IAEA oversight throughout these efforts to reinforce the new nuclear agenda. Along with this security and surety commitment, the United States needs to allow the IAEA to verify that the 2010 Nuclear Policy Review commitment not to build any new nuclear systems, to refrain from any testing of weapons.

Support for UN and IAEA efforts to widen nuclear and alternative energy sources with sufficient restrictions and controls to prevent diversion of nuclear materials to weapons development is another significant area which U.S. support and expertise will be critical to the nuclear non-proliferation agenda. President Obama's suggestion of an international nuclear fuel bank open to all states with a desire for nuclear energy production is well within the realm of the possible. One former Soviet plant is already in place for this function and producing fuel for a number of states. The dual goal of such a project is to solve the nuclear fuel supply problem to NPT compliant states while negating need or desire to build national capability to produce fuel. As was seen in the Soviet example, states can choose to build dual use nuclear facilities that would only increase the requirement for international controls and at the same time continue to provide states the opportunity to defect from the NPT regime.

As has been seen in the decade of combating terrorism, keeping those groups who do not want to operate within the rules and norms of the international system are difficult to fully interdict. Several groups have stated their desire to acquire nuclear weapons by

any means. Preventing this circumstance is the stated goal of the United States with the near universal support of the international community. Each of the non-proliferation efforts described in this chapter are ultimately aimed in eliminating the use of nuclear weapons completely. States remain the dominant powers in the international system to deal with this threat. The United States has led international efforts in a number of ways, some accepted, and some not as much to deal with terrorism and so far the international community has not suffered a nuclear terrorist attack. Continued leadership of the United States to secure all nuclear material, support the growth of durable international institutions such as the PSI, the Global Initiative to Combat Nuclear Terrorism, and most importantly the UN and the IAEA while seeking to increase the binding together of individual states to prevent nuclear capabilities from reaching these groups is essential. The United States leadership on UNSCRs 1540 and 1887 are a clear demonstration of U.S. support for a multilateralist approach to nuclear issues. Both of these UNSCRs align and are mutually reinforcing of the NPT and the policies of the U.S. nuclear agenda. As the state that brought the world both the nuclear weapon and the UN, continued support through this international institution is essential to fostering the required increasing interdependence and cooperation of the international community to finally remove the fear of nuclear threats and destruction.

NUCLEAR TERRORISM THREAT BRINGS OLD WARRIORS IN FROM THE COLD WAR

Even before the renewed U.S. nuclear agenda was in place, one prominent group of U.S. Cold War leaders including two former Secretaries of State, a Secretary of

Defense and a former Senator joined together to call for immediate and complete disarmament of nuclear weapons with the nuclear terrorist threat as central to their argument. George Schultz, Henry Kissinger, William Perry and Sam Nunn in a series of Wall Street opinion editorial pieces and most recently an hour long video appeal have highlighted the much changed international security environment and suggested a number of requirements to ultimately eliminate this emerging threat of nuclear terrorism.¹²³ Many of the current policies of the U.S. renewed nuclear agenda are supported by these statesmen. Their appeal calls for U.S. leadership in a multilateral effort which includes the stated goals of the Obama Administration to secure of worldwide stocks of nuclear material, implement substantial reductions of existing nuclear arsenals including elimination of short range battlefield nuclear weapons, identifying the requirement for the CTBT and strengthening verification and enforcement capabilities. Their effort in support of the Nuclear Threat Initiative, called the Nuclear Security Project (NSP), also recommends developing cooperative missile defense and early warning systems, developing a new international system to manage the risks of producing fuel for nuclear power, and phasing out the use of highly enriched uranium in civil commerce. The NSP group's potentially most controversial recommendation was their call for discarding Cold War practices for U.S. and Russian nuclear forces to decrease the danger of accidental, mistaken or unauthorized launch. Essentially, this last recommendation would "de-alert" or stand down those nuclear systems that remain on alert for rapid response and launch. Their argument is supported by the difficulty of using these systems to retaliate against a

¹²³ George P. Shultz et al., "A World Free of Nuclear Weapons," *The Wall Street Journal*, (2007), 4.

terrorist attack if this scenario seems to be rising over time as the fear of a nuclear war for which the alert is designed to respond fades.

Understanding the value of state leadership that this case study highlights in order to reassess the legacy of the U.S. and Soviet nuclear arms race and continuing slow reductions is essential to developing a framework to restore the NPT regime. Among the most important steps to provide an example to the international system is to determine the best course to reduce and secure the two largest nuclear stockpiles. With the momentum toward this intermediate goal now building again, the United States is best positioned to encourage Russia and other states to support the effort. A framework for reestablishing the non-proliferation regime and continuing reductions in nuclear weapons led by the United States will be examined as a part of the analysis to be found in the concluding chapter.

SUMMARY

This case study of the bilateral strategic arms reduction process beginning with the SALT negotiations and continuing into the current negotiations to a follow-on agreement to START I Treaty highlights the impact of state leadership on negotiations, agreements and legislative ratification of any arms control agreement. Expanding on the concept and importance of state leadership as a catalyst for new agreements and in sustaining the arms control process, this key component to the reinforcement of the non-proliferation regime, arms control and sustaining an international drive to nuclear disarmament is essential to the success of any arms control process. By focusing on the more than 40 years of history of the strategic arms negotiations between the United States

and Russia, this case study provides reinforcement of the limits of bilateral agreements including unilateral withdrawal, the problems with linking other foreign policy issues to the negotiation process and the difficulties in gaining ratification from party states' legislatures. The strength of this bilateral process as pointed out in the case study lies in the long term commitment of states to the process, a common desire to control proliferation in general and arms races between the states in particular. The issue of proliferation, both horizontal and vertical forms, was discussed as the principle issue arms control seeks to avoid and the role state leadership plays in decision making to either allow or prohibit it.

Among the longest and most prominent arms control efforts since the end of the Second World War are the series of negotiations between the United States and Russia on limiting strategic nuclear arms. Beginning with the first Strategic Arms Limitation Talks (SALT I) in the Nixon Administration and continuing through to the renewed discussions following the expiration of the Strategic Arms Reduction Treaty (START I) on December 5, 2009, the United States and Russia have been in a lengthy effort to control and reduce their massive holdings in strategic nuclear systems. This strategic arms reduction process has made substantial progress toward achieving the ultimate goal of the NPT, total disarmament. While progress has been slow, a number of significant successes have occurred despite significant swings of the political landscape on the part of both nations as well as the environment around them. This process, which has had a renewed momentum in the last year, displays several key features of a successful arms control process that are supported by international relations theory. The April 2010 joint U.S. and Russia announcement of a new START agreement to further reduce operational strategic

nuclear systems to 1,550 on each side further validates the willingness of both states to support an arms control agenda that enables a path toward disarmament as well as a commitment to the principles of non-proliferation. State leadership continues to play a central role in this process with both Presidents Obama and Medvedev driving their negotiators to reach a successful agreement.

The essential value of a long term relationship like that of the United States and Russia in forwarding a significant arms control process especially one that seeks to deal with strategic nuclear systems cannot be overestimated. This relationship demonstrates both the difficulties as well as the gains that can be achieved from such a relationship. The norm of seeking to limit and eventually reduce strategic nuclear weapons has proven a powerful force that binds these states to their mutual obligations in the NPT. These two states also represent both the owners of the legacy of the arms control process as well as the most experienced at how the process can work well. This bilateral relationship despite its weaknesses has endured.

In order to achieve the goals of the NPT, participation of both will be essential in any strengthening efforts in support of the non-proliferation regime. Of them, the United States, through the policies and actions of the current president, is best positioned to lead those efforts. Without the active participation of state leadership in furthering the goals of the NPT, either in bilateral arms control or in a wider multilateral effort that includes the nuclear states at a minimum, the international environment remains far more at risk of an unnecessary nuclear event. State leadership when engaged in a multilateral effort to reduce the risks of a nuclear event such as reinforcing the NPT is key to sustaining any drive to both enforce the regime's norms as well as achieve its goals. The concluding

chapter will provide a reinforcement of these concepts with a summary analysis of each case study. With this analysis in view, the dissertation argument will be reviewed and used as a basis to recommend future research in international relations on how best to achieve multilateral movement toward nuclear disarmament. This conclusion will also review the appropriate next steps on the part of the United States in a leadership role towards the goals of the NPT as suggested by this research.

CHAPTER VI

ANALYSIS AND CONCLUSION

Given the historical record of nuclear arms control and non-proliferation, what are the prospects for a reenergized global effort led by the United States to achieve the goals of the NPT? What has emerged from this period is an outline of both theory and practice that offers opportunities for theorists and states to work toward improvements in institutions, regimes and supporting international relations theory, particularly in the issue area of nuclear weapons. While there remains a wide range of views on the purpose of nuclear weapons and the utility of the NPT, explanations and potential solutions that have been discussed in this dissertation can be analyzed to determine if a new theoretical ground can be staked out. This new ground would potentially provide new support for efforts to fashion a means to control, reduce and potentially eliminate nuclear weapons. One clear result of this research is that the power of states remains important within the international system and within the nuclear issue area, the United States has emerged as the best positioned state to lead any significant effort to further control nuclear weapons.

This chapter will provide an analysis of the research contained in this dissertation as well as provide a conclusion that supports and extends the dissertation argument. Within the analysis portion of the chapter a summary the key findings of the preceding case studies will be provided. Next, the analysis will outline the significant international relations theoretical foundations for the current environment related to the nuclear issue area. Once the findings and theoretical foundations have been identified, a suggested new theoretical framework that attempts to explain the current and future security

environment states will operate within and be able to seek lasting arrangements that will deal effectively with the nuclear issue area will be suggested. Finally, the analysis will provide a discussion of the appropriate U.S. role as the leader within this environment.

THE NPT REGIME: DURABLE TREATY STILL STANDS

The NPT stands as the first and most inclusive nuclear agreement and establishes an important foundation for multilateral efforts to control nuclear weapons, enable future nuclear disarmament and foster civilian uses for nuclear power. What is most significant about the treaty is the degree to which the signatories have been able to establish a significant international norm. Among the most criticized of the regime setting agreements, the NPT has endured as a goal that has been slowly being accepted. Critics have pointed to a number of limitations of the treaty that when combined offer evidence of the demise of the non-proliferation regime. At the same time, proponents offer that despite the lack of universal acceptance and obvious issues such as dual use of nuclear fuel, the treaty has served the important of overcoming the hurdle of establishing a regime that can be evolved.

Given that all but a handful of states are signatories of the treaty, one cannot easily dismiss the NPT's value to establishing the non-proliferation regime. The 1970 agreement set out a universal set of rules, norms and goals with respect to nuclear power both for military and civil uses. Compliance has been generally far better than expectations in the 1960s such as President Kennedy's stated concern that by now there would be 25 nuclear weapons states. In fact, after continuing to steadily rise during the Cold War, several states nuclear programs have been reversed including the United States

and Russia. A small number have been completely shut down including Libya, South Africa, Brazil, Argentina, and the three former nuclear Soviet states, Belarus, Kazakhstan, and Ukraine.

The emerging nuclear proliferation “challenger” states have slowed to a handful with each garnering both international condemnation and sanctions from the P5 as well as the UN in general. The P5 have been active in developing negotiation strategies and options to address these breakout states. Thousands of nuclear weapons have been disassembled and their nuclear components reprocessed. One estimate provides the ability to truly turn sword in to plowshares as an estimated 10% of all electric power in the United States today is powered with reprocessed former Soviet nuclear weapons material. All of the weapons on both sides of the INF Treaty have been destroyed. No open air tests of nuclear devices have been conducted since 1980 and only North Korea has done any testing since non-signatories India and Pakistan “traded” tests in 1998.

The right of any state to gain from the nuclear possessing states the benefits of nuclear energy for civilian is enshrined in the NPT. This right has also been the source of friction within the international community due to the weakness of the treaty and its inspection protocols. This issue is as much the fault of the P5 as it is the newer nuclear states. Each of the original P5 were responsible for providing nuclear technology to the other 39 nations that possess nuclear power plants for energy. A lack of transparency in many of these exchanges to the broader international nuclear energy community, the IAEA in particular, has inhibited efforts to control improper transfers of technology and fuel to weapons programs. Several states have historically not followed the “no transfer rule” which prohibited nuclear weapons states from providing the means, technology or

actual weapons to non-nuclear weapons and levied the responsibility on these states to refuse accepting the same from nuclear weapons states. Today's international environment may be generating sufficient cause for these former provider states to support the NPT in an effort to roll back these transfers. Even if no improper transfer of nuclear technology for weapons development had taken place, secrecy surrounding many nations' nuclear enterprises has led to unintended consequences and tragedy.

As an obvious example, Russian electric power became a byproduct of their nuclear arms program as every Soviet nuclear reactor was specifically designed to both generate energy and produce weapons grade material for warheads. The disaster in the reactor at Chernobyl was in part due to the dual nature of its design. In order to have access to the nuclear reactor for removing weapons material, the design was weaker than most western designs preventing significant containment of the fire and nuclear contamination. Experts within the Russian scientific community had convinced national leadership and themselves that the design and their procedures were safe.

Despite these problems, the value of the norm enforcement function of the NPT has been proven and emanates from the original five tenets. These tenets included the desire to create an agreement that allowed no proliferation loopholes, a need to balance the responsibilities and obligations of nuclear weapons states and non-nuclear weapons states, a step toward total disarmament including nuclear weapons, provisions that are "acceptable and workable," and no limits on nuclear weapons free zones. What now seems essential to getting all but a few states to agree is the "width" of the space the agreement created. Over time, appropriate changes like placing the IAEA within the verification structure of the treaty is consistent with regime theory. Within this space was

Article VI which anticipated and supported continuing negotiations that would further bind the signatories together in pursuit of the goal. Some have argued that the recent bilateral agreement between the United States and India is an appropriate means to engage one of the NPT holdout states. If the eventual result is adherence to the NPT norms than the cause of the treaty is forwarded but bilateral agreements do not have the same value as multilateral from a normative view.

The NPT's most distant goal of total disarmament is still elusive due in part to the size of the problem created by the arms racing of the United States and U.S.S.R. in the Cold War. The on again, off again nature of negotiations between these states since the end of the Cold War has also contributed to a negative atmosphere within the international community with respect to reducing nuclear weapons. At the same time, the regime has had a positive impact on strengthening rules and norms especially in the area of inspections and verification. All states now allow some form of IAEA inspections of their nuclear activities with except Cuba. Strengthened and wider acceptance of IAEA protocols occurred after the first gulf war that ejected Saddam's Iraq from Kuwait. Despite being outside of the NPT, Israel, Pakistan and India have established IAEA relationships demonstrating the willingness to comply with the intent if not the letter of the treaty. Non-compliance of IAEA protocols has been extensively publicized, especially in the cases of Iran and North Korea, which serves the norm of the regime equally well. Without the NPT, states would be free to pursue any course of action as their national interests dictate.

NPT LIMITATIONS: ISSUES WITHIN THE REGIME

Despite the accomplishments of the non-proliferation regime, a number of serious limitations remain. Among these issues are explaining why nuclear weapons persist despite conclusion of the Cold War, the issue of status conferred on nuclear weapons states over those that do not possess nuclear weapons, a rise of a second tier of nuclear weapons states and others seeking similar protections they believe nuclear weapons provide due to continuing regional conflicts, “undereducated” security elites and the impact of a strategic culture on nuclear decision making. Each issue is both interrelated and difficult to address with a single solution.

Nuclear weapons grew from the requirement to find an ultimate weapon that would serve the cause of defeating the Axis Powers in World War II. The fear that the Nazis would produce a weapon and use it before the Allies could counter it served as an embryonic example of the fear and power based major state competition that was to follow. Now that the security competition between the P5 has all but passed, the rationale for the existence for large stockpiles and hair-trigger alert forces has been weakened. The security dilemma that was the hallmark of the Cold War period seems to have shifted down to a second tier of states with unresolved regional conflicts such as North Korea, Iran, Israel, India and Pakistan. But are these conflicts sufficient conditions to justify deployment of nuclear weapons? Are the territorial integrity of any of these states at sufficient risk that nuclear weapons are required to hold a would be aggressor at bay? What are the long term implications of allowing states with histories of unstable and violent changes in national leadership to develop and possess nuclear weapons? The NPT remains the best foundation to build a consensus effort to reverse these situations.

Another issue limiting the effectiveness of the non-proliferation regime rests with the traditional power status nuclear weapons conferred on the P5. Nuclear armed states get to make the rules frequently within the international system. While the limits of this power have been on display in recent years, the fact that the P5 are permanent members of the UN Security Council is not lost on other states. Reform of the UNSC has been a focus of recent UN efforts but has not received broad acceptance from the P5.¹ As has been demonstrated repeatedly the range of power based options in the security dimension of state influence within the international system. This imbalance of power compounds the non nuclear weapon state's security dilemma which is frequently based on regional threats including overwhelming conventional military power demonstrated by P5 states most notably the United States and the Russian Federation. Seeking similar status and counterbalancing regional threats, emerging nuclear weapon states are driven to acquire the ultimate weapon.

The role of deterrence theory in the Cold War was so dominant within academic and policy elites within the Cold War. This shadow of deterrence lingers today from decisions on force sizing and budgets to sustain existing nuclear systems to the political dimension of what deterrence means given the shift from Cold War relationships to a focus on deterring rogue states and terrorists. While the evidence of a lack of any nuclear attack since 1946 is powerful, does this history provide sufficient support for a continuation of this logic? T. V. Paul recently explored this issue of the power of the

¹ See Ramesh Thakur, "United Nations Security Council Reform," *African Security Review* 13, no. 3 (2004). For a recent review of ongoing reform initiatives Jonas von Freiesleben, "Reform of the Security Council," *Managing Change at the United Nations*, *Managing Change at the United Nations*, New York: Center for UN Reform Education, 2010, <http://www.centerforunreform.org/node/308> (accessed February 1, 2010), and Jakob Silas Lund, "Pros and Cons of Security Council reform," *Center for UN Reform Education website*, January 19, 2010, <http://www.centerforunreform.org/node/414> (accessed February 1, 2010).

“nuclear taboo” but found that awareness of the concept was no guarantee of continued security.² Complicating the post Cold War security environment is the problem of terrorist use of nuclear weapons which provide states difficulty in warning, mitigation, and retaliation which were relatively simple issues at the state on state level. Just how accurate and timely will identification of an attacker be in a terrorist attack? Once identified, how does the victim state retaliate? Would nuclear weapons be the appropriate response against a non-state group even if a specific location target was identified as this would reside inside a state’s boundaries? How would the retaliating state assure allies, other nuclear weapons states and adversaries that the response was not directed against them? Add to these issues the obvious physical, political, economic and social fallout from the response and the new world of nuclear calculus in relation to terrorists is complex.

Does Waltz’s view that “more is better” extend to terrorist groups?³ Rational deterrence theory was based on the concept that spreading nuclear weapons to more states drives up the cost of going to war. While this theory may hold at the state level, its power decreases dramatically when the traditional structures between states are not in view. When one adds in the experiences of proliferation rings like A.Q. Khan, the logic that more states with potentially less stable government structures being added to the ranks of nuclear weapons states seems weak at best. Given the lack of goodness of fit of deterrence theory to the terrorist issue, a growing number of voices are beginning to

² T. V. Paul, *The Tradition of Non-Use of Nuclear Weapons* (Stanford, Calif.: Stanford Security Studies, 2009).

³ See Scott D. Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: A Debate Renewed: With New Sections on India and Pakistan, Terrorism, and Missile Defense*, [2nd ed. (New York: W.W. Norton & Co., 2003). Waltz argued that spreading of nuclear weapons to potentially all states would cause the international environment to become more secure. Sagan supported the goal of the NPT as the only solution to potential for nuclear weapon use.

advocate that the best option to prevent such an attack lies in securing all nuclear material through the NPT and parallel risk reduction efforts.⁴ These efforts are founded on the NPT norm that nuclear material should only be used for peaceful purposes. Achieving complete or nearly complete control of nuclear material would be seemingly impossible to accomplish but would serve to at least support the norms of the NPT and likely attract other parallel efforts by both state and corporate entities. Without such a global, multilateral project, the likelihood of miscalculation or accident rises with the unchecked spread of nuclear material. The result of the April 2010 U.S. sponsored Nuclear Security Summit provides renewed optimism with respect to this goal.⁵

Even if one allowed for state development of nuclear capabilities to deal with the security dilemma such as Pakistan and India, questions still remain on the ability of these states to learn the appropriate “lessons” from the Cold War. When one combines the advice of Sagan in contrast to Waltz’s suggestion of a nuclear free for all approach and view it through Jack Snyder’s work on strategic cultures, the risk added to the international security environment of new members of the nuclear club having to “learn while doing would seem far higher than most states would be willing to accept. If one accepts that Pakistan and India have sufficiently well educated and serious leaders who fully comprehend the weight of responsibility nuclear weapons require, does this extend to military junta controlled states like Myanmar? Sagan’s advice about the improper

⁴ Shultz et al., “A World Free of Nuclear Weapons.” One of the key insights the authors provide is the enduring requirement, now seen as at risk, for continually providing the nation a nuclear capability as long as other nations possess them but the rise of such a weapon falling into terrorists hands is increasing. The only way to fully prevent that possibility is to eliminate the weapons completely. Additionally, as long as the U.S. possesses these weapons, they need to be properly maintained.

⁵ See the official summit communiqué for full details of the work plan that will lead to achievement of securing all nuclear material by 2014. All 47 nations agreed to commit to this plan. Office of the Press Secretary, “Communiqué of the Washington Nuclear Security Summit,” The White House, Washington, DC, April 13, 2010, <http://www.whitehouse.gov/the-press-office/communiqu-washington-nuclear-security-summit> (accessed April 15, 2010).

influence of military leadership over civilian decision makers certainly applies to these states, the less civilians control the nuclear enterprise, the higher the likelihood of security failures and accidents. Given the passage of time since the end of the Cold War, when is it likely that the required consensus to move the NPT agenda forward will reappear?

The current environment contains both concerns and positive indications that the NPT agenda remains in place and active. The North Korea nuclear question now nearing two full decades of ever increasing distance from the goal of a nuclear free peninsula is being addressed by a multilateral forum. Iran, seemingly following a similar path, has also been confronted by UNSC sanctions and another multilateral negotiation effort. With indications of cooperation between the two states and recent interdiction of a North Korea transport aircraft thought to be carrying military hardware to Iran, the international community has presented a substantial effort to sustain the non-proliferation regime. Continued expansion of these efforts along with a new more positive and proactive U.S. administration view on arms control, the upcoming 2010 Review of the NPT and renewed bilateral efforts to reach agreement on United States and Russian nuclear arms control would seem to indicate a strengthening of the regime with the United States in the lead state role.

The history of the non-proliferation regime and arms control in general offer some important perspectives that have been discussed in the case studies on the ABM Treaty and strategic arms reductions. First, the NPT did not stop the arms race between the United States and the U.S.S.R. In fact, the bilateral talks established between the two Cold War opponents set limits on defensive systems (ABM) that each continued to

disrespect if even only in limited ways. Offensive systems were limited and in one case an entire class eliminated but new systems were built. Some capabilities that were not specifically limited or prohibited allowed each state to continue to expand their arsenals to sizes that dwarfed the nearest competitor by two orders of magnitude. The NPT did not formally guide or directly influence these agreements. Proliferation norms seemed to apply to other states during the Cold War.

Today the antagonism between the west and Russia is far less than during the Cold War. Once the United States and Russia reach a new set of limits that approach the levels of the other P5 states, the potential for serious consideration of global disarmament would seem highly improved. Of key interest to all states is just exactly how far they will reduce, what verification measures will be implemented and what level of transparency and trust can be built as they reduce. The history of bilateral negotiations and the limitations of their agreements would suggest the need for a broader involvement of international institutions in acknowledgement of the impact these states have on the international system.

The evidence that historic antagonisms can be resolved with either existing or emergent nuclear programs being abandoned exists. From Libya as the most recent example, the three former Soviet republics, South Africa, as well as nearly a dozen more who considered nuclear programs, the momentum away from seeking nuclear answers to perceived security dilemmas seems to indicate a significant shift since the Cold War ended. As discussed in argument chapter, Cerny believes the traditional security dilemma has changed and if so, state based solutions may be insufficient to fully address the future

conflicts arising from nuclear emergent states.⁶ Some states with unresolved regional security issues remain on a path toward nuclear weapons states status. With the upcoming 2010 NPT Review, an opportunity exists to further solidify recent gains in non-proliferation and reinforce the vision and norms of the treaty.

POTENTIAL SOLUTIONS TO WEAKNESSES IN THE NPT

As was addressed in the argument chapter, regimes are difficult to bring into existence but easier to sustain over time. For the NPT, both Jervis and Krasner's early definitions hold sufficient explanatory power. For Jervis, security regimes are

those principles, rules, and norms that permit nations to be restrained in their behavior in the belief that others will reciprocate. This concept implies not only norms and expectations that facilitate cooperation, but a form of cooperation that is more than the following of short-run self-interest.....the fact that neither superpower attacks the other is a form of cooperation, but not a regime. The links between the states' restraint and their immediate self-interest are too direct and unproblematic to invoke the concept.⁷

Steven Krasner defined them similarly as "sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations."⁸ The definition Krasner uses narrows the concept to a single issue between two or more states. The NPT is the bedrock of the most important security regime. What has been elusive is how to sustain multilateral discussions on how to achieve the treaty's goal. Moving beyond cooperation of short-term self interest is the next step to increase the power of the non-proliferation regime.

⁶ Cerny, "The New Security Dilemma: Divisibility, Defection and Disorder in the Global Era."

⁷ Jervis, "Security Regimes," 357.

⁸ Krasner, *International Regimes*, 2.

The specific actions that are currently ongoing that will continue to strengthen the non-proliferation regime include expanding seeking opportunities to start or expand membership of multilateral talks to slow and reverse emergence of potential nuclear weapons states. The Six Party talks on the North Korean issue and the seven nation EU supported talks with Iran are an important evolution from the Cold War example of bilateral arms control. Each time the focus states of these talks have attempted to obstruct or break down the size of the effort, relative solidarity of the parties has reinforced the norms of the NPT for the participating states if not on the nuclear emergent state. The continuing and expanded use of the IAEA to verify compliance, the willingness of states to use sanctions individually or through the UN to force compliance and the ability of states to offer incentives when appropriate to do so are all important to the deepening of the regime.

While the environment that generated the original NPT has passed, nuclear weapons still have the ability to transform the security calculus among states. States that have relatively less power than the P5 and who have no aspirations to acquire nuclear weapons have always been either on the periphery or excluded from arms control or specific non-proliferation efforts. When they are included, their role is typically to assist the stronger powers in achieving their interests. Alignment of interests is frequent in these situations but the results are typically most beneficial to the most powerful states. As the direct security concerns of the powerful states begin to recede, other more regional conflicts become prominent. These conflicts more directly impact the less powerful states than the original nuclear states. Traditional realist based explanations make the solution set to these issues simple but potentially too narrow.

MERGING THEORIES TO ALLOW SOLUTION FORMATION

This research has exposed two distinct theoretical explanations for how the nuclear question has been traditionally discussed: power-based explanations which fit the nuclear capable states interaction and cognitive-based explanations that expand the visibility of all states particularly those without traditional levels of power. The non-proliferation regime needs to address a range of issues that drive traditional state security concerns in order to further bond as many states in the international environment as possible to effectively achieve and sustain the goals of the NPT. One example of these issues is what to do with the remaining tactical nuclear weapons in Europe which have a source of increasing criticism from both NATO and non-NATO countries in recent years.⁹ As the United States and Russia have reached another agreement on strategic weapons, an obvious moment for further discussions that take into account broader, regional interests of neighboring states may have arrived.

Specific recommendations to strengthen the NPT above would have to include finding enhancements to existing treaties that relate to non-proliferation. Enforcement of UNSCR 1540, which requires both states and non-state actors to ensure weapons of mass destruction are not proliferated, would substantially support and extend the NPT norms beyond the state level. The United States has expressed full support for the resolution, has completed a national action plan to implement its provisions and has provided an

⁹ Carl Bildt and Radek Sikorski, "Next, the Tactical Nukes," The New York Times, On-line Edition, February 2, 2010, <http://www.nytimes.com/2010/02/02/opinion/02iht-edbildt.html?scp=1&sq=&st=nyt> (accessed February 2, 2010). Authors argue that remaining tactical nuclear weapons be withdrawn from areas near the EU as they endanger a common future for the EU and Russia. An agreement that covers these weapons similar to that being discussed for strategic weapons be completed. Authors are the former prime ministers of Sweden and Poland respectively.

overview of the plan to the UNSCR 1540 Committee.¹⁰ Another important effort that would strengthen the NPT involves the IAEA.

Universal acceptance of IAEA inspections and combined with improvements to those protocols would be a critical part of strengthening the NPT regime. The use of non-state groups, organizations and individuals to report on violations, criminal activity and suspected proliferation activity would likely provide a dramatic increase in transparency. Experiences from the environmental regimes have demonstrated that states are frequently ill equipped, unwilling or unable to identify activities that are against the norms and rules of a specific regime. States with greater resources should be encouraged to volunteer to assist those in need as will likely be done as a result of the global nuclear material securing effort. Additionally, efforts must be undertaken to determine and implement the appropriate comprehensive approach to close the nuclear “loophole” in the NPT that encourages spreading nuclear technology to promote nuclear power plant construction and operation for the generation of electrical power. The history of proliferation of nuclear technology for weapons has obvious links and drawn opacity from this weakness in the NPT. Universal acceptance of the IAEA and improved protocols will dramatically improve transparency of nuclear technology transfers.

OPERATIONALIZING THE NORMS OF THE NON-PROLIFERATION REGIME

Regimes have been successful in a number of issue areas apart from security but within the security area the NPT still stands as the gold standard. Among the pressing non-proliferation concerns is just how to operationalize the norms of the regime. In

¹⁰ Department of State, “Overview of United States National Action Plan for Implementation of Resolution 1540 (2004),” *Department of State website*, 2010. <http://www.state.gov/documents/organization/86372.pdf> (accessed February 2, 2010).

Tipping Point, Campbell and Einhorn provide five recommendations including stopping North Korea and Iran from going nuclear. Given that one has gone as far as testing and the other seems determined to do all it can to position itself to emerge, these states are serving as test cases of the ability of the international community to adapt and expand the non-proliferation regime. Next, they believe the United States should take the international lead in dealing with regional security concerns including the Middle East, India-Pakistan, and the Korean Peninsula. Campbell and Einhorn find the United States best positioned to fill the gap in NPT dual use through a multilateral effort to control the nuclear fuel cycle process within a limited and internationally controlled plants. This effort should provide both security of the material and a guaranteed source of nuclear fuel for the 44 states now operating nuclear power plants. Improved analytical and intelligence capabilities at the multinational level which would require expanded sharing of classified data would improve transparency in the nuclear issue area.

As discussed in Chapter III, another NPT proponent and expert, William Walker, recommended a number of actions to reinforce the NPT. Walker sees the key to improving the NPT lies in working out the natural tension between realist and constitutional views of international relations. Certain concepts at the core of the NPT are still valid and should be embraced by all nations. All of these are simple but often ignored when states are unwilling to alter their view of their interests or subordinate them to those of the common good. Respecting reciprocal obligations and the requirement to exercise restraint are among these responsibilities Walker notes as key to the NPT's success. Walker stresses the fact that the signatories all agreed to work toward elimination of all weapons, both conventional and nuclear, and that states agreed to

constrain production and deployment of these systems. Without this specific restraint on the production side, the temptation for states to divert resources and violate the terms of the NPT and other international obligations such as the UN Charter remains strong.

Walker's back to basics approach to international cooperation which is at the core of the NPT includes the requirements for states to value and promote the supremacy of diplomacy over war and a multilateral willingness to adhere to international law.

NPT ANALYSIS SUMMARY

The solution set that will enable long term enhancement of the NPT, a permanent reduction of nuclear arms and eventual total disarmament, includes efforts to find common ground for nuclear weapons states and non-nuclear weapons states in terms of resolving the underlying security issues. Theoretical approaches that are acceptable to nuclear capable states have to be tempered with acceptance of activities that engage all states in an equitable arrangement and result in a realignment of the international security environment. Dealing with cheating within the non-proliferation regime, outdated rationales for possession of nuclear weapons and states unwilling to address abandonment of the weapons remain significant issues in reducing the power of the Cold War deterrent shadow on national security elites. As the secretary general of the French Foreign Ministry responded to a question on the idea of nuclear disarmament, "France's nuclear deterrent has protected our country very well for many years," these P5 states and those who seek similar answers to their security dilemmas will be the core problem for

the NPT regime in the years to come.¹¹ Efforts that go beyond the traditional state level of analysis and actual interaction can provide needed catalysts for positive action in disarmament.

ABM TREATY: BEST AGREEMENT ABANDONED AS ENVIRONMENT CHANGED

Frequently noted as the most durable of U.S. and Soviet agreements, the ABM treaty also proved in the end unable to suit the short-term interests of the United States. Was the 2002 abandonment of the treaty by the United States inevitable? Where the changes in the international security environment sufficient to justify the negative impacts on a 30 year relationship? Specifically, did concern about an emerging threat of a single missile attack from a third party “rogue” state warrant rejection of the treaty? Were the changes in the political structure of Russia a significant factor in the U.S. decision? The research conducted in this dissertation provides only partial answers to these questions but does offer insights on the limitations of a bilateral arms control agreement over time.

The ABM Treaty enshrined mutual assured destruction for the two Cold War superpowers by limiting defensive systems to the point of merely a fig leaf for each other’s capital and a small but sufficient counterforce. Over time, the bargain would be further limited to a single defensive area on each side. The United States would construct their system only to abandon it a year after it became operational. The Soviet Union would build their ABM system to protect Moscow and continue to maintain it. Each side

¹¹ Angela Charlton, “Disarmament Talks Strained Over Mideast, Russia,” *Washington Post*, February 2, 2010, <http://www.washingtonpost.com/wp-dyn/content/article/2010/02/02/AR2010020200596.htm> (accessed February 2, 2010).

frequently accused the other of cheating on the agreement. In the end, each was correct in their concern. The Soviet Union did in fact construct a radar system that was designed as an ABM component and as such violated the treaty. Virtually all of the U.S. research and systems developed under the Strategic Defense Initiative and its successor program names were at least counter to the intent if not outright violations of the agreement.

If neither side was intent on holding up their side of the bargain, what value could be gained from maintaining the treaty so long? The answer is found in the fundamental structures the agreement established which served as a foundation for all future negotiations and agreements. The ABM Treaty was the first specific limitation on any nuclear system and committed the two states to continue the work of limiting offensive weapons having “solved” the issue of defensive and offensive arms races simultaneously occurring. The establishment of the Strategic Consultative Committee still stands as the greatest strength of the treaty that unfortunately was not equaled in later agreements.

As discussed in Chapter IV, the Standing Consultative Committee, as set out in Article XII, can serve as a model for other agreements as it established an effective and permanent forum to discuss issues that impact the continuance of the agreement. While not as intrusive as some verification requirements of later agreements, the Standing Consultative Committee provided a forum between the signatory states, held in confidence, where issues of implementation, compliance, or ambiguities in the treaty itself could be identified and addressed. Effectiveness of the committee had been periodically challenged, most notably by the Reagan Administration. The evidence of specific instances where the Standing Consultative Committee was able to raise and resolve significant issues indicates the gains may have outweighed the alternative of

some other arrangement. Other later agreements which did not have similar committees were not as effective and in one instance, the Intermediate-range Nuclear Forces Treaty (INF), the United States would have to request one be implemented.¹²

The Standing Consultative Committee was of particular importance to support the requirement for a formal review of the treaty every five years as set out in Article XIV. The Standing Consultative Committee continued to meet at least twice annually and at each five year review reconfirmed the parties' intent to continue their commitment to the "aims and objectives of the treaty" and that the Standing Consultative Committee was the appropriate forum to continue to promote the provisions of the agreement. The Standing Consultative Committee did so for thirty years until the U.S. withdrawal in 2002.¹³ The lasting value of the Standing Consultative Committee from a normative perspective was its ability to increase transparency, build trust between the negotiators and facilitate knowledgeable and orderly reviews of the treaty at regular intervals. The value of the Standing Consultative Committee was not likely fully appreciated until it no longer existed. One could speculate that the difficulties experienced the recent new START negotiations as evidenced by the failure to reach an agreement before START I expired might have been lessened had the Standing Consultative Committee still existed.

A number of issues from the ABM Treaty era impacted the overall arms control environment and provide insights that remain applicable for future arms control and disarmament efforts. Technology advancements had a significant impact on the treaty over time. Leadership statements and changes in personalities and policies were at times

¹² Bunn, *Foundation for the Future: The ABM Treaty and National Security*, 77.

¹³ Ibid., 168. Bunn provides a summary of the six major follow on agreements reached between the parties which included issues of procedures for replacing ABM components, statements of mutual agreement of the successful operation of the treaty, and the controversial Soviet radar at Kamchatka.

supporting and others damaging to the image of the treaty within elites as well as public support for its approval and continuance. Linkage of arms control efforts like the ABM Treaty and the companion SALT agreements to follow to other issues and events was a frequent occurrence which often significantly damaged the painstaking work of the negotiations and almost negated the Senate vote for ratification.

From a technology perspective, the inability of the ABM systems and the treaty itself to fully satisfy each state's concerns related to MIRVs proved a major liability in the long run, at first for the Soviets and later the United States as well. The frequent problem of each state's leader making public statements in an attempt to leverage the other's actions frequently set back negotiations and accelerated development of newer systems. One example was President Johnson's miscommunications with Soviet Premier Kosygin in 1967 resulting in a delay in further arms control talks until the Nixon Administration and a delay in an approval to build the U.S. ABM system, both actions that would have long term impacts on the strategic environment. Others included halts in negotiations on various agreements whenever the Soviets either were unresponsive to U.S. interests in Vietnam or invaded another country such as Czechoslovakia in 1968 and Afghanistan in 1979. Leadership policies and public statements frequently had a direct and negative impact on negotiations. The result in the case of the ABM Treaty was a one vote majority in the U.S. Senate in favor of ratification.

The ABM Treaty would have theoretically kept offensive systems deployments limited and prevented a defensive arms race. Unfortunately, theory does not fully explain later U.S. and Soviet offensive buildups except as a product of the limitation of bilateral agreements. If two states are unable to build additional trust and lengthen the shadow of

the future, each will likely choose to match the other step for step in offensive weapons and seek to cheat on defensive systems as well. The history of the 1970s and 1980s would seem to provide adequate evidence of the negative impact of the security dilemma. The rise of SDI can be explained as a result of basic distrust of the Soviets that their “adventures” and expansion of offensive strategic arms did little to abate. On the Soviet side, below the state leadership level, scientists raised doubt about the effectiveness of SDI but their distrust of the United States was equally powerful. As a result both states hedged and continued both defensive and offensive nuclear systems development and deployments through the 1980’s. Elites within both states emerged to drive state policy making toward short-term state interests which did not follow the norm of the original agreement.

ABM ANALYSIS SUMMARY

The history of the ABM Treaty provides an example of the weaknesses inherent in a bilateral security treaty. The binding effects of multiple states interacting as occurs within the NPT is absent in these types of agreements. International relations theory rooted in realist assumptions is similarly less capable of explaining the activities below the state level that can extend and strengthen or weaken and destroy such agreements. The third case study explores the follow-on strategic arms agreements further on this point showing that despite leadership willingness, future agreements tended to be less specific and therefore less binding than the ABM Treaty. Realist based theory would support the concept of protection of state interests through self help but offer no ability to reach a less Hobbsian solution set in the long term.

If states prefer bilateral agreements that rely on mutual trust to work, then one must ask what additional “glue” might be useful to sustain the relationship. Governments are subject to changes in political will as their leadership and domestic support changes. The closeness of the vote to ratify the ABM Treaty as well as the shifting policy stances of subsequent leaders in both states bear witness to this issue. Short of seeking a multilateral approach to future agreements, states could consider the value added of widening the contact between government and non-government elites within and between the states. These groups, both formal and informal, increase the opportunities for improved transparency and trust below the level of the state. Confidence building measures and information exchanges on the nuclear issue would reduce the opportunities for negative competition on security and economic issues related to weapons and electric power generation. This trust building system of networks can be fostered by third party states as well as international institutions.¹⁴

Due in part to today’s changed and increasingly robust transnational or globalized environment, new explanations beyond traditional realist views are emerging. Security dilemma or power-based explanations from the Cold War period are useful to explain the U.S. withdrawal from the ABM in 2002 if one substitutes another state such as North Korea or Iran for the Soviet Union. But what power-based theory explains the almost immediate and continuing loss of respect for the new Russia on the part of the United States and the west? Once the direct confrontation ended, a developing knowledge based relationship between the two Cold War foes was all but abandoned. The conclusion one

¹⁴ One example of cooperation on research sponsored by both governments but at the academic level is the Joint Coordinating Committee for Radiation Effects Research (JCCER) sponsored in the U.S. by the Department of Energy. The Committee is focused on assisting efforts in the Russian Federation to study the long term effects of nuclear radiation. Established in 1994 and renewed through 2009, this is the first large study on the subject since the post war studies on Japanese survivors of Hiroshima and Nagasaki.

could draw is the United States slowly began to act as if a non-threatening Russia no longer mattered. Certainly the commonly held belief that the United States was the “sole remaining superpower” could not have been useful to a new relationship. After the Cold War ended, the United States by its action if not statements indicated that Russia were no longer central to matters of international security or U.S. security interests. If they were not longer a threat then there was no need to negotiate anything more than a protocol on arms reductions.

If the one feature from the ABM Treaty that is in common with the NPT, a review forum such as the Standing Consultative Committee, could be adapted and included in all bilateral agreements along with an inspection and verification protocol administered by the IAEA, then a bilateral agreement would more likely to succeed and endure. The history of the ABM clearly demonstrates the power of individuals to both positively and negatively influence the success and failures of a bilateral agreement as well as the limits of power-based theories to explain state behavior. Theories that explain interaction between states below the state level are not new but need to be reexamined in an effort to better describe how states deal with a security “hangover” from a now passed era. A worthy research effort would seek to explain how to get states to accept and sustain bilateral agreements that were assisted by third parties such as states, institutions and non-government organizations.

SORT TO START: THE SLOW DECLINE OF BOTH NUCLEAR ARMS AND ARMS CONTROL

The legacy of the more than four decades of negotiations on strategic offensive weapons between the United States and Russia continues to be in development. These bilateral agreements have resulted in an effective foundation for slowing and reversing the once growing stockpiles of nuclear weapons that together still account for 95% of the world's supply. The latest chapter of the saga includes the effort to determine how to extend and lower the START I limits. These discussions took on increased intensity as the expiration date for START I passed in December 2009. Each state is committed to achieving the limits proposed under SORT of 1,700 to 2,200 deployed warheads by December 31, 2012. The limits from the new START agreement signed in April 2010 are some 650 warheads less than START I and a cut of 50% of the remaining launchers to 800.¹⁵ The common interest that drove both the Cold War arms races and the parallel

¹⁵ Tom Z. Collina, "U.S. Russia Poised for Arsenal Cuts," Arms Control Association website, December 2009, http://www.armscontrol.org/act/2009_12/USRussiaArsenalCuts (accessed February 3, 2010). Collina reports that the new START treaty will "significantly tighten bilateral limits on the number of strategic nuclear warheads and delivery vehicles each side can deploy. Under START and the Strategic Offensive Reductions Treaty (SORT), Russia and the United States are limited to deploying 2,200 strategic warheads (by 2012) on 1,600 long-range land-based missiles, sea-based missiles, and bombers." (from the article) The new treaty reduces the warhead limit from 2,200 to 1,550 or a reduction of nearly 30%. Launchers were cut 50% from 1,600 to 800. "The launcher reduction is larger in part because the previous limit (1,600) has not been revised since 1991, when START was signed. The previous warhead limit (2,200), by contrast, was agreed to a decade later in SORT, which was signed in 2002, and is thus a more accurate reflection of current deployments. (For comparison, START limits both sides to 6,000 "accountable" warheads, i.e., warheads that are associated with delivery systems but not directly counted.) With regard to deployed strategic warheads, the Department of State reported in July 2009 that the United States had met its SORT limit of 2,200 three years early. Russia is believed to have about 2,800 warheads, according to independent estimates." To meet these new limits, the U.S. would be reducing warheads by almost 30% and Russia by 42%. Collina reports the "new limit of 800 strategic delivery vehicles (long-range missiles and bombers) will not directly affect current forces because Russia and the United States are at or below these limits already. The United States is believed to deploy about 800 (the same number allowed under the new treaty) while Russia deploys about 620, according to independent estimates. The difference is due in part to the U.S. preference to keep more missiles with fewer warheads loaded on each one. Russia, due primarily to budget constraints, chooses to deploy fewer missiles with more warheads on each. Reflecting these preferences, Russia originally proposed that the two sides agree to keep only 500 launchers apiece, while the United States first proposed 1,100."

arms control efforts were the states' desires to protect their population from the perceived threat of the other. Each state at times believed the other would strike first and even when this was not a primary concern, they continued to both modernize and negotiate to control each other's nuclear arsenal. This common interest to control each other's arsenal began with the Partial Test Ban Treaty and continues through the current SORT and post-START III negotiations. In the long view, these states have committed to a long term arrangement that could lead to complete nuclear disarmament. Most importantly, the continuation toward the goal by these states remains essential as they provide an appropriate example for other states to follow.¹⁶

The history of the strategic arms negotiations contains a number of technical issues that became the key problem areas for all negotiations: technical advances that challenged the other side's ability to monitor them and drove decisions to compete, restrictions on systems were never fully encompassing until the INF Treaty, no other states were limited in any way, national leadership and domestic politics were a constant factor on progress and approval. Each of these issues presented separate but related difficulties to achieving a lasting and comprehensive treaty. As a result, each succeeding agreement whether ratified or not by the states legislatures reflected the realities of the moment. In the end, nuclear arsenals were reduced over time from the massive heights of the Cold War but remain far larger than any other states and still present significant challenges to the required monitoring, security and verification processes.

As the Cold War progressed, both the United States and U.S.S.R. were presented with the issue of how to monitor the other's development and deployment of strategic

¹⁶ For an assessment of the new START agreement, see Daryl G. Kimball, "New START Good for U.S. and International Security, Deserves the Senate's Support," *Arms Control Association website*, 2010. <http://www.armscontrol.org/pressroom/NEWStartStatement> (accessed April 15, 2010).

nuclear systems. National technical means, the use of aircraft and later satellites as well as other systems, provided sufficient awareness and verification of each state's efforts. Construction of missile silos and submarines were relatively easy subjects to monitor. With the introduction of MIRVs, cruise missiles and increasingly more stealthy submarines, these monitoring systems could no longer determine exactly how many weapons either side might have available. Inspection and verification became increasingly more important and equally resisted by each state.

Each of the negotiations of this era focused limiting specific systems but did not fully restrict all delivery platforms specifically heavy bombers, cruise missiles, and MIRVs. Early on in the period, submarines were also a focus of the Soviets while limiting heavy ICBMs captured U.S. attention. Negotiations often were delayed or stopped over specific details of these systems often as each side sought to either buy time for their own counter program or to slow development and deployment of the other states system that they had no rival. At the same time, technology can provide a means of deepening a bilateral security arrangement between antagonists.

In 1962, the United States and the Soviets saw the importance of having permanent and effective open lines of communications to prevent a crisis from escalating. The implementation of the "hot line" after the Cuban Missile Crisis and the follow on "Hotline Agreement" provided a significant example for other states to follow. Today there are similar arrangements between most of the P5 states. India and Pakistan have had one in place since 2004 and are interested in expanding discussions on nuclear issues to

include all of the nuclear states.¹⁷ The U.S. and Russian hotline continues to exist and has been repeatedly upgraded as communications have advanced over the years.¹⁸

State leadership always played a central role in the strategic arms control process from initiation to approval or rejection of agreements. SALT II was the obvious follow on to the initial agreements in 1972 that required significant adjustments and would continue to lower the levels of each side's weapons. Domestic political environments, particularly the U.S. 1976 Presidential election, would prove too difficult for state leaders to overcome in order achieve agreement. Of particular concern on the U.S. side was how to go forward with an agreement if intrusive verification in addition to NTM could not be a part of the treaty. Negative perception of Soviet activities overseas and their increasing production and deployment of nuclear systems within the United States ultimately proved impossible to overcome. The Soviet invasion of Afghanistan in 1979 was the key event that caused the United States to withdraw from further consideration of any agreement. This shadow would cement the U.S. negative view of arms control for the next five years, the period during which President Reagan initiated SDI and called the Soviet Union an "evil empire." The security dilemma enhanced by distrust of the other state's motives remained a powerful explanation for the weakness of a bilateral agreement process.

The U.S. and Soviet relationship became so dysfunctional as to cause an eighteen month break in negotiations on the INF and START. April Carter's analysis of strategic arms control negotiations of this period places the responsibility for the impasse with the states' leaders. Each was actively using every opportunity to trade propaganda missiles

¹⁷ Jawed Naqvi, "Nuclear hotline to be set up: Pakistan, India to continue test ban," Dawn Internet Edition, June 21, 2004, <http://www.dawn.com/2004/06/21/top1.com> (accessed February, 4, 2010).

¹⁸ Another joint effort to improve coordination on nuclear issues was initiated in 1999 establishing temporary monitoring capability to guard against any impacts of the anticipated year 2000 computer issue.

with each other. The negotiations before this moment were conducted in an appropriate manner however; the national leaders chose to be “essentially bargaining in public.”¹⁹ Once the two negotiations were combined and restarted after the Soviet leadership changed with the rise of Mikhail Gorbachev, progress was rapid. The danger in a national leader tying a separate issue to arms control negotiations in an effort to leverage the other state to move on both lies in the potential of a failure to gain anything in either. This problem can be heightened when national leadership tries to communicate through the press.

Another significant aspect of this era is the impact of ideas on national leadership. Both Reagan and Gorbachev held similar personal views of their roles as leaders within their states and on the utility of nuclear weapons. Each saw themselves as an agent of change to lead their nation into the future. Reagan sought to strengthen the United States through a rebuilding of public confidence through a rebuilt military. In his view, America should always negotiate from a position of strength. He also saw that nuclear weapons were a part of that strength but at the same time believed they unnecessarily held the ability to destroy mankind. Gorbachev had similar views but his main concern was to reform the Soviet system to better survive in the emerging globalized world. He also saw no use for nuclear weapons in this new world. Interestingly, SDI was in the end the only issue that prevented agreement to fully disarm in 1986 at Reykjavik.²⁰ The impact of these individuals on their systems, the opposing state, and the international system in terms of changing the status quo was significant and not well explained by traditional power based international relations theories.

¹⁹ Carter, *Success and Failure in Arms Control Negotiations*, 198.

²⁰ Paul Lettow, *Ronald Reagan and his Quest to Abolish Nuclear Weapons*, (New York: Random House, 2005), 246.

The INF Treaty provided the bridge to reestablishing offensive arms control as an appropriate venue for interaction between the United States and the Soviets. Key elements of the INF Treaty that would provide lasting value for future agreements included improved verification methods and on-site inspections. START I verification methods and protocols remained in place and active for the 25 year period of the agreement until the expiration in December 2009. So successful was the INF breakthrough, the spirit of eliminating an entire class of nuclear weapons directly impacted the state leaders as they met in Reykjavik in 1986. The opportunity to go beyond partial reductions in nuclear systems over time and eliminate all weapons with one agreement was briefly and now famously offered at this summit. In the end, this leap of faith was too difficult to accept. The Soviet leader also passed on the offer to share SDI technology which could have possibly opened lines of communication and education previously unimaginable. In the end, the tie of nuclear capability to the state's conception of power proved too strong a bond to break even when personal beliefs might have suggested another path. These lost opportunities and concerns over further restricting of Soviet strategic arms would result in the INF Treaty being the last agreement of the Soviet era. Momentum for further agreements was slowed by a continuing lack of trust between the two states.²¹

With the end of the Cold War, the relationship between the United States and Russia was different and the succeeding agreements reflected the dramatic shift in the international environment. These agreements beginning with START I continued the

²¹ Baglione, *To Agree or Not to Agree: Leadership, Bargaining, and Arms Control*, 139-40. Baglione makes a forceful argument throughout the work that state leadership matters in arms control negotiations and in the case of the early 1980's, the domestic responses to leadership caused each (Reagan and eventually Gorbachev) to adopt policies that reflected domestic pressure. This dissertation finds that the distrust of the other state was strongest in the U.S. public due in part to Reagan's own political stances such as the U.S. must 'negotiate from a position of strength.'

trend to reduce strategic arms but with far less other constraints than during the Cold War period. START I was deferred in Reagan's term but would eventually be approved and reductions fully completed by December 2001. Key to this agreement was the use of on-site inspections, information exchanges and national technical means all of which remained in place until shortly after the expiration of the treaty in December 2009. At a July 2009 summit in Moscow, the U.S. and Russian presidents agreed to continue to negotiate even after the treaty expired if necessary in order to conclude a follow-on agreement. By April 2010, a new START agreement would be signed and awaiting ratification.

START II achieved the long elusive goal of limiting MIRVs and had a range to limit warheads vice a specific number each had to reach. Although never entering into force, START II was a demonstration of the willingness of the states to continue the dialog despite the dramatic political changes taking place in Russia. Later issues with U.S. unwillingness to accept Russian requests for amendments to the ABM Treaty as a precondition to the Duma's allowing the treaty to go into force caused President Clinton to decide to not risk a failure to ratify the agreement in the Senate. The unilateral U.S. withdrawal from the ABM Treaty ended any chance of START II surviving.

START III would have established another lower level for deployed warheads at 2,000 to 2,500 but it would never enter into force due to the demise of START II. In a significant development in the negotiations, for the first time in an offensive arm treaty language was included to destroy delivery vehicles and warheads in an effort "to promote the irreversibility of deep reductions including prevention of a rapid increase in the

number of warheads.”²² Initially discussed in START II, the concept of limiting systems, while allowing modernization, became a part of START III establishing both reductions and hedge for the future. In the end, both states lowered their arsenals for mostly economic reasons. The START agreements were most valuable as they opened the door to increased transparency in verification and irreversible reductions.

During the George W. Bush presidency, the September 11, 2001 terrorist attacks caused a dramatic shift away from a slow fading of Cold War relationships. Concerns about terrorist groups dominated the security thinking of this administration. Chief among these concerns was the potential for terrorist acquisition and use of a nuclear device. Additionally, two U.S. Nuclear Posture Reviews, in particular the 2002 review, identified the People’s Republic of China and Russia as “plausible” nuclear contingencies. This assessment may have been useful for domestic military budgeting and policy reasons, the subjects of these comments were negatively energized by them. Further actions by the Bush Administration in terms of strategic arms control negotiations made plain the U.S. view on arms control had shifted. Specifically during this period, the United States was insisting on storage of warheads removed from deployment vice destruction as had been done in earlier agreements. The United States also insisted on less restrictive rules on weapons counting, development and deployment.

This swing to a more realist stance on the part of the United States would result in a far less productive relationship. One example of this environment was the START Bilateral Implementation Commission that unlike the SALT era Standing Consultative Committee was unusable without agenda or verification protocol. Verification protocols

²² Arms Control Association, “U.S.-Soviet/Russian Nuclear Arms Control Agreements at a Glance,” *Arms Control Association website*, December 2009, <http://www.armscontrol.org/factsheets/factfiledec09> (accessed February 4, 2010).

became subject to continuing discussion without any specific set of rules becoming a part of the SORT process. One positive aspect of this era was growing levels of cooperation through the Nunn Lugar Cooperative Threat Reduction Program. With a change in U.S. Administrations and the expiration of START I, a renewed emphasis on continuing to eliminate nuclear weapons has energized both states to support negotiations as well as widen and reenergize the international discussion on the nuclear issue.

ARMS RACES LEGACY

One of the major features of the Cold War, nuclear arms races remain a serious concern especially among those states with regional security concerns and limited conventional means. While the scale of confrontation between regional competitors who do not have the resources to rebuild the enormous nuclear arsenals of the Cold War, the risk of repeating a similar condition with billions of people in the target zones should be avoided with every means available to the non-proliferation and disarmament movement. As the decision logics of the Cold War still hold great power for those who may not understand the costs, the cost of miscalculation with nuclear weapons due to traditional hatreds is far higher than during the past.

A portion of this case study, the period from 1967 to the end of the Cold War in 1991, encapsulates the largest arms race in human history in terms of cost, lethality and difficulty to control and reverse. The post Cold War period provides both a period of strategic drift in the immediate aftermath of the collapse of the Soviet state and its allies and a return to threat focused policy formation and use of force to respond to aggression after September 11, 2001. What does emerge from the post Cold War period continuing

until the current U.S. Administration is the devaluation of the strategic relationship that existed between the Cold War superpowers. Despite the disparity in economic terms and incomplete transformation of the Soviet state to viable western style democratic nation, Russia remains key to the nuclear agenda and essential to achievement of additional arms control and non-proliferation goals. The United States and Russia have an obligation to educate and dissuade other state elites from replicating the past.

The theoretical debate of more nuclear weapons in more states yields stability in the international security environment is difficult to support given the recent history of states rejecting these weapons. One could argue that the current concerns over the emerging nuclear states have their roots in the unresolved disarmament of the NPT nuclear weapons states. Other explanations for the drive for nuclear capability by a growing number of states, North Korea and Iran being the latest examples, see these states' nuclear desires tied to issues of sovereignty, extant or perceived extant threats, regional hegemonic aspirations or a combination of these. Within each of these situations lies both the potential for continued horizontal and vertical proliferation.

The Waltz and Sagan proliferation debate highlights a number of explanations for why states acquire nuclear weapons that are useful in understanding the current nuclear environment.²³ Waltz's explanation as one would expect is framed in a realist tradition. States are socialized by an anarchical system marked by each approaching its security concerns in a "self-help" fashion. In this system, states accept that the balance of terror is a permanent condition. States act with rational behavior in this anarchical system seek to

²³ Sagan and Waltz, *The Spread of Nuclear Weapons: A Debate Renewed: With New Sections on India and Pakistan, Terrorism, and Missile Defense*. Waltz argued that proliferation of nuclear weapons would actually result in a more secure world where no state would risk attacking another, in effect, mutually assured deterrence globally.

maintain the balance with nuclear arms being the ultimate expression of a state's ability to secure itself. In Sagan's view, deterrence, long a prominent feature of the Cold War, has been replaced by pre-emption and counter-proliferation activities, with the U.S. invasion of Iraq being the most prominent example. In addition to purely security reasons, Sagan suggests states acquire nuclear weapons to satisfy domestic political or bureaucratic struggles. Economic considerations are another possibility using logic similar to that used by the U.S. military in the 1950's where nuclear forces were the "answer" to winning wars more cheaply than conventional forces. States look to nuclear weapons to gain leverage in foreign affairs, to legitimize their power in the eyes of both domestic and foreign audiences. Nuclear weapons provide states with prestige and respect for seeking to be a modern nation capable of scientific achievements on a level with other "great" powers. Although each of these rationalizations for seeking nuclear power may be seen as legitimate, the increased risk of escalation to war, a nuclear accident, theft or support to non-state groups in their efforts to acquire nuclear weapons is the most likely result of increased horizontal nuclear proliferation.

Security, domestic politics, norms based explanations such as prestige of nuclear weapons shaping a state's self-image all offer interesting if incomplete explanations for the utility of nuclear weapons in the increasingly globalized international environment. This terrorist challenge was not considered significant in the Cold War but has become the central focus of the renewed nuclear non-proliferation and arms control agenda led by the United States. Ultimately, states must work together to negate the nuclear terrorist threat.

STRATEGIC ARMS REDUCTIONS ANALYSIS SUMMARY

This long history of bilateral if imperfect negotiations seeking to control and reduce strategic offensive nuclear arms offers a numbers of valuable insights for both theory and future negotiations. First, bilateral negotiations and agreements rise and fall on the strength of the relationship between the party states. Any change in attitude or behavior in one or both of the states can have a profound (and usually negative) impact on both short term discussions and long term results. This simple fact accounts for the frequent rise in distrust of motives and actions of both states featured in the strategic arms control case study. The concerns of other states while frequently considered in the broader nuclear and security considerations of these two superpowers but were not offered the opportunity to directly impact them. With the passing of the Soviet state, the realist or power-based theories of how arms control relations worked began to lose their explanatory power but not their hold on states and their security thinking.

After the terrorist attacks of September 11, 2001, the U.S. view of extant threat shifted or more appropriately was refocused primarily on the possibility of a non-state actor attack with nuclear or other weapons of mass destruction. Unfortunately, the deterrence calculus of the Cold War error does not fit well below the state level of analysis. How does a state threaten retaliation in kind when targeting of the aggressor is impossible to accurately be accomplished? Can a state retaliate on a non-state actor inside another sovereign state? If so, nuclear weapons are not likely the response of choice. The changing and expanding globalization of international relations and commerce may also have negated the legitimacy or utility of nuclear weapons themselves. If citizens from a non-belligerent state are caught in the potential impact area or are subject to fallout from

nuclear exchanges, what rights do they have to object or intervene a priori? The answer would seem to be found in multilateral discussions vice bilateral talks.

The shifted security environment of the post-9/11 world combined with the rapid globalization of communications and commerce likely has reduced the explanatory power of theories that fit the security environment of the Cold War. The weaknesses in these theories was hidden during the immediate post Cold War period but now the balance between them and more normative based explanations may have shifted. If smaller power states are able to capture the non-proliferation agenda by shifting the discussion to one based on the legality and morality of nuclear weapons, nuclear states will be unable to so easily ignore them absent an extant and plausible threat. The era of any state selecting to build a massive nuclear arsenal of a size beyond a few hundred weapons has passed but not without leaving a lingering shadow on the international security landscape. The next set of negotiations beyond the new START agreement that builds on to START I and SORT is likely to bring the other nuclear weapons states into the global lens. While a discussion at the level of the P5 plus India and Pakistan would be useful and likely more able to bond the participants to the NPT norms, a wider involvement of undeclared, emergent nuclear states and the rest of the international community will be needed to achieve the stated goals of United States and Russia as well as the NPT, total disarmament.

NEW FRAMEWORK FOR MERGING ARMS CONTROL AND NON- PROLIFERATION

Three central findings have emerged from this research. First, multilateral treaties that establish an issue based regime, like the NPT, tend to be difficult to achieve initially, if properly developed around an appropriate set of rules and norms, and reviewed frequently and equitably, will last significantly longer than bilateral treaties among powerful states. Second, for any international agreement on nuclear weapons to succeed, it must be supported by the United States. Finally, power-based international relations theories seem to be losing their explanatory power in the increasingly globalized environment of the post Cold War world while normative theories have yet to completely replace them. A significant factor in the issue area of nuclear disarmament is the merging of arms control efforts into the overall non-proliferation and disarmament agenda.

In an effort to bridge the gap between the two schools of international relations that bear on the nuclear issue area, this research suggests the formation of a hybrid theory which provides the potential to allow nuclear weapons states and non-nuclear weapons states including emergent or undeclared nuclear states to develop a more frequent multilateral dialog to support efforts to achieve the goals of the NPT. First, the issue of eventual extinction of nuclear weapons has clearly been decided as early as 1970. Even the non-signatories of the NPT have from time to time indicated their willingness to eliminate nuclear weapons under the assumption that the regional issues that placed them in the security dilemmas driving their requirements for the weapons are resolved. The majority of the world's states do not possess any nuclear capabilities either for security or electric power generation. Most of the world's states do not face an extant security threat

and as a result have no need for nuclear weapons. So how does one resolve the issue of the needs of the few outweighing the needs of the rest?

A framework that explains the need to eliminate nuclear weapons would have to be able to explain the requirement in a power-based way for nuclear weapons states and regionally threatened states while adding in normative based procedures that provide appropriate transparency and irreversibility to reassure the rest of the international system. As an example of initial steps taken by the United States and Russia, efforts like the Nunn-Lugar Cooperative Threat Reduction Program, offer appropriate economics based incentives to comply with treaty requirements while building a sufficient level of trust between the participants. Removal of the Libyan WMD programs under international supervision is another example. States have to see the alignment of short-term interests with long term international goals in order to decide to comply with established multilateral norms. Regardless of the internal rationale for making the decision to disarm, the international community must be prepared to support that decision in the long term. Financial and political incentives are likely key to such efforts.

Nuclear weapons states like the P5 will find it difficult to disarm without sufficient mutually reinforcing behaviors on the part of the other states. For example, the United States would have to refrain from attempting to describe China or Russia as a potential military competitor in such documents like its Nuclear Policy Review. The recently completed 2010 Nuclear Policy Review is far more nuanced in describing potential adversaries than previous reviews. De-alerting nuclear forces and allowing IAEA or at least bilateral confidence building, inspection and verification efforts to become routine practices among all nuclear states would be essential to advancing toward

the NPT goal. Support for these activities is well within the power-based side of international relations theory and are proven methods that were used in completion of the INF Treaty as well as the Conventional Forces in Europe Treaty. The Conventional Forces in Europe Treaty provides a better fit for any multilateral nuclear disarmament program than the bilateral INF Treaty.

The non-nuclear weapons states would provide a ready pool of support for the development of additional inspectors and negotiators who could offer and insist on changes to strengthen the NPT. Efforts in the past have been stalled by nuclear weapons states that were for a number of reasons unable or unwilling to commit to changes that did not seem to reassure them that the potential for cheating was eliminated. Given the far more integrated international environment, efforts to educate state elites on the history, theory and implications of nuclear weapons to all states are likely far more influential and simplified than during the Cold War. In a recent NPT Review workshop held in the Philippines, the Republic's Foreign Secretary expressed concern for the need to work for an improved NPT in order "to benefit Filipinos, especially those living and working overseas."

His nation was proud to lead the effort "because it is in our national interest to strive for a world free from the threat of these devastating and inhumane weapons. There is not a single corner in this small world of ours where you will not find a Filipino who could be adversely affected with the use of nuclear weapons."²⁴ This view is likely felt by a majority of non-nuclear weapons states and contains both the norm of disarmament enshrined in the NPT as well as alignment of state interest in protecting its people from

²⁴ Jerry E. Esplanada, "RP riding high, heads nix nuke conference," Philippine Daily Inquirer On-line edition, January 31, 2010, <http://newsinfo.inquirer.net/inquirerheadlines/nation/view/20100130-250247/RP-riding-high-heads-nix-nuke-conference> (accessed February 5, 2010).

nuclear threats without using military force as a response. Leadership in the NPT Review by a non-nuclear weapons state is a significant opportunity for the normative focused states to engage the nuclear weapons states in a common effort to disarm. Support in this effort from the United States and other nuclear weapons states will be critical. Access to other states academic research, historical studies, as well as cultural experiences that would help states with little knowledge of the impact of nuclear weapons both from a security or power based perspective as well as a societal or social impact such as that of the Japanese, Russians and Americans. Reform of the United Nations Security Council to allow increased influence of states with a normative view of security issues might be another important step toward the goals of the UN Charter and NPT.

Full U.S. support to the NPT community and its goal of total disarmament would have to be a prerequisite to the required further bonding of all states to the norms of this regime. From the NPT's initiation through each of its key stages including the 1995 decision to permanently extend its mandate, each positive step has occurred with the full support of the United States. The current difficulties in further solidifying the treaty's norms have also been in part due to incomplete U.S. support for these initiatives. The upcoming 2010 NPT Review will likely succeed or fail on U.S. support for any recommended changes. The U.S. sponsored initiatives spring from President Obama's April 2009 Prague speech provide growing reason for optimism.

A security regime that is strengthened by universal state acceptance and evidenced by state behavior in compliance with its rules and norms is seen to be providing a needed public good to participating states. How states' view of their future in terms of security is important to how they will likely behave in reaction to this view.

Robert Axelrod's description of cooperation among states or "lengthening the shadow of the future" is useful for both nuclear weapons states and non-nuclear weapons states in terms of how they will view future NPT efforts. The United States must seek to reinforce the NPT through a range of activities that both reduce the threat of a nuclear event in the near term and eventually eliminate it altogether thus lengthening the shadow of the future for all states. The public goods that this leadership would produce include freedom from nuclear threats, attacks or accidents as well as opening up the opportunities for economic benefits that come from nuclear power based electricity production. The United States has the requisite position and power to help all states adjust their cost versus benefit calculation of trading in weapons for economic property and the security that comes with increased wealth. Similarly, the United States should continue the tradition of bilateral negotiations with Russia until these states' arsenals reach an equivalent level with the other nuclear weapons states when an increasingly multilateral negotiation under the NPT norms should be developed.

CONCLUSION

This dissertation has examined the hypothesis that the United States must reassert a position of leadership through multilateral cooperation to develop appropriate nuclear arms policies that effectively reestablish worldwide controls, continue reduction of nuclear arms toward the NPT goal of nuclear disarmament. Without the development of a set of U.S. national policies to support the reestablishment and sustainment an international nuclear non-proliferation regime, U.S. attempts at leadership in the nuclear issue area will not likely be fully effective and are likely to result in a continuation of the

weakened nuclear non-proliferation regime. Without significant renewed efforts to do so, the United States and its allies will likely be faced with increasingly complex and persistent challenges to the nuclear “rules of the road.” From a social science perspective, this study examined the interaction of international nuclear treaties as a dependent variable and U.S. leadership in nuclear arms control and non-proliferation as an independent variable. Specifically, this study is based on the idea that the degree to which the United States forms and implements effective policies that lead to participation in nuclear arms control will result in a direct, positive enhancement of international security from the threat of renewed proliferation and potential use of nuclear weapons. Said another way, states will more likely adhere to a nuclear arms control regime, rejecting the pursuit of nuclear arms as the United States increases its participation in nuclear arms control and disarmament. One key finding of this research is the inherent weaknesses of bilateral treaties should lead states to overcome the difficulty of establishing multilateral agreements on nuclear arms. Bilateral treaties can serve as an important building block for multilateral efforts toward disarmament but must eventually be widened to include more states. One can envision the nuclear issues consolidated into a single regime where Jervis’ definition, “those principles, rules, and norms that permit nations to be restrained in their behavior in the belief that others will reciprocate.”²⁵ These issues can and should be treated together in order to reach a level of cooperation that is more than operationalizing short-term interest of certain states as Jervis suggests.

The case studies provide evidence that power does still matter but states can and should consider the long term implications of placing their pursuit for relative gains for their individual security in the short run over the absolute gains such as disarmament

²⁵ Jervis, "Security Regimes," 357.

provides to all states. Recent statements of the President and Vice President backed by actions such as the new START agreement and the 2010 Nuclear Posture Review indicate that the United States is once re-energizing U.S. Nuclear Arms Policy and acting as a leader in the international community toward the NPT goals. If one accepts as the NPT preamble statements, "Considering the devastation that would be visited upon all mankind by a nuclear war and the consequent need to make every effort to avert the danger of such a war and to take measures to safeguard the security of peoples, Believing that the proliferation of nuclear weapons would seriously enhance the danger of nuclear war," then given the current security environment, a rational acting nuclear weapons states would have difficulty seeing the requirement for nuclear weapons on purely security concerns. Additionally, if one accepts the power of one state to influence the nuclear issue area as dramatically as the United States has, then one should expect other states including Russia also seek to influence as well. What is needed in this era of globalization where polarity has decreasing explanatory power is an agenda set by one of the more powerful states that can lead others to cooperate and ultimately engage all states in a common goal, in this case nuclear arms reduction leading to disarmament. This research has suggested both a theoretical and a practical framework for achieving the non-proliferation goals of the NPT, a stated goal of all but a handful of states and now the restated goal of the United States. Additionally, this research suggests that the existing bilateral relationship between the United States and Russia provides a useful example of cooperation below the multilateral level that can be useful in setting an example for other states to follow on reducing the value each place on nuclear weapons as a part of their national security policies.

RE-ENERGIZED U.S. NUCLEAR ARMS POLICY: A FRAMEWORK FOR SUSTAINED PROGRESS

Recent events and activities, primarily from the United States, are both a positive indication of a return to the unfinished business of the post Cold War and an awakening of the international community of the requirement to complete the work of the NPT. The Obama Administration as this dissertation suggests is best positioned to lead multilateral effort to eliminate nuclear weapons and can serve as facilitator of increased dialog between power and normative framed states. The United States in the last year has called for a renewed agenda of arms control and non-proliferation leading toward eventual disarmament beginning with President Obama's April 2009 speech in Prague and continuing through the May 2010 NPT Review Conference. This short period has witnessed a new START Treaty being signed by the U.S. and Russian presidents, the completion of the third U.S. Nuclear Posture Review which called for a renewed focus on non-proliferation to prevent nuclear terrorism, an unprecedented U.S. hosted Nuclear Security Summit where 47 nations committed to securing the world's nuclear material within the next four years and the NPT Review Conference. After more than a decade of little to no progress on nuclear arms control and a number of disturbing developments in proliferation of nuclear technology and even nuclear testing, this renewed focus on the nuclear issue is both supported by this research and cautiously welcomed by the international community. What remains to be seen is whether or not these steps will continue to build into a sustained march toward the NPT goals. If the United States is to retain its leadership position as this research recommends, a broader policy framework which includes the current U.S. stated policies and more is required.

The United States will need to work to reinforce and sustain non-proliferation regime which is the foundation of the needed actions required to achieve nuclear disarmament and to assist the international environment to remain “nuclear arms free.” As a part of this effort, the United States will need to simultaneously support overall security of all states while improving bilateral relations with Russia and China in order to gain their cooperation on regional issues. This is both a part of the President’s stated policy from the Prague Speech and is a prominent part of the 2010 Nuclear Posture Review.²⁶ As this dissertation argues, the United States as the “strongest” power based (neorealist framed) state, is best equipped to assist in increasing complex interdependence among both power based and normative states. This unique position also provides the United States with opportunities to offer solutions to regional security issues in cooperation with other power based states like Russia and China. The central focus of the U.S. effort should be to lengthen the shadow of the future for power based states such as Russia, China, India, Pakistan, Iran, North Korea as well as their neighbors. As the level of nuclear arms held by the United States and Russia falls to a level nearly equal to the other major nuclear weapons states, the regional issues become the only significant state level security concerns that would prompt their elites to require nuclear weapons as a counter to those threats. At time unique but multilateral formations of states such as those currently dealing with the Iranian and North Korean issues will be required with support of the United States key to their success.

Even if successful in developing consensus among power based states, the United States will have to also offer support to normative based states (neoliberal institutionalist

²⁶ Department of Defense. “Nuclear Posture Review Report,” *Department of Defense website*, 2010, xi, 47. <http://www.defense.gov/npr/docs/2010%20Nuclear%20Posture%20Review%20Report.pdf> (accessed June 15, 2010).

framed) through appropriate for a which will remind power based states of their international obligations and the benefits available in other areas than military security from cooperation. If the United States is successful in dealing with only a limited amount of states on both nuclear issues and regional conflicts, those normative based states that do not see any benefits could potentially determine that a change to power based views and associated military solutions is the best means of lengthening their shadows of the future. As the world's largest economic power, the United States, despite its current economic downturn, is most able to leverage its substantial economic and political power to limit the requirement for military power in these states. While the advantages of conventional military power will likely become more apparent as nuclear weapons are eliminated, the United States will need to become adept at leveraging the rising international credibility gained from all efforts to shift the international community from conflict to cooperation. The series of activities on nuclear issues currently underway should eventually result in the United States being recognized as the only state to have recently offered a public plan to reach nuclear disarmament and acted on those stated intentions. This state leadership should result in the United States gaining international moral authority and respect reversing a decade of decline in both.

ENGAGING RUSSIA AND CHINA: KEY TO MULTILATERAL SUCCESS

To succeed in shifting the international agenda from primarily focusing on security threats which nuclear weapons represent the ultimate response to them, the United States will need to continue to engage Russia and China. As has been argued in this dissertation, the return to prominence of arms control between Russia and the United

States will likely have the beneficial impact of restoring a long neglected strategic relationship formerly between opponents. As the United States considers how to continue to engage Russia, the renewed relationship should be update to an appropriate form that fits with the current environment. From a security perspective, the United States needs to assist its NATO Allies to develop a more useful relationship with Russia as has been suggested by the NATO Secretary General.²⁷ If multilateral security relationships as successful as NATO have had normalizing impacts on its members, then adding Russia to the seats at the table in Brussels would seem an appropriate goal. If the Alliance remains distrustful of the Russia's policies, then the price of admission should reflect the changes desired on the part of both Russia and its members alike. Without some willingness to incorporate Russia into the "Euro defense" discussion in a serious and permanent way, continued divergence on both policy and action will most likely continue. This effort also would have significant advantages when the focus is shifted to resolving other regional conflicts as Russia is a part of the equation in virtually every one of them.

²⁷ In a recent speech , NATO Secretary General Anders Rasmussen outlined his vision for an improved NATO/Russia relationship, "But continuing NATO's Open Door policy is only part of the answer to Europe's consolidation. We also need a new relationship with Russia. Indeed, I firmly believe that a much improved relationship between NATO and Russia would be the best reassurance of all, to all our nations. That is why I have invested a lot of time and effort, ever since I took office, in building better relations with Russia. There has been progress in a number of areas, including our joint review of common threats and challenges. But there is a lot of work still left to do. We continue to have our differences, not least about NATO's Open Door policy. There are also profound concerns, all across our Alliance, about Russia's policy vis-à-vis Georgia. We think Russia sends the wrong kind of signal by conducting military exercises that rehearse the invasion of a smaller NATO member. Let me stress, NATO is not a threat to Russia and will never invade Russia. Nor do we consider Russia a threat to NATO. That is why Russia's new military doctrine does not reflect the real world. It contains a very outdated notion about the nature and role of NATO. But we must not let these differences hold the entire NATO-Russia relationship hostage. After all, NATO and Russia also have many common interests – in Afghanistan, in combating terrorism, and in preventing nuclear proliferation. We need a NATO-Russia relationship that allows us to pursue these common interests, and which will not de-rail every time we disagree. I will continue to work for such a strong, trustful NATO-Russia relationship. And I am confident that NATO's new Strategic Concept will underline the determination of all our nations to make it a reality." Excerpted from SECGEN Speech, http://www.nato.int/cps/en/natolive/opinions_62143.htm (accessed April 7, 2010).

A similar arrangement with China is not as simple to develop as their region has no similar NATO structure. However, China has been essential to the process of engaging with North Korea on their nuclear program. China's own nuclear program while limited in scope compared to others, the opaqueness of their policies, doctrine, force modernization and targeting creates difficulties when other states consider arms control. The recent U.S. hosted Nuclear Security Summit invitation was accepted by China which along with the upcoming NPT Review Conference allows the United States two opportunities to encourage discussion on the future of nuclear weapons in Chinese thinking. Given the significant level of interdependence of the U.S. and Chinese economies, shaping of the international security agenda to allow China to participate actively, to be understood and to be engaged will have lasting benefits both for the region as well as globally. Essential to a wider engagement of China by the United States is the use of multilateralism such as is being done on the North Korean issue. Without a specific international institution that focuses on regional issues important to China and her neighbors, the United States will need to carefully seek opportunities to start and continue multilateral dialogs that assist in lowering tensions in the region and begin to develop positive relationships both among the regional states but also globally. Long standing conflicts such as the Kashmir issue, border disputes, terrorism, human rights issues have not been resolved through bilateral means but may yield to a renewed multilateral effort backed by the United States.

Engagement of Russia and China must be more than just on a security level to be successful but the current nuclear "moment" allows a significant opportunity to attempt to broaden engagement with these key states from one of avoiding conflict to one of

resolving conflict. Engagement with these two states should be done on several parallel levels, economic, political, security and social with only loose linking of expectations. Quid pro quos should not necessarily be expected in the short run to avoid the “linking of issues” problem experienced by Carter when he tied advancement of human rights in the Soviet Union to further arms control negotiations. What can be expected is the development of a deeper interaction between the states on a range of issues that is designed to at least minimize misunderstandings and open up opportunities for cooperation.

MORAL OBLIGATION TO LEAD: RISKS REMAIN DRIVING A BROADER U.S. NUCLEAR AGENDA

While responsible for nearly half of all nuclear weapons produced, the United States has been in the lead of every successful attempt to limit nuclear arms and seems once again assuming that role. As President Obama has observed the goal of nuclear disarmament will not likely be achieved in his lifetime, the United States has an obligation to do all it can to work toward it. The research of this dissertation supports such efforts which in the long run, say a century from now, will matter. The three case studies in this work have highlighted the strengths and weaknesses of the efforts to date to control and reverse proliferation of nuclear arms. The renewed effort to continue the reduction of strategic nuclear arms embodied in the new START agreement between the United States and Russia will cut these systems by a third which is an encouraging new step in the right direction. But a great deal of further arms control needs to be done to reach the NPT goal.

As the case studies on the ABM and strategic arms reductions describe, bilateral negotiations are important but have significant limitations. The participation and support of the United States were essential to the success of these agreements and appear to have been the drivers behind the new START. As this process moves forward to deal with a range of remaining systems and issues, the limitations of bilateral negotiations and agreements must be recognized and anticipated. Specifically, the issue of the degree of sovereignty lost by a party state must be perceived as appropriate for security gained through the reductions. Some have argued that the easier reductions have already been made which in turn poses the ultimate challenge for state leadership on the part of the United States: how to reassure all parties of the value of the gain from a reduced number of nuclear arms. The current focus on preventing proliferation to terrorist groups may prove a sufficient reinforcement and incentive to continue reductions. Until a level near the other nuclear weapons states is reached, approximately 500 strategic weapons, the other nuclear weapons states will remain on the sidelines and the fragility of a bilateral agreement will remain.

As with the ABM case where the Bush Administration decided an older agreement no longer fit the security environment, a similar perception of threats could reverse the gains of the new START. Missile defense, a continuing goal of the United States, continues to be viewed with suspicion in Russia as having the potential to negate the remaining Russian ICBM force, which remains a key support of their great power perception of their state. The United States may have been successful in helping Russia see U.S. missile defense efforts as focused on other states as the states negotiated the new START deal. President Obama may have offered to include Russian experts as Reagan in

the development of missile defense did at Reykjavik only to be rebuffed by Gorbachev. If so, events would seem to support a positive response from Medvedev which signals the prospect for a far more positive relationship. In a further sign of a more appropriate post Cold War relationship, the new START verification and inspection protocols reportedly allow each side to both be more transparent and less negatively intrusive due to advancements in the technology used to accomplish these processes. Once this relationship matures, the potential for progress in a wider set of negotiations will likely increase.

Beyond the immediate goal of reducing strategic nuclear arms, the wider issue of the U.S. role and support in efforts to secure nuclear material and reduce weapons below the strategic system level remains the more critical issue impacting the health of the NPT regime. The NPT regime remains weakened or under stress from proliferators, non-signatories and breakout states. A lack of complete security on materials and tactical nuclear systems contributes to this problem. Despite a great deal of work to deal with these problems through programs such as the Proliferation Security Initiative and the Global Initiative to Combat Terrorism, a lack of US support to the 2005 NPT Review Conference provided mixed signals to the international community on the degree of U.S. support to the goals of the treaty. Through the past decade, the U.S. backed both efforts to control North Korea and Iran but had a more inconsistent record with respect to other states' nuclear programs such as Pakistan and India. With a return to a more focused and comprehensive approach to nuclear issues, the United States will need to insure actions including appropriate funding support follow words. The U.S. sponsored Nuclear Security Summit would seem to be an appropriate "informal" pre-NPT Review

Conference to gauge nuclear weapons states positions, particularly Russia and China, for reinforcing the NPT and widening future nuclear security discussions. If the U.S. nuclear agenda is to progress, the 2010 NPT Review Conference would seem an important moment for the U.S. to positively engage.

Assuming the U.S. remains for the immediate future the most powerful state in the international system, what can the U.S. do to improve the maintenance of the nuclear security regime and the international security environment? As was mentioned earlier, the ball is rolling toward implementing the recommendations of President Obama's Prague Speech. The key treaty elements of this program are now beginning to take shape including the new START agreement signed on the one year anniversary of President Obama's Prague Speech, a push to ratify the Comprehensive Test Ban Treaty (CTBT) and a call to negotiate and ratify a Fissile Material Cutoff Treaty (FMCT). The CTBT and the FMCT once completed would essentially place a permanent limit on state's ability to produce new nuclear material for weapons and constrain new weapons testing. These two processes are seen as essential to further limiting the entrance of any new nuclear states. In support of these normative measures for the international community, President Obama called for increased support for inspections, primarily through funding of the IAEA, the development of a cooperative civilian nuclear fuel bank to assist in achievement of the NPT goal of supporting peaceful uses of nuclear energy while limiting opportunities for proliferation and consideration of stronger consequences for rule breaking of the non-proliferation regime. One example of his commitment to this last policy was seen in the President's direct discussions with the Chinese leader Ho Jin Tao during another of his stated goals, the U.S. hosted Nuclear Security Summit in April

2010, where he sought a Chinese commitment to support additional sanctions against Iran's nuclear program.

Additionally the President's nuclear arms policy agenda includes support to strengthening the global regime to stop proliferators with specific emphasis on reversing North Korea's nuclear program and preventing further proliferation from that state while seeking to engage Iran in a multilateral dialog. At present, the latter effort seems to be developing into a classic carrot and stick approach as Iran is unwilling to either engage in such a dialog or slow its progress toward achieving nuclear weapons capability which they continue to categorically deny is the aim of their nuclear program. Beyond dealing with these two states, the U.S. President's ultimate policy goal is to prevent terrorist groups from possessing a nuclear capability. To achieve this end, the United States is supporting all efforts to secure all nuclear material that could be transferred to such groups by 2014. During the Washington Nuclear Security Summit at least two states offered to have the United States to secure their material immediately while the conference concluded with a 47 state commitment to the U.S. goal of complete security in four years.²⁸ These policy initiatives demonstrate two parts of the central argument of this dissertation in action: U.S. leadership in the international community on the nuclear issue and the potential power of multilateral efforts like the Nuclear Security Summit.

The United States has also stated several policy changes to demonstrate the seriousness and long term nature of the commitment being made to the NPT goals. The President has stated his full support for having durable international institutions continue

²⁸ Chile, Mexico and Ukraine have committed to immediately transfer their civilian HEU for disposal. See Daryl G. Kimball, "New START Good for U.S. and International Security, Deserves the Senate's Support," Arms Control Association website, 2010. <http://www.armscontrol.org/pressroom/NEWStartStatement> (accessed April 15, 2010).

to assist states in reaching a world free of nuclear terror, most notably in Prague, identifying the Proliferation Security Initiative and Global Initiative to Combat Terrorism as examples. The actions of the United States at the NPT Review Conference will no doubt continue to provide clear support for that multilateral international institution and its non-proliferation regime. In a parallel policy development, Vice President Biden, in a major policy speech given in February 2010 at the National Defense University, reaffirmed the United States nuclear policy agenda outlined in Prague and added the President's intent to stabilize the existing government nuclear enterprise with funding to modernize U.S. nuclear labs, hire specialists to work nuclear reductions, and assure reliability of the remaining nuclear systems. Included in the Vice President's remarks was a commitment to increase U.S.-Russian verification transparency in new START agreement. The April release of the 2010 Nuclear Posture Review Report provided a restatement of the United States commitment to these policies as well as several additional specific steps to advance the overall agenda.

The 2010 Nuclear Posture Review while aligning with the Prague Speech nuclear agenda was the product of much internal debate between the White House and the Department of Defense. In the end, the review reaffirmed the importance still remaining for U.S. security of the nuclear deterrent. The review also placed constraints on the United States that previous reviews had not been willing to do. The 2010 Nuclear Policy Review focused on five objectives that frame U.S. nuclear arms policy:

1. Preventing nuclear proliferation and nuclear terrorism,
2. Reducing the role of U.S. nuclear weapons in U.S. national security strategy;
3. Maintaining strategic deterrence and stability at reduced nuclear force levels;

4. Strengthening regional deterrence and reassuring U.S. allies and partners;
and
5. Sustaining a safe, secure, and effective nuclear arsenal.²⁹

At the center of these objectives is the explicit restatement of the U.S. commitment “to bolster the nuclear non-proliferation regime and its centerpiece, the NPT, by reversing the nuclear ambitions of North Korea and Iran, strengthening International Atomic Energy Agency Safeguards and enforcing compliance with them, impeding illicit nuclear trade, and promoting the peaceful uses of nuclear energy without increased proliferation risks.”³⁰ The Nuclear Policy Review also reaffirmed the Prague goals of aggressively pursuing arms control efforts including the new START agreement, “ratification and entry into force of the CTBT and negotiation of a verifiable Fissile Cutoff Treaty.”³¹

Included in the Nuclear Policy Review actionable policies was the clarification of circumstances where nuclear weapons would not be used, specifically, the United States “is now prepared to strengthen its long-standing ‘negative security assurance’ by declaring the United States will not use or threaten to use nuclear weapons against non-nuclear weapon states that are party to the NPT and in compliance with their nuclear non-proliferation obligations.” This provision has already spurred criticism for departing from the long standing position of “having all options on the table” when dealing with potential aggressors but as has been earlier discussed, this policy change is fully in line with the concept of providing states considering their security from a purely power based view a strong incentive to resist selecting nuclear weapons as a means to do so. Equally important to reestablishment of the leadership role for the United States, the Nuclear

²⁹Department of Defense. "Nuclear Posture Review Report," *Department of Defense website*, vi.

³⁰ Ibid., vii.

³¹ Ibid.

Policy Review makes clear the U.S. interest in a permanent extension of the non-use of nuclear weapons that has held for 65 years.³²

Among the specific initiatives described in the 2010 Nuclear Policy Review Report, the United States has committed to a deepening of bilateral dialogs with Russia and China on nuclear issues to seek “strategic stability,” conduct follow-on analysis that will identify the next set of strategic arms reductions for negotiation with Russia, work with Russia to deal with non-strategic nuclear weapons both deployed and non-deployed, and implement any reductions to the nuclear arsenal “in ways that maintain the reliability and effectiveness of security assurances to our allies and partners.”³³ In a clear indication of the United States’ multilateral intentions, the Nuclear Policy Review Report states that allies and partners will be consulted on the appropriate approach to post-New START negotiations. The Nuclear Policy Review Report concludes that while the conditions to achieve a world without nuclear weapons do not yet exist, the United States believes that NPT goal is achievable through working actively to create them.

GETTING TO UNITY OF EFFORT: EXPANDING MULTILATERAL NUCLEAR DISARMAMENT EFFORTS

United States must also begin to shape the long term security environment in terms of progress toward nuclear disarmament beyond the above steps. Specific issues to be addressed both in pursuit of above objectives and disarmament in the long run must solidify the multilateral nature of the effort which seems to be the goal of the emerging United States nuclear arms agenda. As this dissertation has shown, bilateral negotiations

³² Ibid., ix.

³³ Ibid, xi.

have limits that can be stronger in the long run than the short term achievements of their agreements. The conditions for a stronger and more dynamic multilateral effort with the original five nuclear weapons states are in place. The United States leadership is essential to moving this group beyond any lingering Cold War rooted political, military or other relationship.

The long term plan for strategic arms reductions should include an effort to bring the P5 to a common negotiation which has yet to be suggested formally. These states control all but less an estimated 500 of the world's nuclear weapons and no longer threaten other members of this group. Combined with their status on the UN Security Council, they should seek out means to follow the renewed leadership of the United States on strategic nuclear weapons. The April 2010 Nuclear Security Summit was attended by the leaders of these states and as discussed earlier each has committed to the goal of securing the world's nuclear material and are engaged either directly or indirectly with the North Korean and Iranian issues. This working relationship should be strengthened and made routine to build confidence and trust between them ultimately removing any risk of accident or miscalculation among them. Such an arrangement is a natural outgrowth of the U.S. Nuclear Policy Review recommendation to further develop the Russia and China bilateral relationships with the United States.

As the original nuclear club shows maturity and forward thinking on concentrating their collective efforts to move toward the NPT goals, they will also need to work to merge arms control efforts with disarmament and non-proliferation agenda. The United States has already identified the initial steps required and has demonstrated a significant change in direction from the immediate past. Ultimately, other states must

cooperate. As this dissertation describes, the example of one state followed by other power based states, which each of the P5 are, opens the potential for cooperation toward the NPT goals. What remains as a significant challenge for the United States is to continuously and steadfastly reinforce the gains each state will derive from the new nuclear agenda. As the United States begins to achieve success in lengthening the shadows of these states, engagement of the normative based states should quickly align all but the few outlying states in working to achieve the NPT goals. The speed at which the 47 states attending the U.S. sponsored Nuclear Security Summit is a strong indicator of the potential of this concept to succeed. The willingness of Russia and China to work to develop “smart sanctions” for Iran shows progress on gaining support from power based states as well.

A range of follow on discussions and activities focused on confidence building measures that lead to consensus building where these states work toward common goals such as was done in the immediate Cold War period experiences of the Conventional Forces in Europe Treaty and the NATO Partnership for Peace is the obvious next step. Here again the United States is best positioned to organize and lead these activities. Once the nuclear agenda shows significant progress the next layer of issues particularly the resolution of lingering regional security issues will become most obvious and important to resolve. Without unity of international effort, lengthening the shadow of the future for Israel, Iran, North Korea, India and Pakistan and their neighbors will remain problematic.

For the immediate future, the United States must continue to responsibly negotiate continuing reductions in two largest nuclear inventories (U.S. and Russia) adding international verification while increasing irreversibility and transparency. This

negotiation should begin immediately to capitalize on the momentum of this “nuclear moment.” The history of successful strategic nuclear arms control negotiations does not favor pauses in their process. The 2010 Nuclear Policy Review suggests the United States is committed to further reductions and inclusion of sub-strategic weapons which are the most likely objects of theft, accident or other incident. What has become apparent in the last forty years of arms control and reductions especially in the post Cold War experience is that the economic component of the process dominates the other components. The Nunn-Lugar efforts and others have provided both the model and economic path to remove any incentives to resist reductions due to a lack of host nation funding. The United States needs to find the resources to continue these efforts to conclusion in a manner that eliminates any fluctuation based on shifts in political support. The most important by product of this modernized bilateral relationship is sustained “adult like” behavior on the part of both states which in turn serves as example to all states of need to continue toward goals of the NPT and uphold the related international agreements. U.S. State Department has reportedly been given this guidance from the President but at the moment there is uncertainty as to Russian willingness to build on the current momentum. One means of gaining Russian support for the nuclear agenda would be a further “embrace” of Russia in the European security discussion. The NATO Secretary General has suggested the Alliance move rapidly toward doing so.³⁴

As the relationship between the P5 modernizes, the United States must be willing to take the lead under international supervision serve as the recipient of any international nuclear materials for conversion from military use or to prevent such use. If a state

³⁴ Anders Fogh Rasmussen, "NATO's New Strategic Concept - Global, Transatlantic and Regional Challenges and Tasks Ahead."

wishes to retain nuclear material, the United States needs to be ready to provide any assistance required to insure these materials remain secure and out of military use. The nearly immediate acceptance of assistance from Mexico, Ukraine and (another state, see news) during the Nuclear Security Summit shows the requirement and the United States needs to be prepared to respond with all available speed. This was the standard during the immediate post Cold War period when the three former Soviet Republics denuclearized and should be fully embraced in this renewed period of nuclear non-proliferation activity. If the United States is unable or unwilling to do so, reinforcement of President Obama's stated policy and goals will become very difficult. A similar emphasis on providing other states with experts who can assist in developing the appropriate documents and political rationales for negotiating and ratifying the CTBT and FMCT should be led by the U.S. Department of State. This outreach effort would not only demonstrate the positive nature and commitment of the United States to its stated agenda to the international community, it would potentially provide reinforcement of the value of U.S. leadership to the members of the Senate who would need to be convinced of the need to ratify these treaties.

The United States should also demonstrate leadership by more than calling for more financial support of the IAEA by supporting the placing of this critical UN agency at the center of providing transparency of all states engaged in nuclear programs. As a part of its efforts to widen the multilateral nature of arms control leading to non-proliferation and eventual disarmament, the United States must seek wider international acceptance of IAEA as controlling authority of nuclear arms inspections, verification, destruction, and governing of appropriate procedures for civilian nuclear energy programs. One of the keys to this effort would be increased transparency of U.S.

programs to international inspection. The United States need to continue to allow all the same processes it has asked other states to accept on their programs as a clear demonstration of support for the IAEA, a rejection of any “do as I say, no as I do” attitude. As the 2010 Nuclear Policy Review has stated, the United States does not intend to modernize any existing systems beyond requirements to assure their continued reliability which the IAEA can and should monitor. The United States is committed to both continued security and reliability of its nuclear deterrent and should leverage IAEA oversight throughout these efforts to reinforce the new nuclear agenda. Along with this security and surety commitment, the United States needs to allow the IAEA to verify that the 2010 Nuclear Policy Review commitment not to build any new nuclear systems, to refrain from any testing of weapons.

Support for UN and IAEA efforts to widen nuclear and alternative energy sources with sufficient restrictions and controls to prevent diversion of nuclear materials to weapons development is another significant area which U.S. support and expertise will be critical to the nuclear non-proliferation agenda. President Obama’s suggestion of an international nuclear fuel bank open to all states with a desire for nuclear energy production is well within the realm of the possible. One former Soviet plant is already in place for this function and producing fuel for a number of states. The dual goal of such a project is to solve the nuclear fuel supply problem to NPT compliant states while negating need or desire to build national capability to produce fuel. As was seen in the Soviet example, states can choose to build dual use nuclear facilities that would only increase the requirement for international controls and at the same time continue to provide states the opportunity to defect from the NPT regime.

As has been seen in the decade of combating terrorism, keeping those groups who do not want to operate within the rules and norms of the international system are difficult to fully interdict. Several groups have stated their desire to acquire nuclear weapons by any means. Preventing this circumstance is the stated goal of the United States with the near universal support of the international community. Each of the non-proliferation efforts described in this chapter is ultimately aimed in eliminating the use of nuclear weapons completely. States remain the dominant powers in the international system to deal with this threat. The United States has led international efforts in a number of ways, some accepted, and some not as much to deal with terrorism and so far the international community has not suffered a nuclear terrorist attack. Continued leadership of the United States to secure all nuclear material, support the growth of durable international institutions such as the PSI, the Global Initiative to Combat Nuclear Terrorism, and most importantly the UN and the IAEA while seeking to increase the binding together of individual states to prevent nuclear capabilities from reaching these groups is essential. The United States leadership on UNSCRs 1540 and 1887 are a clear demonstration of U.S. support for a multilateralist approach to nuclear issues. Both of these UNSCRs align and are mutually reinforcing of the NPT and the policies of the U.S. nuclear agenda. As the state that brought the world both the nuclear weapon and the UN, continued support through this international institution is essential to fostering the required increasing interdependence and cooperation of the international community to finally remove the fear of nuclear threats and destruction.

Earlier in this chapter, the rise of individual voices to deal with the nuclear disarmament issue before terrorists strike was mentioned. One prominent group includes

two former Secretaries of State, a Secretary of Defense and a former Senator joined together to call for immediate and complete disarmament of nuclear weapons with this terrorist threat as central to their argument. George Schultz, Henry Kissinger, William Perry and Sam Nunn in a series of Wall Street opinion editorial pieces and most recently an hour long video appeal have highlighted the much changed international security environment and suggested a number of requirements to ultimately eliminate this emerging threat of nuclear terrorism. Many of the current policies of the U.S. renewed nuclear agenda are supported by these statesmen. Their appeal calls for U.S. leadership in a multilateral effort which includes the stated goals of the Obama Administration to secure of worldwide stocks of nuclear material, implement substantial reductions of existing nuclear arsenals including elimination of short range battlefield nuclear weapons, identifying the requirement for the CTBT and strengthening verification and enforcement capabilities. Their effort in support of the Nuclear Threat Initiative, called the Nuclear Security Project (NSP), also recommends developing cooperative missile defense and early warning systems, developing a new international system to manage the risks of producing fuel for nuclear power, and phasing out the use of highly enriched uranium in civil commerce. The NSP group's potentially most controversial recommendation was their call for discarding Cold War practices for U.S. and Russian nuclear forces to decrease the danger of accidental, mistaken or unauthorized launch. Essentially, this last recommendation would "de-alert" or stand down those nuclear systems that remain on alert for rapid response and launch. Their argument is supported by the difficulty of using these systems to retaliate against a terrorist attack if this scenario seems to be rising over time as the fear of a nuclear war for which the alert is designed to respond fades.

If the ultimate goal of the NPT is to be achieved, a truly universal effort on the part of the United Nations will be required. From the more theoretical and political problem of finding an appropriate set of explanations for power based states to accept a world without nuclear weapons to the smallest detail on an IAEA inspectors' checklist, the unifying goal of nuclear disarmament and the potential gains from a vastly more complex interdependent world would seem more than worthy of the effort. Bilateral efforts of the past have been slow to achieve and ultimately what progress was achieved was at best incremental and subject to changes in the domestic political environment. Renewed emphasis on the U.S. and Russia arms control relationship should be seen as a part of a much larger effort to achieve the goals of the NPT and the formation of a new international environment where military forces are not the best means for resolving conflict. Given the willingness of the Obama Administration to push forward a significantly different nuclear arms policy agenda than he inherited, leadership by the United States at a key moment in the NPT regime has significant potential for positive movement toward its goals. Sustainment and cooperation by the P5 states of this effort will likely cause a significant shift in global attitudes toward the international security environment and the place of nuclear weapons in it. The United States has already taken the important steps on a delayed journey toward nuclear disarmament. This return to the unfinished business of the Cold War is long overdue and far more likely to succeed than resigning the world to live in a very short shadow of the future.

SUGGESTED FUTURE RESEARCH

While recent events have moved the nuclear disarmament discussion to the forefront of the international policy agenda, other pressing matters will inevitably cause the issues involved to return a lower state of interest fairly quickly. What will remain important is the need to continue to work toward the goals of the NPT and to renew research within international relations to better describe the security environment of today and the future world as we approach disarmament. In an important policy shift, U.S. nuclear arms control policy has been significantly updated to support this effort beginning with President Obama's Prague speech in April 2009. This dissertation research fully supports continuing U.S. support for multilateral nuclear arms control in support of the NPT goals with disarmament the constant long term objective.

Additionally, this research suggests that the global security environment has significantly shifted since the end of the Cold War and continues to accelerate away from traditional realist explanations particularly since the terrorist attacks of September 11, 2001. This research has suggested a basic hybrid theory for addressing the explanation gap between power and normative focused states as a means of addressing the need to strengthen multilateralism to end nuclear proliferation and reach disarmament.

In order to expand the discussion within the international relations field, this dissertation suggests three areas that would provide useful new avenues of research: characterization of non hegemonic single state leadership in multilateral efforts, implications of the merging of international agendas, and the need for new thinking on nuclear disarmament. As this research recommends, the United States is best positioned to assert leadership in the international environment. However, the traditional view of

that hegemonic (benevolent or not) leader state, as one could assert the United States attempted to be after September 11, 2001, requires review. The United States, which remains the most powerful military and economic power in international system, has demonstrated in recent years that that power has limits. At the same time, the United States has had difficulty asserting moral leadership in a number of issue areas despite its position in the international system. Either the “unipolar moment” has truly passed in to a multipolar period or some other deeper explanation of how the international system has evolved is possible. Is it possible that the rise of a more normative explanation for how states interact is emerging? Conflict between states remains but conflicts are not occurring to the global extent of the world wars or the Cold War of the last century. International relations theory has settled into a relative steady state where power and normative explanations oppose each other. A useful avenue of exploration would be to discuss the requirements, conditions and effects of a single state as it shifts from a base of military power to enforce its security interests to acting as an example that follows internationally accepted norms without resorting to force.

The emerging international environment characterized by globalization of economic, social and political systems has placed increasing stress on the nation state. One of the leading stressors from the challenge of adapting to globalization that states individually are increasingly less capable of relying on self help is terrorism. With globalization, a merging of agendas from economics and trade to human rights versus state sovereignty has begun to emerge. Not all states are well equipped to gain from the positive benefits of a global economic system. Several states continue to refuse to accept international norms causing fault lines to appear in a range of issues that seem settled to a

majority of states. Security issues are rapidly combining with other issues resulting in a globalization of the international security environment. What would seem to be emerging is a form of complex interdependence similar to Nye and Keohane's formulation over 30 years ago. Has military power become increasingly less relevant as they suggested? If one accepts that the international environment is dramatically different today, then a reinvestigation of complex interdependence measured against today's situation would be useful.

As has been suggested in this dissertation, there is a moral component to the requirement to achieve nuclear disarmament which the United States has once again provided as support to President Obama's renewed nuclear arms control agenda. The moral argument for nuclear disarmament is not new and has been forwarded since the end of World War II. If rational states and their leadership have long accepted that nuclear weapons are immoral, then one should wonder why they are still with us. Obviously, concerns for being the next state to suffer a nuclear attack have long been an overriding reason to retain or acquire nuclear weapons, more powerful than any moral argument for their abolition. As this research has suggested, Cold War rationales for using nuclear weapons to defend one's state and allies have begun to lose their meaning as the likely scenarios for their use become small in number. If the moral argument to support this NPT goal is insufficient, then a requirement for a replacement argument seems obvious and necessary. This new thinking can be supported by this dissertation's suggestion of a hybrid theory to allow power based and normative based states to frame the requirement to disarm cooperatively. The possibility of terrorism by nuclear means offers a significant point of departure for reconsidering the utility of nuclear weapons. A range of rationales

could be explored such as environmental, economic, as well as security effects of any nuclear event, accidental or otherwise.

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APPENDIX A: NUCLEAR NON-PROLIFERATION TREATY (NPT)

TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS¹

Signed at Washington, London, and Moscow July 1, 1968

Ratification advised by U.S. Senate March 13, 1969

Ratified by U.S. President November 24, 1969

U.S. ratification deposited at Washington, London, and Moscow March 5, 1970

Proclaimed by U.S. President March 5, 1970

Entered into force March 5, 1970

The States concluding this Treaty, hereinafter referred to as the "Parties to the Treaty",

Considering the devastation that would be visited upon all mankind by a nuclear war and the consequent need to make every effort to avert the danger of such a war and to take measures to safeguard the security of peoples,

Believing that the proliferation of nuclear weapons would seriously enhance the danger of nuclear war,

In conformity with resolutions of the United Nations General Assembly calling for the conclusion of an agreement on the prevention of wider dissemination of nuclear weapons,

Undertaking to cooperate in facilitating the application of International Atomic Energy Agency safeguards on peaceful nuclear activities,

Expressing their support for research, development and other efforts to further the application, within the framework of the International Atomic Energy Agency safeguards system, of the principle of safeguarding effectively the flow of source and special fissionable materials by use of instruments and other techniques at certain strategic points,

Affirming the principle that the benefits of peaceful applications of nuclear technology, including any technological by-products which may be derived by nuclear-weapon States from the development of nuclear explosive devices, should be available for peaceful purposes to all Parties of the Treaty, whether nuclear-weapon or non-nuclear weapon States,

Convinced that, in furtherance of this principle, all Parties to the Treaty are entitled to participate in the fullest possible exchange of scientific information for, and to contribute alone or in cooperation with other States to, the further development of the applications of atomic energy for peaceful purposes,

¹ Arms Control Association, "Nuclear Non-proliferation Treaty (NPT)," *Arms Control Association website*, 2009. <http://www.armscontrol.org/documents/npt> (accessed September 17, 2009).

Declaring their intention to achieve at the earliest possible date the cessation of the nuclear arms race and to undertake effective measures in the direction of nuclear disarmament,

Urging the cooperation of all States in the attainment of this objective,

Recalling the determination expressed by the Parties to the 1963 Treaty banning nuclear weapon tests in the atmosphere, in outer space and under water in its Preamble to seek to achieve the discontinuance of all test explosions of nuclear weapons for all time and to continue negotiations to this end,

Desiring to further the easing of international tension and the strengthening of trust between States in order to facilitate the cessation of the manufacture of nuclear weapons, the liquidation of all their existing stockpiles, and the elimination from national arsenals of nuclear weapons and the means of their delivery pursuant to a Treaty on general and complete disarmament under strict and effective international control,

Recalling that, in accordance with the Charter of the United Nations, States must refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any State, or in any other manner inconsistent with the Purposes of the United Nations, and that the establishment and maintenance of international peace and security are to be promoted with the least diversion for armaments of the world's human and economic resources,

Have agreed as follows:

Article I

Each nuclear-weapon State Party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly; and not in any way to assist, encourage, or induce any non-nuclear weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.

Article II

Each non-nuclear-weapon State Party to the Treaty undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices.

Article III

1. Each non-nuclear-weapon State Party to the Treaty undertakes to accept safeguards, as set forth in an agreement to be negotiated and concluded with the International Atomic Energy Agency in accordance with the Statute of the International Atomic Energy Agency and the Agency's safeguards system, for the exclusive purpose of verification of the fulfillment of its obligations assumed under this Treaty with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices. Procedures for the safeguards required by this article shall be followed with respect to source or special fissionable material whether it is being produced, processed or used in any principal nuclear facility or is outside any such facility. The safeguards required by this article shall be applied to all source or special fissionable material in all peaceful nuclear activities within the territory of such State, under its jurisdiction, or carried out under its control anywhere.
2. Each State Party to the Treaty undertakes not to provide: (a) source or special fissionable material, or (b) equipment or material especially designed or prepared for the processing, use or production of special fissionable material, to any non-nuclear-weapon State for peaceful purposes, unless the source or special fissionable material shall be subject to the safeguards required by this article.
3. The safeguards required by this article shall be implemented in a manner designed to comply with article IV of this Treaty, and to avoid hampering the economic or technological development of the Parties or international cooperation in the field of peaceful nuclear activities, including the international exchange of nuclear material and equipment for the processing, use or production of nuclear material for peaceful purposes in accordance with the provisions of this article and the principle of safeguarding set forth in the Preamble of the Treaty.
4. Non-nuclear-weapon States Party to the Treaty shall conclude agreements with the International Atomic Energy Agency to meet the requirements of this article either individually or together with other States in accordance with the Statute of the International Atomic Energy Agency. Negotiation of such agreements shall commence within 180 days from the original entry into force of this Treaty. For States depositing their instruments of ratification or accession after the 180-day period, negotiation of such agreements shall commence not later than the date of such deposit. Such agreements shall enter into force not later than eighteen months after the date of initiation of negotiations.

Article IV

1. Nothing in this Treaty shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with articles I and II of this Treaty.

2. All the Parties to the Treaty undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy. Parties to the Treaty in a position to do so shall also cooperate in contributing alone or together with other States or international organizations to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of non-nuclear-weapon States Party to the Treaty, with due consideration for the needs of the developing areas of the world.

Article V

Each party to the Treaty undertakes to take appropriate measures to ensure that, in accordance with this Treaty, under appropriate international observation and through appropriate international procedures, potential benefits from any peaceful applications of nuclear explosions will be made available to non-nuclear-weapon States Party to the Treaty on a nondiscriminatory basis and that the charge to such Parties for the explosive devices used will be as low as possible and exclude any charge for research and development. Non-nuclear-weapon States Party to the Treaty shall be able to obtain such benefits, pursuant to a special international agreement or agreements, through an appropriate international body with adequate representation of non-nuclear-weapon States. Negotiations on this subject shall commence as soon as possible after the Treaty enters into force. Non-nuclear-weapon States Party to the Treaty so desiring may also obtain such benefits pursuant to bilateral agreements.

Article VI

Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict and effective international control.

Article VII

Nothing in this Treaty affects the right of any group of States to conclude regional treaties in order to assure the total absence of nuclear weapons in their respective territories.

Article VIII

1. Any Party to the Treaty may propose amendments to this Treaty. The text of any proposed amendment shall be submitted to the Depositary Governments which shall circulate it to all Parties to the Treaty. Thereupon, if requested to do so by one-third or more of the Parties to the Treaty, the Depositary Governments shall convene a conference, to which they shall invite all the Parties to the Treaty, to consider such an amendment.

2. Any amendment to this Treaty must be approved by a majority of the votes of all the Parties to the Treaty, including the votes of all nuclear-weapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency. The amendment shall enter into force for each Party that deposits its instrument of ratification of the amendment upon the deposit of such instruments of ratification by a majority of all the Parties, including the instruments of ratification of all nuclear-weapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency. Thereafter, it shall enter into force for any other Party upon the deposit of its instrument of ratification of the amendment.

3. Five years after the entry into force of this Treaty, a conference of Parties to the Treaty shall be held in Geneva, Switzerland, in order to review the operation of this Treaty with a view to assuring that the purposes of the Preamble and the provisions of the Treaty are being realized. At intervals of five years thereafter, a majority of the Parties to the Treaty may obtain, by submitting a proposal to this effect to the Depositary Governments, the convening of further conferences with the same objective of reviewing the operation of the Treaty.

Article IX

1. This Treaty shall be open to all States for signature. Any State which does not sign the Treaty before its entry into force in accordance with paragraph 3 of this article may accede to it at any time.

2. This Treaty shall be subject to ratification by signatory States. Instruments of ratification and instruments of accession shall be deposited with the Governments of the United States of America, the United Kingdom of Great Britain and Northern Ireland and the Union of Soviet Socialist Republics, which are hereby designated the Depositary Governments.

3. This Treaty shall enter into force after its ratification by the States, the Governments of which are designated Depositaries of the Treaty, and forty other States signatory to this Treaty and the deposit of their instruments of ratification. For the purposes of this Treaty, a nuclear-weapon State is one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to January 1, 1967.

4. For States whose instruments of ratification or accession are deposited subsequent to the entry into force of this Treaty, it shall enter into force on the date of the deposit of their instruments of ratification or accession.

5. The Depositary Governments shall promptly inform all signatory and acceding States of the date of each signature, the date of deposit of each instrument of ratification or of accession, the date of the entry into force of this Treaty, and the date of receipt of any requests for convening a conference or other notices.

6. This Treaty shall be registered by the Depositary Governments pursuant to article 102 of the Charter of the United Nations.

Article X

1. Each Party shall in exercising its national sovereignty have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other Parties to the Treaty and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests.

2. Twenty-five years after the entry into force of the Treaty, a conference shall be convened to decide whether the Treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods. This decision shall be taken by a majority of the Parties to the Treaty.

Article XI

This Treaty, the English, Russian, French, Spanish and Chinese texts of which are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of this Treaty shall be transmitted by the Depositary Governments to the Governments of the signatory and acceding States.

IN WITNESS WHEREOF the undersigned, duly authorized, have signed this Treaty.

DONE in triplicate, at the cities of Washington, London and Moscow, this first day of July one thousand nine hundred sixty-eight.

APPENDIX B: ABM TREATY

TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE LIMITATION OF ANTI-BALLISTIC MISSILE SYSTEMS²

(Note: This appendix provides the English version of the 1974 Additional Protocol as well as the original 1972 ABM Treaty.)

In the Treaty on the Limitation of Anti-Ballistic Missile Systems the United States and the Soviet Union agree that each may have only two ABM deployment areas, * so restricted and so located that they cannot provide a nationwide ABM defense or become the basis for developing one. Each country thus leaves unchallenged the penetration capability of the others retaliatory missile forces.

The Treaty permits each side to have one limited ABM system to protect its capital and another to protect an ICBM launch area. The two sites defended must be at least 1,300 kilometers apart, to prevent the creation of any effective regional defense zone or the beginnings of a nationwide system.

Precise quantitative and qualitative limits are imposed on the ABM systems that may be deployed. At each site there may be no more than 100 interceptor missiles and 100 launchers. Agreement on the number and characteristics of radars to be permitted had required extensive and complex technical negotiations, and the provisions governing these important components of ABM systems are spelled out in very specific detail in the Treaty and further clarified in the "Agreed Statements" accompanying it.

Both Parties agreed to limit qualitative improvement of their ABM technology, e.g., not to develop, test, or deploy ABM launchers capable of launching more than one interceptor missile at a time or modify existing launchers to give them this capability, and systems for rapid reload of launchers are similarly barred. These provisions, the Agreed Statements clarify, also ban interceptor missiles with more than one independently guided warhead.

There had been some concern over the possibility that surface-to-air missiles (SAMs) intended for defense against aircraft might be improved, along with their supporting radars, to the point where they could effectively be used against ICBMs and SLBMs, and the Treaty prohibits this. While further deployment of radars intended to give early warning of strategic ballistic missile attack is not prohibited, such radars must be located along the territorial boundaries of each country and oriented outward, so that they do not contribute to an effective ABM defense of points in the interior.

² Arms Control Association, "Anti-Ballistic Missile Treaty (ABM) Treaty," *Arms Control Association website*, 2009. <http://www.armscontrol.org/documents/abmtreaty> (accessed September 17, 2009).

Further, to decrease the pressures of technological change and its unsettling impact on the strategic balance, both sides agree to prohibit development, testing, or deployment of sea-based, air-based, or space-based ABM systems and their components, along with mobile land-based ABM systems. Should future technology bring forth new ABM systems "based on other physical principles" than those employed in current systems, it was agreed that limiting such systems would be discussed, in accordance with the Treaty's provisions for consultation and amendment.

The Treaty also provides for a U.S.-Soviet Standing Consultative Commission to promote its objectives and implementation. The commission was established during the first negotiating session of SALT II, by a Memorandum of Understanding dated December 21, 1972. Since then both the United States and the Soviet Union have raised a number of questions in the Commission relating to each side's compliance with the SALT I agreements. In each case raised by the United States, the Soviet activity in question has either ceased or additional information has allayed U.S. concern.

Article XIV of the Treaty calls for review of the Treaty five years after its entry into force, and at five-year intervals thereafter. The first such review was conducted by the Standing Consultative Commission at its special session in the fall of 1977. At this session, the United States and the Soviet Union agreed that the Treaty had operated effectively during its first five years, that it had continued to serve national security interests, and that it did not need to be amended at that time.

The most recent Treaty review was completed in October 1993. Following that review, numerous sessions of the Standing Consultative Commission have been held to work out Treaty succession -- to "multilateralize" the Treaty -- as a result of the break-up of the Soviet Union and to negotiate a demarcation between ABM and non-ABM systems.

* Subsequently reduced to one area (See section on ABM Protocol).

TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE LIMITATION OF ANTI-BALLISTIC MISSILE SYSTEMS

Signed at Moscow May 26, 1972

Ratification advised by U.S. Senate August 3, 1972

Ratified by U.S. President September 30, 1972

Proclaimed by U.S. President October 3, 1972

Instruments of ratification exchanged October 3, 1972

Entered into force October 3, 1972

The United States of America and the Union of Soviet Socialist Republics, hereinafter referred to as the Parties,

Proceeding from the premise that nuclear war would have devastating consequences for all mankind,

Considering that effective measures to limit anti-ballistic missile systems would be a substantial factor in curbing the race in strategic offensive arms and would lead to a decrease in the risk of outbreak of war involving nuclear weapons,

Proceeding from the premise that the limitation of anti-ballistic missile systems, as well as certain agreed measures with respect to the limitation of strategic offensive arms, would contribute to the creation of more favorable conditions for further negotiations on limiting strategic arms,

Mindful of their obligations under Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons,

Declaring their intention to achieve at the earliest possible date the cessation of the nuclear arms race and to take effective measures toward reductions in strategic arms, nuclear disarmament, and general and complete disarmament,

Desiring to contribute to the relaxation of international tension and the strengthening of trust between States,

Have agreed as follows:

Article I

1. Each Party undertakes to limit anti-ballistic missile (ABM) systems and to adopt other measures in accordance with the provisions of this Treaty.
2. Each Party undertakes not to deploy ABM systems for a defense of the territory of its country and not to provide a base for such a defense, and not to deploy ABM systems for defense of an individual region except as provided for in Article III of this Treaty.

Article II

1. For the purpose of this Treaty an ABM system is a system to counter strategic ballistic missiles or their elements in flight trajectory, currently consisting of:
 - (a) ABM interceptor missiles, which are interceptor missiles constructed and deployed for an ABM role, or of a type tested in an ABM mode;
 - (b) ABM launchers, which are launchers constructed and deployed for launching ABM interceptor missiles; and
 - (c) ABM radars, which are radars constructed and deployed for an ABM role, or of a type tested in an ABM mode.
2. The ABM system components listed in paragraph 1 of this Article include those which are:
 - (a) operational;
 - (b) under construction;

- (c) undergoing testing;
- (d) undergoing overhaul, repair or conversion; or
- (e) mothballed.

Article III

Each Party undertakes not to deploy ABM systems or their components except that:

- (a) within one ABM system deployment area having a radius of one hundred and fifty kilometers and centered on the Party's national capital, a Party may deploy: (1) no more than one hundred ABM launchers and no more than one hundred ABM interceptor missiles at launch sites, and (2) ABM radars within no more than six ABM radar complexes, the area of each complex being circular and having a diameter of no more than three kilometers; and
- (b) within one ABM system deployment area having a radius of one hundred and fifty kilometers and containing ICBM silo launchers, a Party may deploy: (1) no more than one hundred ABM launchers and no more than one hundred ABM interceptor missiles at launch sites, (2) two large phased-array ABM radars comparable in potential to corresponding ABM radars operational or under construction on the date of signature of the Treaty in an ABM system deployment area containing ICBM silo launchers, and (3) no more than eighteen ABM radars each having a potential less than the potential of the smaller of the above-mentioned two large phased-array ABM radars.

Article IV

The limitations provided for in Article III shall not apply to ABM systems or their components used for development or testing, and located within current or additionally agreed test ranges. Each Party may have no more than a total of fifteen ABM launchers at test ranges.

Article V

1. Each Party undertakes not to develop, test, or deploy ABM systems or components which are sea-based, air-based, space-based, or mobile land-based.
2. Each Party undertakes not to develop, test or deploy ABM launchers for launching more than one ABM interceptor missile at a time from each launcher, not to modify deployed launchers to provide them with such a capacity, not to develop, test, or deploy automatic or semi-automatic or other similar systems for rapid reload of ABM launchers.

Article VI

To enhance assurance of the effectiveness of the limitations on ABM systems and their components provided by the Treaty, each Party undertakes:

- (a) 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; and

(b) not to deploy in the future radars for early warning of strategic ballistic missile attack except at locations along the periphery of its national territory and oriented outward.

Article VII

Subject to the provisions of this Treaty, modernization and replacement of ABM systems or their components may be carried out.

Article VIII

ABM systems or their components in excess of the numbers or outside the areas specified in this Treaty, as well as ABM systems or their components prohibited by this Treaty, shall be destroyed or dismantled under agreed procedures within the shortest possible agreed period of time.

Article IX

To assure the viability and effectiveness of this Treaty, each Party undertakes not to transfer to other States, and not to deploy outside its national territory, ABM systems or their components limited by this Treaty.

Article X

Each Party undertakes not to assume any international obligations which would conflict with this Treaty.

Article XI

The Parties undertake to continue active negotiations for limitations on strategic offensive arms.

Article XII

1. For the purpose of providing assurance or compliance with the provisions of this Treaty, each Party shall use national technical means of verification at its disposal in a manner consistent with generally recognized principles of international law.
2. Each Party undertakes not to interfere with the national technical means of verification of the other Party operating in accordance with paragraph 1 of this Article.
3. Each Party undertakes not to use deliberate concealment measures which impede verification by national technical means of compliance with the provisions of this Treaty. This obligation shall not require changes in current construction, assembly, conversion, or overhaul practices.

Article XIII

1. To promote the objectives and implementation of the provisions of this Treaty, the Parties shall establish promptly a Standing Consultative Commission, within the framework of which they will:

- (a) consider questions concerning compliance with the obligations assumed and related situations which may be considered ambiguous;

- (b) provide on a voluntary basis such information as either Party considers necessary to assure confidence in compliance with the obligations assumed;
- (c) consider questions involving unintended interference with national technical means of verification;
- (d) consider possible changes in the strategic situation which have a bearing on the provisions of this Treaty;
- (e) agree upon procedures and dates for destruction or dismantling of ABM systems or their components in cases provided for by the provisions of this Treaty;
- (f) consider, as appropriate, possible proposals for further increasing the viability of this Treaty; including proposals for amendments in accordance with the provisions of this Treaty;
- (g) consider, as appropriate, proposals for further measures aimed at limiting strategic arms.

2. The Parties through consultation shall establish, and may amend as appropriate, Regulations for the Standing Consultative Commission governing procedures, composition and other relevant matters.

Article XIV

- 1. Each Party may propose amendments to this Treaty. Agreed amendments shall enter into force in accordance with the procedures governing the entry into force of this Treaty.
- 2. Five years after entry into force of this Treaty, and at five-year intervals thereafter, the Parties shall together conduct a review of this Treaty.

Article XV

- 1. This Treaty shall be of unlimited duration.
- 2. Each Party shall, in exercising its national sovereignty, have the right to withdraw from this Treaty if it decides that extraordinary events related to the subject matter of this Treaty have jeopardized its supreme interests. It shall give notice of its decision to the other Party six months prior to withdrawal from the Treaty. Such notice shall include a statement of the extraordinary events the notifying Party regards as having jeopardized its supreme interests.

Article XVI

- 1. This Treaty shall be subject to ratification in accordance with the constitutional procedures of each Party. The Treaty shall enter into force on the day of the exchange of instruments of ratification.
- 2. This Treaty shall be registered pursuant to Article 102 of the Charter of the United Nations.

DONE at Moscow on May 26, 1972, in two copies, each in the English and Russian languages, both texts being equally authentic.

FOR THE UNITED STATES OF AMERICA:

RICHARD NIXON

President of the United States of America

FOR THE UNION OF SOVIET SOCIALIST REPUBLICS:

L. I. BREZHNEV

General Secretary of the Central Committee of the CPSU

APPENDIX C: SALT I TREATY

INTERIM AGREEMENT BETWEEN THE UNITED STATES OF AMERICA AND
THE UNION OF SOVIET SOCIALIST REPUBLICS ON CERTAIN MEASURES
WITH RESPECT TO THE LIMITATION OF STRATEGIC OFFENSIVE ARMS³

Signed at Moscow May 26, 1972

Approval authorized by U.S. Congress September 30, 1972

Approved by U.S. President September 30, 1972

Notices of acceptance exchanged October 3, 1972

Entered into force October 3, 1972

The United States of America and the Union of Soviet Socialist Republics, hereinafter referred to as the Parties,

Convinced that the Treaty on the Limitation of Anti-Ballistic Missile Systems and this Interim Agreement on Certain Measures with Respect to the Limitation of Strategic Offensive Arms will contribute to the creation of more favorable conditions for active negotiations on limiting strategic arms as well as to the relaxation of international tension and the strengthening of trust between States,

Taking into account the relationship between strategic offensive and defensive arms,

Mindful of their obligations under Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons,

Have agreed as follows:

Article I

The Parties undertake not to start construction of additional fixed land-based intercontinental ballistic missile (ICBM) launchers after July 1, 1972.

Article II

The Parties undertake not to convert land-based launchers for light ICBMs, or for ICBMs of older types deployed prior to 1964, into land-based launchers for heavy ICBMs of types deployed after that time.

³ Federation of Atomic Scientists, "Interim Agreement Between The United States of America and The Union of Soviet Socialist Republics on Certain Measures with Respect to the Limitation Of Strategic Offensive Arms," *Federation of Atomic Scientists website*, 2009.

<http://www.fas.org/nuke/control/salt1/text/salt1.htm>, (accessed December 20, 2009). The US Department of State no longer has this text posted on its website, only a summary of the history remains from the Bush Administration posting.

Article III

The Parties undertake to limit submarine- launched ballistic missile (SLBM) launchers and modern ballistic missile submarines to the numbers operational and under construction on the date of signature of this Interim Agreement, and in addition to launchers and submarines constructed under procedures established by the Parties as replacements for an equal number of ICBM launchers of older types deployed prior to 1964 or for launchers on older submarines.

Article IV

Subject to the provisions of this Interim Agreement, modernization and replacement of strategic offensive ballistic missiles and launchers covered by this Interim Agreement may be undertaken.

Article V

1. For the purpose of providing assurance of compliance with the provisions of this Interim Agreement, each Party shall use national technical means of verification at its disposal in a manner consistent with generally recognized principles of international law.
2. Each Party undertakes not to interfere with the national technical means of verification of the other Party operating in accordance with paragraph 1 of this Article.
3. Each Party undertakes not to use deliberate concealment measures which impede verification by national technical means of compliance with the provisions of this Interim Agreement. This obligation shall not require changes in current construction, assembly, conversion, or overhaul practices.

Article VI

To promote the objectives and implementation of the provisions of this Interim Agreement, the Parties shall use the Standing Consultative Commission established under Article XIII of the Treaty on the Limitation of Anti-Ballistic Missile Systems in accordance with the provisions of that Article.

Article VII

The Parties undertake to continue active negotiations for limitations on strategic offensive arms. The obligations provided for in this Interim Agreement shall not prejudice the scope or terms of the limitations on strategic offensive arms which may be worked out in the course of further negotiations.

Article VIII

1. This Interim Agreement shall enter into force upon exchange of written notices of acceptance by each Party, which exchange shall take place simultaneously with the exchange of instruments of ratification of the Treaty on the Limitation of Anti-Ballistic Missile Systems.
2. This Interim Agreement shall remain in force for a period of five years unless replaced earlier by an agreement on more complete measures limiting strategic offensive arms. It is the objective of the Parties to conduct active follow-on negotiations with the aim of concluding such an agreement as soon as possible.
3. Each Party shall, in exercising its national sovereignty, have the right to withdraw from this Interim Agreement if it decides that extraordinary events related to the subject matter of this Interim Agreement have jeopardized its supreme interests. It shall give notice of its decision to the other Party six months prior to withdrawal from this Interim Agreement. Such notice shall include a statement of the extraordinary events the notifying Party regards as having jeopardized its supreme interests.

DONE at Moscow on May 26, 1972, in two copies, each in the English and Russian languages, both texts being equally authentic.

FOR THE UNITED STATES OF AMERICA:

RICHARD NIXON

President of the United States of America

FOR THE UNION OF SOVIET SOCIALIST REPUBLICS:

L.I. BREZHNEV

General Secretary of the

Central Committee of the CPSU

PROTOCOL TO THE INTERIM AGREEMENT BETWEEN THE UNITED STATES
OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON
CERTAIN MEASURES WITH RESPECT TO THE LIMITATION OF STRATEGIC
OFFENSIVE ARMS

The United States of America and the Union of Soviet Socialist Republics, hereinafter referred to as the Parties,

Having agreed on certain limitations relating to submarine-launched ballistic missile launchers and modern ballistic missile submarines, and to replacement procedures, in the Interim Agreement,

Have agreed as follows:

The Parties understand that, under Article III of the Interim Agreement, for the period during which that Agreement remains in force:

The United States may have no more than 710 ballistic missile launchers on submarines (SLBMs) and no more than 44 modern ballistic missile submarines. The Soviet Union may have no more than 950 ballistic missile launchers on submarines and no more than 62 modern ballistic missile submarines.

Additional ballistic missile launchers on submarines up to the above-mentioned levels, in the United States -- over 656 ballistic missile launchers on nuclear-powered submarines, and in the USSR -- over 740 ballistic missile launchers on nuclear-powered submarines, operational and under construction, may become operational as replacements for equal numbers of ballistic missile launchers of older types deployed prior to 1964 or of ballistic missile launchers on older submarines.

The deployment of modern SLBMs on any submarine, regardless of type, will be counted against the total level of SLBMs permitted for the United States and the USSR.

This Protocol shall be considered an integral part of the Interim Agreement.

DONE at Moscow this 26th day of May, 1972

FOR THE UNITED STATES OF AMERICA:

RICHARD NIXON

President of the United States of America

FOR THE UNION OF SOVIET SOCIALIST REPUBLICS:

L.I. BREZHNEV

General Secretary of the

Central Committee of the CPSU

AGREED STATEMENTS, COMMON UNDERSTANDINGS, AND UNILATERAL
STATEMENTS REGARDING THE INTERIM AGREEMENT BETWEEN THE
UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST
REPUBLICS ON CERTAIN MEASURES WITH RESPECT TO THE LIMITATION
OF STRATEGIC OFFENSIVE ARMS

1. Agreed Statements

The document set forth below was agreed upon and initialed by the Heads of the Delegations on May 26, 1972 (letter designations added):

AGREED STATEMENTS REGARDING THE INTERIM AGREEMENT BETWEEN
THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST
REPUBLICS ON CERTAIN MEASURES WITH RESPECT TO THE LIMITATION
OF STRATEGIC OFFENSIVE ARMS

[A]

The Parties understand that land-based ICBM launchers referred to in the Interim Agreement are understood to be launchers for strategic ballistic missiles capable of ranges in excess of the shortest distance between the northeastern border of the continental United States and the northwestern border of the continental USSR.

[B]

The Parties understand that fixed land-based ICBM launchers under active construction as of the date of signature of the Interim Agreement may be completed.

[C]

The Parties understand that in the process of modernization and replacement the dimensions of land-based ICBM silo launchers will not be significantly increased.

[D]

The Parties understand that during the period of the Interim Agreement there shall be no significant increase in the number of ICBM or SLBM test and training launchers, or in the number of such launchers for modern land-based heavy ICBMs. The Parties further understand that construction or conversion of ICBM launchers at test ranges shall be undertaken only for purposes of testing and training.

[E]

The Parties understand that dismantling or destruction of ICBM launchers of older types deployed prior to 1964 and ballistic missile launchers on older submarines being replaced by new SLBM launchers on modern submarines will be initiated at the time of the beginning of sea trials of a replacement submarine, and will be completed in the shortest

possible agreed period of time. Such dismantling or destruction, and timely notification thereof, will be accomplished under procedures to be agreed in the Standing Consultative Commission.

2. Common Understandings

Common understanding of the Parties on the following matters was reached during the negotiations:

A. Increase in ICBM Silo Dimensions

Ambassador Smith made the following statement on May 26, 1972:

The Parties agree that the term "significantly increased" means that an increase will not be greater than 10-15 percent of the present dimensions of land-based ICBM silo launchers.

Minister Semenov replied that this statement corresponded to the Soviet understanding.

B. Standing Consultative Commission

Ambassador Smith made the following statement on May 22, 1972:

The United States proposes that the sides agree that, with regard to initial implementation of the ABM Treaty's Article XIII on the Standing Consultative Commission (SCC) and of the consultation Articles to the Interim Agreement on offensive arms and the Accidents Agreement,

See Article 7 of Agreement to Reduce the Risk of the Outbreak of Nuclear War Between the United States of America and the Union of Soviet Socialist Republics, signed Sept. 30, 1971 agreement establishing the SCC will be worked out early in the follow-on SALT negotiations; until that is completed, the following arrangements will prevail: when SALT is in session, any consultation desired by either side under these Articles can be carried out by the two SALT Delegations; when SALT is not in session, *ad hoc* arrangements for any desired consultations under these Articles may be made through diplomatic channels.

Minister Semenov replied that, on an *ad referendum* basis, he could agree that the U.S. statement corresponded to the Soviet understanding.

C. Standstill

On May 6, 1972, Minister Semenov made the following statement:

In an effort to accommodate the wishes of the U.S. side, the Soviet Delegation is prepared to proceed on the basis that the two sides will in fact observe the obligations of

both the Interim Agreement and the ABM Treaty beginning from the date of signature of these two documents.

In reply, the U.S. Delegation made the following statement on May 20, 1972:

The United States agrees in principle with the Soviet statement made on May 6 concerning observance of obligations beginning from date of signature but we would like to make clear our understanding that this means that, pending ratification and acceptance, neither side would take any action prohibited by the agreements after they had entered into force. This understanding would continue to apply in the absence of notification by either signatory of its intention not to proceed with ratification or approval.

The Soviet Delegation indicated agreement with the U.S. statement.

3. Unilateral Statements

(a) The following noteworthy unilateral statements were made during the negotiations by the United States Delegation:

A. Withdrawal from the ABM Treaty

On May 9, 1972, Ambassador Smith made the following statement:

The U.S. Delegation has stressed the importance the U.S. Government attaches to achieving agreement on more complete limitations on strategic offensive arms, following agreement on an ABM Treaty and on an Interim Agreement on certain measures with respect to the limitation of strategic offensive arms. The U.S. Delegation believes that an objective of the follow-on negotiations should be to constrain and reduce on a long-term basis threats to the survivability of our respective strategic retaliatory forces. The USSR Delegation has also indicated that the objectives of SALT would remain unfulfilled without the achievement of an agreement providing for more complete limitations on strategic offensive arms. Both sides recognize that the initial agreements would be steps toward the achievement of more complete limitations on strategic arms. If an agreement providing for more complete strategic offensive arms limitations were not achieved within five years, U.S. supreme interests could be jeopardized. Should that occur, it would constitute a basis for withdrawal from the ABM Treaty. The United States does not wish to see such a situation occur, nor do we believe that the USSR does. It is because we wish to prevent such a situation that we emphasize the importance the U.S. Government attaches to achievement of more complete limitations on strategic offensive arms. The U.S. Executive will inform the Congress, in connection with Congressional consideration of the ABM Treaty and the Interim Agreement, of this statement of the U.S. position.

B. Land-Mobile ICBM Launchers

The U.S. Delegation made the following statement on May 20, 1972:

In connection with the important subject of land-mobile ICBM launchers, in the interest of concluding the Interim Agreement the U.S. Delegation now withdraws its proposal that Article I or an agreed statement explicitly prohibit the deployment of mobile land-based ICBM launchers. I have been instructed to inform you that, while agreeing to defer the question of limitation of operational land-mobile ICBM launchers to the subsequent negotiations on more complete limitations on strategic offensive arms, the United States would consider the deployment of operational land-mobile ICBM launchers during the period of the Interim Agreement as inconsistent with the objectives of that Agreement.

C. Covered Facilities

The U.S. Delegation made the following statement on May 20, 1972:

I wish to emphasize the importance that the United States attaches to the provisions of Article V, including in particular their application to fitting out or berthing submarines.

D. "Heavy" ICBMs

The U.S. Delegation made the following statement on May 26, 1972:

The U.S. Delegation regrets that the Soviet Delegation has not been willing to agree on a common definition of a heavy missile. Under these circumstances, the U.S. Delegation believes it necessary to state the following: The United States would consider any ICBM having a volume significantly greater than that of the largest light ICBM now operational on either side to be a heavy ICBM. The United States proceeds on the premise that the Soviet side will give due account to this consideration.

On May 17, 1972, Minister Semenov made the following unilateral "Statement of the Soviet Side":

Taking into account that modern ballistic missile submarines are presently in the possession of not only the United States, but also of its NATO allies, the Soviet Union agrees that for the period of effectiveness of the Interim Freeze Agreement the United States and its NATO allies have up to 50 such submarines with a total of up to 800 ballistic missile launchers thereon (including 41 U.S. submarines with 656 ballistic missile launchers). However, if during the period of effectiveness of the Agreement U.S. allies in NATO should increase the number of their modern submarines to exceed the numbers of submarines they would have operational or under construction on the date of signature of the Agreement, the Soviet Union will have the right to a corresponding increase in the number of its submarines. In the opinion of the Soviet side, the solution of the question of modern ballistic missile submarines provided for in the Interim Agreement only partially compensates for the strategic imbalance in the deployment of the nuclear-powered missile submarines of the USSR and the United States. Therefore, the Soviet side believes that this whole question, and above all the question of liquidating the American missile submarine bases outside the United States, will be appropriately resolved in the course of follow-on negotiations.

On May 24, Ambassador Smith made the following reply to Minister Semenov:

The United States side has studied the "statement made by the Soviet side" of May 17 concerning compensation for submarine basing and SLBM submarines belonging to third countries. The United States does not accept the validity of the considerations in that statement.

On May 26 Minister Semenov repeated the unilateral statement made on May 17. Ambassador Smith also repeated the U.S. rejection on May 26.

APPENDIX D: START I TREATY

TREATY BETWEEN THE UNITED STATES OF AMERICA AND
THE UNION OF SOVIET SOCIALIST REPUBLICS ON
THE REDUCTION AND
LIMITATION OF STRATEGIC OFFENSIVE ARMS⁴

The United States of America and the Union of Soviet Socialist Republics, hereinafter referred to as the Parties,

Conscious that nuclear war would have devastating consequences for all humanity, that it cannot be won and must never be fought,

Convinced that the measures for the reduction and limitation of strategic offensive arms and the other obligations set forth in this Treaty will help to reduce the risk of outbreak of nuclear war and strengthen international peace and security,

Recognizing that the interests of the Parties and the interests of international security require the strengthening of strategic stability,

Mindful of their undertakings with regard to strategic offensive arms in Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons of July 1, 1968; Article XI of the Treaty on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972; and the Washington Summit Joint Statement of June 1, 1990,

Have agreed as follows:

ARTICLE I

Each Party shall reduce and limit its strategic offensive arms in accordance with the provisions of this Treaty, and shall carry out the other obligations set forth in this Treaty and its Annexes, Protocols, and Memorandum of Understanding.

ARTICLE II

1. Each Party shall reduce and limit its ICBMs and ICBM launchers, SLBMs and SLBM launchers, heavy bombers, ICBM warheads, SLBM warheads, and heavy bomber armaments, so that seven years after entry into force of this Treaty and thereafter, the aggregate numbers, as counted in accordance with Article III of this Treaty, do not exceed:

(a) 1600, for deployed ICBMs and their associated launchers, deployed SLBMs and their associated launchers, and deployed heavy bombers, including 154 for deployed heavy ICBMs and their associated launchers;

⁴ Department of State, "Hypertext of START I Treaty," *Department of State website*, 2010. <http://www.state.gov/www/global/arms/starthtm/start/start1.html#ArtI> (accessed June 17, 2009). This text contains numerous hypertext references when viewed on the website which provide the reader a comprehensive view of all related documentation to this basic treaty text.

(b) 6000, for warheads attributed to deployed ICBMs, deployed SLBMs, and deployed heavy bombers,

(i) 4900, for warheads attributed to deployed ICBMs and deployed SLBMs;

(ii) 1100, for warheads attributed to deployed ICBMs on mobile launchers of ICBMs;

(iii) 1540, for warheads attributed to deployed heavy ICBMs. 2. Each Party shall implement the reductions pursuant to paragraph 1 of this Article in three phases, so that its strategic offensive arms do not exceed:

(a) by the end of the first phase, that is, no later than 36 months after entry into force of this Treaty, and thereafter, the following aggregate numbers:

(i) 2100, for deployed ICBMs and their associated launchers, deployed SLBMs and their associated launchers, and deployed heavy bombers;

(ii) 9150, for warheads attributed to deployed ICBMs, deployed SLBMs, and deployed heavy bombers;

(iii) 8050, warheads attributed to deployed ICBMs and deployed SLBMs;

(b) by the end of the second phase, that is, no later than 60 months after entry into force of this Treaty, and thereafter, the following aggregate numbers:

(i) 1900, for deployed ICBMs and their associated launchers, deployed SLBMs and their associated launchers, and deployed heavy bombers;

(ii) 7950, for warheads attributed to deployed ICBMs, deployed SLBMs, and deployed heavy bombers;

(iii) 6750, warheads attributed to deployed ICBMs and deployed SLBMs;

(c) by the end of the third phase, that is, no later than 84 months after entry into force of this Treaty: the aggregate numbers provided for in paragraph 1 of this Article .

3. Each Party shall limit the aggregate throw-weight of its deployed ICBMs and deployed SLBMs so that seven years after entry into force of this Treaty and thereafter such aggregate throw-weight does not exceed 3600 metric tons.

ARTICLE III

1. For the purposes of counting toward the maximum aggregate limits provided for in subparagraphs 1(a), 2(a)(i), and 2(b)(i) of Article II of this Treaty:

(a) Each deployed ICBM and its associated launcher shall be counted as one unit; each deployed SLBM and its associated launcher; shall be counted as one unit.

(b) Each deployed heavy bombers shall be counted as one unit.

2. For the purposes of counting deployed ICBMs and their associated launchers and deployed SLBMs and their associated launchers,

(a) Each deployed launcher of ICBMs and each deployed launcher of SLBMs shall be considered to contain one deployed ICBM or one deployed SLBM, respectively.

(b) If a deployed ICBM has been removed from its launcher and another missile has not been installed in that launcher, such an ICBM removed from its launcher and located at that ICBM base shall continue to be considered to be contained in that launcher.

(c) If a deployed SLBM has been removed from its launcher and another missile has not been installed in that launcher, such an SLBM removed from its launcher shall be considered to be contained in that launcher. Such an SLBM removed from its launcher shall be located only at a facility at which non-deployed SLBMs may be located pursuant to subparagraph 9(a) of Article IV of this Treaty or be in movement to such a facility.

3. For the purposes of this Treaty, including counting ICBMs and SLBMs:

(a) For ICBMs or SLBMs that are maintained, stored, and transported in stages, the first stage of an ICBM or SLBM of a particular type shall be considered to be an ICBM or SLBM of that type.

(b) For ICBMs or SLBMs that are maintained, stored, and transported as assembled missiles without launch canisters, an assembled missile of a particular type shall be considered to be an ICBM or SLBM of that type.

(c) For ICBMs that are maintained, stored, and transported as assembled missiles in launch canisters, an assembled missile of a particular type, in its launch canister, shall be considered to be an ICBM of that type.

(d) Each launch canister shall be considered to contain an ICBM from the time it first leaves a facility at which an ICBM is installed in it until an ICBM has been launched from it or until an ICBM has been removed from it for elimination. A launch canister shall not be considered to contain an ICBM if it contains a training model of a missile or has been placed on static display. Launch canisters for ICBMs of a particular type shall be distinguishable from launch canisters for ICBMs of a different type.

4. For the purposes of counting warheads:

(a) The number of warheads attributed to an ICBM or SLBM of each existing type shall be the number specified in the Memorandum of Understanding on the Establishment of the Data Base Relating to this Treaty, hereinafter referred to as the Memorandum of Understanding.

(b) The number of warheads that will be attributed to an ICBM or SLBM of a new type shall be the maximum number of reentry vehicles with which an ICBM or SLBM of that type has been flight-tested. The number of warheads that will be attributed to an ICBM or SLBM of a new type with a front section of an existing design with multiple reentry vehicles, or to an ICBM or SLBM of a new type with one reentry vehicle, shall be no less than the nearest integer that is smaller than the result of dividing 40 percent of the accountable throw-weight of the ICBM or SLBM by the weight of the lightest reentry vehicle flight-tested on an ICBM or SLBM of a new type. In the case of an ICBM or SLBM of a new type with a of warheads that will be attributed to an ICBM or SLBM of a new type with a front section of a fundamentally new design, the question of the applicability of the 40-percent rule to such an ICBM or SLBM shall be subject to agreement within the framework of the Joint Compliance and Inspection Commission. Until agreement has been reached regarding the rule that will apply to such an ICBM or SLBM, the number of warheads that will be attributed to such an ICBM or SLBM shall be the maximum number of reentry vehicles with which an ICBM or SLBM of that type has been flight-tested. The number of new types of ICBMs or SLBMs with a front section of a fundamentally new design shall not exceed two for each Party as long as this Treaty remains in force.

(c) The number of reentry vehicles with which an ICBM or SLBM has been flight-tested shall be considered to be the sum of the number of reentry vehicles actually released during the flight test, plus the number of procedures for dispensing reentry vehicles performed during that same flight test when no reentry vehicle was released. A procedure for dispensing penetration aids shall not be considered to be a procedure for dispensing reentry vehicles, provided that the procedure for dispensing penetration aids differs from a procedure for dispensing reentry vehicles.

(d) Each reentry vehicle of an ICBM or SLBM shall be considered to be one warhead.

(e) For the United States of America, each heavy bomber equipped for long-range nuclear ALCMs, up to a total of 150 such heavy bombers, shall be attributed with ten warheads.

Each heavy bomber equipped for long-range nuclear ALCMs in excess of 150 such heavy bombers shall be attributed with a number of warheads equal to the number of long-range nuclear ALCMs for which it is actually equipped. The United States of America shall specify the heavy bombers equipped for long-range nuclear ALCMs that are in excess of 150 such heavy bombers by number, type, variant, and the air bases at which they are based. The number of long-range nuclear ALCMs for which each heavy bomber equipped for long-range nuclear ALCMs in excess of 150 such heavy bombers is considered to be actually equipped shall be the maximum number of long-range nuclear ALCMs for which a heavy bomber of the same type and variant is actually equipped.

(f) For the Union of Soviet Socialist Republics, each heavy bomber equipped for long-range nuclear ALCMs, up to a total of 180 such heavy bombers, shall be attributed with eight warheads. Each heavy bomber equipped for long-range nuclear ALCMs in excess of 180 such heavy bombers shall be attributed with a number of warheads equal to the number of long-range nuclear ALCMs for which it is actually equipped. The Union of Soviet Socialist Republics shall specify the heavy bombers equipped for long-range nuclear ALCMs that are in excess of 180 such heavy bombers by number, type, variant, and the air bases at which they are based. The number of long-range nuclear ALCMs for which each heavy bomber equipped for long-range nuclear ALCMs in excess of 180 such heavy bombers is considered to be actually equipped shall be the maximum number of long-range nuclear ALCMs for which a heavy bomber of the same type and variant is actually equipped.

(g) Each heavy bomber equipped for nuclear armaments other than long-range nuclear ALCMs shall be attributed with one warhead. All heavy bombers not equipped for long-range nuclear ALCMs shall be considered to be heavy bombers equipped for nuclear armaments other than long-range nuclear ALCMs, with the exception of heavy bombers equipped for non-nuclear armaments, test heavy bombers, and training heavy bombers.

5. Each Party shall have the right to reduce the number of warheads attributed to ICBMs and SLBMs only of existing types, up to an aggregate number of 1250 at any one time.

(a) Such aggregate number shall consist of the following:

(i) for the United States of America, the reduction in the number of warheads attributed to the type of ICBM designated by the United States of America as, and known to the Union of Soviet Socialist Republics as, Minuteman III, plus the reduction in the number of warheads attributed to ICBMs and SLBMs of no more than two other existing types;

(ii) for the Union of Soviet Socialist Republics, four multiplied by the number of deployed SLBMs designated by the Union of Soviet Socialist Republics as RSM-50, which is known to the United States of America as SS-N-18, plus the reduction in the number of warheads attributed to ICBMs and SLBMs of no more than two other existing types.

(b) Reductions in the number of warheads attributed to Minuteman III shall be carried out subject to the following:

(i) Minuteman III to which different numbers of warheads are attributed shall not be deployed at the same ICBM base.

- (ii) Any such reductions shall be carried out no later than seven years after entry into force of this Treaty.
- (iii) The reentry vehicle platform of each Minuteman III to which a reduced number of warheads is attributed shall be destroyed and replaced by a new reentry vehicle platform.
- (c) Reductions in the number of warheads attributed to ICBMs and SLBMs of types other than Minuteman III shall be carried out subject to the following:
 - (i) Such reductions shall not exceed 500 warheads at any one time for each Party.
 - (ii) After a Party has reduced the number of warheads attributed to ICBMs or SLBMs of two existing types, that Party shall not have the right to reduce the number of warheads attributed to ICBMs or SLBMs of any additional type.
 - (iii) The number of warheads attributed to an ICBM or SLBM shall be reduced by no more than four below the number attributed as of the date of signature of this Treaty.
 - (iv) ICBMs of the same type, but to which different numbers of warheads are attributed, shall not be deployed at the same ICBM base.
 - (v) SLBMs of the same type, but to which different numbers of warheads are attributed, shall not be deployed on submarines based at submarine bases adjacent to the waters of the same ocean.
 - (vi) If the number of warheads attributed to an ICBM or SLBM of a particular type is reduced by more than two, the reentry vehicle platform of each ICBM or SLBM to which such a reduced number of warheads is attributed shall be destroyed and replaced by a new reentry vehicle platform.
- (d) A Party shall not have the right to attribute to ICBMs of a new type a number of warheads greater than the smallest number of warheads attributed to any ICBM to which that Party has attributed a reduced number of warheads pursuant to subparagraph (c) of this paragraph. A Party shall not have the right to attribute to SLBMs of a new type a number of warheads greater than the smallest number of warheads attributed to any SLBM to which that Party has attributed a reduced number of warheads pursuant to subparagraph (c) of this paragraph.
- 6. Newly constructed strategic offensive arms shall begin to be subject to the limitations provided for in this Treaty as follows:
 - (a) an ICBM, when it first leaves a production facility;
 - (b) a mobile launcher of ICBMs, when it first leaves a production facility for mobile launchers of ICBMs;
 - (c) a silo launcher of ICBMs, when excavation for that launcher has been completed and the pouring of concrete for the silo has been completed, or 12 months after the excavation begins, whichever occurs earlier;
 - (d) for the purpose of counting a deployed ICBM and its associated launcher, a silo launchers of ICBMs shall be considered to contain a deployed ICBM when excavation for that launcher has been completed and the pouring of concrete for the silo has been completed, or 12 months after the excavation begins, whichever occurs earlier, and a mobile launcher of ICBMs shall be considered to contain a deployed ICBM when it arrives at a maintenance facility, except for the non-deployed mobile launchers of ICBMs provided for in subparagraph 2(b) of Article IV of this Treaty, or when it leaves an ICBM loading facility;
 - (e) an SLBM, when it first leaves a production facility;

(f) an SLBM launcher, when the submarine on which that launcher is installed is first launched;

(g) for the purpose of counting a deployed SLBM and its associated launcher, an SLBM launcher shall be considered to contain a deployed SLBM when the submarine on which that launcher is installed is first launched;

(h) a heavy bomber or former heavy bomber, when its airframe is first brought out of the shop, plant, or building in which components of a heavy bomber or former heavy bomber are assembled to produce complete airframes; or when its airframe is first brought out of the shop, plant, or building in which existing bomber airframes are converted to heavy bomber or former heavy bomber airframes.

7. ICBM launchers and SLBM launchers that have been converted to launch an ICBM or SLBM, respectively, of a different type shall not be capable of launching an ICBM or SLBM of the previous type. Such converted launchers shall be considered to be launchers of ICBMs or SLBMs of that different type as follows:

(a) a silo launchers of ICBMs, when an ICBM of a different type or a training model of a missile of a different type is first installed in that launcher, or when the silo door is reinstalled, whichever occurs first;

(b) a mobile launcher of ICBMs, as agreed within the framework of the Joint Compliance and Inspection Commission;

(c) an SLBM launcher, when all launchers on the submarine on which that launcher is installed have been converted to launch an SLBM of that different type and that submarine begins sea trials, that is, when that submarine first operates under its own power away from the harbor or port in which the conversion of launchers was performed.

8. Heavy bombers that have been converted into heavy bombers of a different category or into former heavy bombers shall be considered to be heavy bombers of that different category or former heavy bombers as follows:

(a) a heavy bomber equipped for nuclear armaments other than long-range nuclear ALCMs converted into a heavy bomber equipped for long-range nuclear ALCMs, when it is first brought out of the shop, plant, or building where it was equipped for long-range nuclear ALCMs;

(b) a heavy bomber of one category converted into a heavy bomber of another category provided for in paragraph 9 of Section VI of the Protocol on Procedures Governing the Conversion or Elimination of the Items Subject to this Treaty, hereinafter referred to as the Conversion or Elimination Protocol, or into a former heavy bomber, when the inspection conducted pursuant to paragraph 13 of Section VI of the Conversion or Elimination Protocol is completed or, if such an inspection is not conducted, when the 20-day period provided for in paragraph 13 of Section VI of the Conversion or Elimination Protocol expires.

9. For the purposes of this Treaty:

(a) A ballistic missile of a type developed and tested solely to intercept and counter objects not located on the surface of the Earth shall not be considered to be a ballistic missile to which the limitations provided for in this Treaty apply.

(b) If a ballistic missile has been flight-tested or deployed for weapon delivery, all ballistic missiles of that type shall be considered to be weapon-delivery vehicles.

(c) If a cruise missile has been flight-tested or deployed for weapon delivery, all cruise missiles of that type shall be considered to be weapon-delivery vehicles.

(d) If a launcher, other than a soft-site launcher, has contained an ICBM or SLBM of a particular type, it shall be considered to be a launcher of ICBMs or SLBMs of that type. If a launcher, other than a soft-site launcher, has been converted into a launcher of ICBMs or SLBMs of a different type, it shall be considered to be a launcher of ICBMs or SLBMs of the type for which it has been converted.

(e) If a heavy bomber is equipped for long-range nuclear ALCMs, all heavy bombers of that type shall be considered to be equipped for long-range nuclear ALCMs, except those that are not so equipped and are distinguishable from heavy bombers of the same type equipped for long-range nuclear ALCMs. If long-range nuclear ALCMs have not been flight-tested from any heavy bomber of a particular type, no heavy bomber of that type shall be considered to be equipped for long-range nuclear ALCMs. Within the same type, a heavy bomber equipped for long-range nuclear ALCMs, a heavy bomber equipped for nuclear armaments other than long-range nuclear ALCMs, a heavy bomber equipped for non-nuclear armaments, a training heavy bomber, and a former heavy bomber shall be distinguishable from one another.

(f) Any long-range ALCM of a type, any one of which has been initially flight-tested from a heavy bomber on or before December 31, 1988, shall be considered to be a long-range nuclear ALCM. Any long-range ALCM of a type, any one of which has been initially flight-tested from a heavy bomber after December 31, 1988, shall not be considered to be a long-range nuclear ALCM if it is a long-range non-nuclear ALCM and is distinguishable from long-range nuclear ALCMs. Long-range non-nuclear ALCMs not so distinguishable shall be considered to be long-range nuclear ALCMs.

(g) Mobile launchers of ICBMs of each new type of ICBM shall be distinguishable from mobile launchers of ICBMs of existing types of ICBMs and from mobile launchers of ICBMs of other new type of ICBMs. Such new launchers, with their associated missiles installed, shall be distinguishable from mobile launchers of ICBMs of existing types of ICBMs with their associated missiles installed, and from mobile launchers of ICBMs of other new types of ICBMs with their associated missiles installed.

(h) Mobile launchers of ICBMs converted into launchers of ICBMs of another type of ICBM shall be distinguishable from mobile launchers of ICBMs of the previous type of ICBM. Such converted launchers, with their associated missiles installed, shall be distinguishable from mobile launchers of ICBMs of the previous type of ICBM with their associated missiles installed. Conversion of mobile launchers of ICBMs shall be carried out in accordance with procedures to be agreed within the framework of the Joint Compliance and Inspection Commission.

10. As of the date of signature of this Treaty:

(a) Existing types of ICBMs and SLBMs are:

(i) for the United States of America, the types of missiles designated by the United States of America as Minuteman II, Minuteman III, Peacekeeper, Poseidon, Trident I, and Trident II, which are known to the Union of Soviet Socialist Republics as Minuteman II, Minuteman III, MX, Poseidon, Trident I, and Trident II, respectively;

(ii) for the Union of Soviet Socialist Republics, the types of missiles designated by the Union of Soviet Socialist Republics as RS-10, RS-12, RS-16, RS-20, RS-18, RS-22, RS-12M, RSM-25, RSM-40, RSM-50, RSM-52, and RSM-54, which are known to the United States of America as SS-11, SS-13, SS-17, SS-18, SS-19, SS-24, SS-25, SS-N-6, SS-N-8, SS-N-18, SS-N-20, and SS-N-23, respectively.

- (b) Existing types of ICBMs for mobile launchers of ICBMs are:
 - (i) for the United States of America, the type of missile designated by the United States of America as Peacekeeper, which is known to the Union of Soviet Socialist Republics as MX;
 - (ii) for the Union of Soviet Socialist Republics, the types of missiles designated by the Union of Soviet Socialist Republics as RS-22 and RS-12M, which are known to the United States of America as SS-24 and SS-25, respectively.
- (c) Former types of ICBMs and SLBMs are the types of missiles designated by the United States of America as, and known to the Union of Soviet Socialist Republics as, Minuteman I and Polaris A-3.
- (d) Existing types of heavy bombers are:
 - (i) for the United States of America, the types of bombers designated by the United States of America as, and known to the Union of Soviet Socialist Republics as, B-52, B-1, and B-2;
 - (ii) for the Union of Soviet Socialist Republics, the types of bombers designated by the Union of Soviet Socialist Republics as Tu-95 and Tu-160, which are known to the United States of America as Bear and Blackjack, respectively.
- (e) Existing types of long-range nuclear ALCMs are:
 - (i) for the United States of America, the types of long-range nuclear ALCMs designated by the United States of America as, and known to the Union of Soviet Socialist Republics as, AGM-86B and AGM-129;
 - (ii) for the Union of Soviet Socialist Republics, the types of long-range nuclear ALCMs designated by the Union of Soviet Socialist Republics as RKV-500A and RKV-500B, which are known to the United States of America as AS-15 A and AS-15 B, respectively.

ARTICLE IV

1. For ICBMs and SLBMs:

- (a) Each Party shall limit the aggregate number of non-deployed ICBMs for mobile launchers of ICBMs to no more than 250. Within this limit, the number of non-deployed ICBMs for rail-mobile launchers of ICBMs shall not exceed 125.
- (b) Each Party shall limit the number of non-deployed ICBMs at a maintenance facility of an ICBM base for mobile launchers of ICBMs to no more than two ICBMs of each type specified for that ICBM base. Non-deployed ICBMs for mobile launchers of ICBMs located at a maintenance facility shall be stored separately from non-deployed mobile launchers of ICBMs located at that maintenance facility.
- (c) Each Party shall limit the number of non-deployed ICBMs and sets of ICBM emplacement equipment at an ICBM base for silo launchers of ICBMs to no more than:
 - (i) two ICBMs of each type specified for that ICBM base and six sets of ICBM emplacement equipment for each type of ICBM specified for that ICBM base; or
 - (ii) four ICBMs of each type specified for that ICBM base and two sets of ICBM emplacement equipment for each type of ICBM specified for that ICBM base.
- (d) Each Party shall limit the aggregate number of ICBMs and SLBMs located at test ranges to no more than 35 during the seven-year period after entry into force of this Treaty. Thereafter, the aggregate number of ICBMs and SLBMs located at test ranges shall not exceed 25.

2. For ICBM launchers and SLBM launchers:

- (a) Each Party shall limit the aggregate number of non-deployed mobile launchers of ICBMs to no more than 110. Within this limit, the number of non-deployed rail-mobile launchers of ICBMs shall not exceed 18. [RF MOU, Section IV] [US MOU Section IV]
 - (b) Each Party shall limit the number of non-deployed mobile launchers of ICBMs located at the maintenance facility of each ICBM base for mobile launchers of ICBMs to no more than two such ICBM launchers of each type of ICBM specified for that ICBM base.
 - (c) Each Party shall limit the number of non-deployed mobile launchers of ICBMs located at training facilities for ICBMs to no more than 40. Each such launcher may contain only a training model of a missile. Non-deployed mobile launchers of ICBMs that contain training models of missiles shall not be located outside a training facility.
 - (d) Each Party shall limit the aggregate number of test launchers to no more than 45 during the seven-year period after entry into force of this Treaty. Within this limit, the number of fixed test launchers shall not exceed 25, and the number of mobile test launchers shall not exceed 20. Thereafter, the aggregate number of test launchers shall not exceed 40. Within this limit, the number of fixed test launchers shall not exceed 20, and the number of mobile test launchers shall not exceed 20.
 - (e) Each Party shall limit the aggregate number of silo training launchers and mobile training launchers to no more than 60. ICBMs shall not be launched from training launchers. Each such launcher may contain only a training model of a missile. Mobile training launchers shall not be capable of launching ICBMs, and shall differ from mobile launchers of ICBMs and other road vehicles or railcars on the basis of differences that are observable by national technical means of verification.
3. For heavy bombers and former heavy bombers:
- (a) Each Party shall limit the aggregate number of heavy bombers equipped for non-nuclear armaments, former heavy bombers, and training heavy bombers to no more than 75.
 - (b) Each Party shall limit the number of test heavy bombers to no more than 20.
4. For ICBMs and SLBMs used for delivering objects into the upper atmosphere or space:
- (a) Each Party shall limit the number of space launch facilities to no more than five, unless otherwise agreed. Space launch facilities shall not overlap ICBM bases.
 - (b) Each Party shall limit the aggregate number of ICBM launchers and SLBM launchers located at space launch facilities to no more than 20, unless otherwise agreed. Within this limit, the aggregate number of silo launchers of ICBMs and mobile launchers of ICBMs located at space launch facilities shall not exceed ten, unless otherwise agreed.
 - (c) Each Party shall limit the aggregate number of ICBMs and SLBMs located at a space launch facility to no more than the number of ICBM launchers and SLBM launchers located at that facility.
5. Each Party shall limit the number of transporter-loaders for ICBMs for road-mobile launchers of ICBMs located at each deployment area or test range to no more than two for each type of ICBM for road-mobile launchers of ICBMs that is attributed with one warhead and that is specified for that deployment area or test range, and shall limit the number of such transporter-loaders located outside deployment areas and test ranges to no more than six. The aggregate number of transporter-loaders for ICBMs for road-mobile launchers of ICBMs shall not exceed 30.

6. Each Party shall limit the number of ballistic missile submarines in dry dock within five kilometers of the boundary of each submarine base to no more than two.

7. For static displays and ground trainers:

(a) Each Party shall limit the number of ICBM launchers and SLBM launchers placed on static displays after signature of this Treaty to no more than 20, the number of ICBMs and SLBMs placed on static display after signature of this Treaty to no more than 20, the number of launch canisters placed on static display after signature of this Treaty to no more than 20, and the number of heavy bombers and former heavy bombers placed on static display after signature of this Treaty to no more than 20. Such items placed on static display prior to signature of this Treaty shall be specified in Annex I to the Memorandum of Understanding, but shall not be subject to the limitations provided for in this Treaty.

(b) Each Party shall limit the aggregate number of heavy bombers converted after signature of this Treaty for use as ground trainers and former heavy bombers converted after signature of this Treaty for use as ground trainers to no more than five. Such items converted prior to signature of this Treaty for use as ground trainers shall be specified in Annex I to the Memorandum of Understanding, but shall not be subject to the limitations provided for in this Treaty.

8. Each Party shall limit the aggregate number of storage facilities for ICBMs or SLBMs and repair facilities for ICBMs or SLBMs to no more than 50.

9. With respect to locational and related restrictions on strategic offensive arms:

(a) Each Party shall locate non-deployed ICBMs and non-deployed SLBMs only at maintenance facilities of ICBM bases; submarine bases; ICBM loading facilities; SLBM loading facilities; production facilities for ICBMs or SLBMs; repair facilities for ICBMs or SLBMs; storage facilities for ICBMs or SLBMs; conversion or elimination facilities for ICBMs or SLBMs; test ranges; or space launch facilities. Prototype ICBMs and prototype SLBMs, however, shall not be located at maintenance facilities of ICBM bases or at submarine bases. Non-deployed ICBMs and non-deployed SLBMs may also be in transit. Non-deployed ICBMs for silo launchers of ICBMs may also be transferred within an ICBM base for silo launchers of ICBMs. Non-deployed SLBMs that are located on missile tenders and storage cranes shall be considered to be located at the submarine base at which such missile tenders and storage cranes are specified as based.

(b) Each Party shall locate non-deployed mobile launchers of ICBMs only at maintenance facilities of ICBM bases for mobile launchers of ICBMs, production facilities for mobile launchers of ICBMs, repair facilities for mobile launchers of ICBMs, storage facilities for mobile launchers of ICBMs, ICBM loading facilities, training facilities for ICBMs, conversion or elimination facilities for mobile launchers of ICBMs, test ranges, or space launch facilities. Mobile launchers of prototype ICBMs, however, shall not be located at maintenance facilities of ICBM bases for mobile launchers of ICBMs. Non-deployed mobile launchers of ICBMs may also be in transit.

(c) Each Party shall locate test launchers only at test ranges, except that rail-mobile test launchers may conduct movements for the purpose of testing outside a test range, provided that:

(i) each such movement is completed no later than 30 days after it begins;

(ii) each such movement begins and ends at the same test ranges and does not involve movement to any other facility;

(iii) movements of no more than six rail-mobile launchers of ICBMs are conducted in each calendar year; and

(iv) no more than one train containing no more than three rail-mobile test launchers is located outside test ranges at any one time.

(d) A deployed mobile launcher of ICBMs and its associated missile that relocates to a test range may, at the discretion of the testing Party, either continue to be counted toward the maximum aggregate limits provided for in Article II of this Treaty, or be counted as a mobile test launchers pursuant to paragraph 2(d) of this Article. If a deployed mobile launcher of ICBMs and its associated missile that relocates to a test range continues to be counted toward the maximum aggregate limits provided for in Article II of this Treaty, the period of time during which it continuously remains at a test range shall not exceed 45 days. The number of such deployed road-mobile launchers of ICBMs and their associated missiles located at a test range at any one time shall not exceed three, and the number of such deployed rail-mobile launchers of ICBMs and their associated missiles located at a test range at any one time shall not exceed three.

(e) Each Party shall locate silo training launchers only at ICBM bases for silo launchers of ICBMs and training facilities for ICBMs. The number of silo training launchers located at each ICBM bases for silo launchers of ICBMs shall not exceed one for each type of ICBM specified for that ICBM base.

(f) Test heavy bombers shall be based only at heavy bomber flight test centers and at production facilities for heavy bombers. Training heavy bombers shall be based only at training facilities for heavy bombers.

10. Each Party shall locate solid rocket motors for first stages of ICBMs for mobile launchers of ICBMs only at locations where production and storage, or testing of such motors occurs and at production facilities for ICBMs for mobile launchers of ICBMs. Such solid rocket motors may also be moved between these locations. Solid rocket motors with nozzles attached for the first stages of ICBMs for mobile launchers of ICBMs shall only be located at production facilities for ICBMs for mobile launchers of ICBMs and at locations where testing of such solid rocket motors occurs. Locations where such solid rocket motors are permitted shall be specified in Annex I to the Memorandum of Understanding.

11. With respect to locational restrictions on facilities:

(a) Each Party shall locate production facilities for ICBMs of a particular type, repair facilities for ICBMs of a particular type, storage facilities for ICBMs of a particular type, ICBM loading facilities for ICBMs of a particular type, and conversion or elimination facilities for ICBMs of a particular type no less than 100 kilometers from any ICBM base for silo launchers of ICBMs of that type of ICBM, any ICBM base for rail-mobile launchers of ICBMs of that type of ICBM, any deployment area for road-mobile launchers of ICBMs of that type of ICBM, any test range from which ICBMs of that type are flight-tested, any production facility for mobile launchers of ICBMs of that type of ICBM, any repair facility for mobile launchers of ICBMs of that type of ICBM, any storage facility for mobile launchers of ICBMs of that type of ICBM, and any training facility for ICBMs at which non-deployed mobile launchers of ICBMs are located. New facilities at which non-deployed ICBMs for silo launchers of ICBMs of ICBMs of any type of ICBM may be located, and new storage facilities for ICBM emplacement equipment, shall be located no less than 100 kilometers from any ICBM base for silo

launchers of ICBMs, except that existing storage facilities for intermediate-range missiles, located less than 100 kilometers from an ICBM base for silo launchers of ICBMs or from a test range, may be converted into storage facilities for ICBMs not specified for that ICBM base or that test range.

(b) Each Party shall locate production facilities for mobile launchers of ICBMs of a particular type of ICBM, repair facilities for mobile launchers of ICBMs of a particular type of ICBM, and storage facilities for mobile launchers of ICBMs of a particular type of ICBM no less than 100 kilometers from any ICBMs for mobile launchers of ICBMs of that type of ICBM and any test range from which ICBMs of that type are flight-tested.

(c) Each Party shall locate test ranges and space launch facilities no less than 100 kilometers from any ICBM base for silo launchers of ICBMs, any ICBM base for rail-mobile launchers of ICBMs, and any deployment area.

(d) Each Party shall locate training facilities for ICBMs no less than 100 kilometers from any test range.

(e) Each Party shall locate storage areas for heavy bomber nuclear armaments no less than 100 kilometers from any air base for heavy bombers equipped for non-nuclear armaments and any training facility for heavy bombers. Each Party shall locate storage areas for long-range nuclear ALCMs no less than 100 kilometers from any air base for heavy bombers equipped for nuclear armaments other than long-range nuclear ALCMs, any air base for heavy bombers equipped for non-nuclear armaments, and any training facility for heavy bombers.

12. Each Party shall limit the duration of each transit to no more than 30 days.

ARTICLE V

1. Except as prohibited by the provisions of this Treaty, modernization and replacement of strategic offensive arms may be carried out.

2. Each Party undertakes not to:

(a) produce, flight-test, or deploy heavy ICBMs of a new type, or increase the launch weight or throw-weight of heavy ICBMs of an existing type;

(b) produce, flight-test, or deploy heavy SLBMs;

(c) produce test, or deploy mobile launchers of heavy ICBMs;

(d) produce, test, or deploy additional silo launchers of ICBMs of heavy ICBMs, except for silo launchers of heavy ICBMs that replace silo launchers of heavy ICBMs that have been eliminated in accordance with Section II of the Conversion or Elimination Protocol, provided that the limits provided for in Article II of this Treaty are not exceeded;

(e) convert launchers that are not launchers of heavy ICBMs into launchers of heavy ICBMs;

(f) produce, test, or deploy launchers of heavy SLBMs;

(g) reduce the number of warheads attributed to a heavy ICBM of an existing type.

3. Each Party undertakes not to deploy ICBMs other than in silo launchers of ICBMs, on road-mobile launchers of ICBMs, or on rail-mobile launchers of ICBMs. Each Party undertakes not to produce, test, or deploy ICBM launchers other than silo launchers of ICBMs, road-mobile launchers of ICBMs, or rail-mobile launchers of ICBMs.

4. Each Party undertakes not to deploy on a mobile launcher of ICBMs an ICBM of a type that was not specified as a type of ICBM for mobile launchers of ICBMs in accordance with paragraph 2 of Section VII of the Protocol on Notifications Relating to

this Treaty, hereinafter referred to as the Notification Protocol, unless it is an ICBM to which no more than one warhead is attributed and the Parties have agreed within the framework of the Joint Compliance and Inspection Commission to permit deployment of such ICBMs on mobile launchers of ICBMs. A new type of ICBM for mobile launchers of ICBMs may cease to be considered to be a type of ICBM for mobile launchers of ICBMs if no ICBM of that type has been contained on, or flight-tested from, a mobile launcher of ICBMs.

5. Each Party undertakes not to deploy ICBM launchers of a new type of ICBM and not to deploy SLBM launchers of a new type of SLBM if such launchers are capable of launching ICBMs or SLBMs, respectively, of other types. ICBM launchers of existing types of ICBMs and SLBM launchers of existing types of SLBMs shall be incapable, without conversion, of launching ICBMs or SLBMs, respectively, of other types.

6. Each Party undertakes not to convert SLBMs into ICBMs for mobile launchers of ICBMs, or to load SLBMs on, or launch SLBMs from, mobile launchers of ICBMs.

7. Each Party undertakes not to produce, test, or deploy transporter-loaders other than transporter-loaders for ICBMs for road-mobile launchers of ICBMs attributed with one warhead.

8. Each Party undertakes not to locate deployed silo launchers of ICBMs outside ICBM bases for silo launchers of ICBMs.

9. Each Party undertakes not to locate soft-site launchers except at test ranges and space launch facilities. All existing soft-site launchers not at test ranges or space launch facilities shall be eliminated in accordance with the procedures provided for in the Conversion or Elimination Protocol no later than 60 days after entry into force of this Treaty.

10. Each Party undertakes not to:

(a) flight-test ICBMs or SLBMs of a retired or former type from other than test launchers specified for such use or launchers at space launch facilities. Except for soft-site launchers, test launchers specified for such use shall not be used to flight-test ICBMs or SLBMs of a type, any one of which is deployed;

(b) produce ICBMs for mobile launchers of ICBMs of a retired type.

11. Each Party undertakes not to convert silos used as launch control centers into silo launchers of ICBMs.

12. Each Party undertakes not to:

(a) produce, flight-test, or deploy an ICBM or SLBM with more than ten reentry vehicles;

(b) flight-test an ICBM or SLBM with a number of reentry vehicles greater than the number of warheads attributed to it, or, for an ICBM or SLBM of a retired type, with a number of reentry vehicles greater than the largest number of warheads that was attributed to any ICBM or SLBM of that type;

(c) deploy an ICBM or SLBM with a number of reentry vehicles greater than the number of warheads attributed to it;

(d) increase the number of warheads attributed to an ICBM or SLBM of an existing or new type.

13. Each Party undertakes not to flight-test or deploy an ICBM or SLBM with a number of reentry vehicles greater than the number of warheads attributed to it.[Agreed State 3]

14. Each Party undertakes not to flight-test from space launch facilities ICBMs or SLBMs equipped with reentry vehicles.

15. Each Party undertakes not to use ICBMs or SLBMs for delivering objects into the upper atmosphere or space for purposes inconsistent with existing international obligations undertaken by the Parties.
16. Each Party undertakes not to produce, test, or deploy systems for rapid reload and not to conduct rapid reload.
17. Each Party undertakes not to install SLBM launchers on submarines that were not originally constructed as ballistic missile submarines.
18. Each Party undertakes not to produce, test, or deploy:
 - (a) ballistic missiles with a range in excess of 600 kilometers, or launchers of such missiles, for installation on waterborne vehicles, including free-floating launchers, other than submarines. This obligation shall not require changes in current ballistic missile storage, transport, loading, or unloading practices;
 - (b) launchers of ballistic or cruise missiles for emplacement on or for tethering to the ocean floor, the seabed, or the beds of internal waters and inland waters, or for emplacement in or for tethering to the subsoil thereof, or mobile launchers of such missiles that move only in contact with the ocean floor, the seabed, or the beds of internal waters and inland waters, or missiles for such launchers. This obligation shall apply to all areas of the ocean floor and the seabed, including the seabed zone referred to in Articles I and II of the Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil Thereof of February 11, 1971;
 - (c) systems, including missiles, for placing nuclear weapons or any other kinds of weapons of mass destruction into Earth orbit or a fraction of an Earth orbit;
 - (d) air-to-surface ballistic missiles (ASBMs);
 - (e) long-range nuclear ALCMs armed with two or more nuclear weapons.
19. Each Party undertakes not to:
 - (a) flight-test with nuclear armaments an aircraft that is not an airplane, but that has a range of 8000 kilometers or more; equip such an aircraft for nuclear armaments; or deploy such an aircraft with nuclear armaments;
 - (b) flight-test with nuclear armaments an airplane that was not initially constructed as a bomber, but that has a range of 8000 kilometers or more, or an integrated planform area in excess of 310 square meters; equip such an airplane for nuclear armaments; or deploy such an airplane with nuclear armaments;
 - (c) flight-test with long-range nuclear ALCMs an aircraft that is not an airplane, or an airplane that was not initially constructed as a bomber; equip such an aircraft or such an airplane for long-range nuclear ALCMs; or deploy such an aircraft or such an airplane with long-range nuclear ALCMs.
20. The United States of America undertakes not to equip existing or future heavy bombers for more than 20 long-range nuclear ALCMs.
21. The Union of Soviet Socialist Republics undertakes not to equip existing or future heavy bombers for more than 16 long-range nuclear ALCMs.
22. Each Party undertakes not to locate long-range nuclear ALCMs at air bases for heavy bombers equipped for nuclear armaments other than long-range nuclear ALCMs, air bases for heavy bombers equipped for non-nuclear armaments, air bases for former heavy bombers, or training facilities for heavy bombers.

23. Each Party undertakes not to base heavy bombers equipped for long-range nuclear ALCMs, heavy bombers equipped for nuclear armaments other than long-range nuclear ALCMs, or heavy bombers equipped for non-nuclear armaments at air bases at which heavy bombers of either of the other two categories are based.

24. Each Party undertakes not to convert:

(a) heavy bombers equipped for nuclear armaments other than long-range nuclear ALCMs into heavy bombers equipped for long-range nuclear ALCM, if such heavy bombers were previously equipped for long-range nuclear ALCMs;

(b) heavy bombers equipped for non-nuclear armaments into heavy bombers equipped for long-range nuclear ALCM or into heavy bombers equipped for nuclear armaments other than long-range nuclear ALCMs;

(c) training heavy bombers into heavy bombers of another category;

(d) former heavy bombers into heavy bombers.

25. Each Party undertakes not to have underground facilities accessible to ballistic missile submarines.

26. Each Party undertakes not to locate railcars at the site of a rail garrison that has been eliminated in accordance with Section IX of the Conversion or Elimination Protocol, unless such railcars have differences, observable by national technical means of verification, in length, width, or height from rail-mobile launchers of ICBMs or launch-associated railcars.

27. Each Party undertakes not to engage in any activities associated with strategic offensive arms at eliminated facilities, notification of the elimination of which has been provided in accordance with paragraph 3 of Section I of the Notification Protocol, unless notification of a new facility at the same location has been provided in accordance with paragraph 3 of Section I of the Notification Protocol. Strategic offensive arms and support equipment shall not be located at eliminated facilities except during their movement through such facilities and during visits of heavy bombers or former heavy bombers at such facilities. Missile tenders may be located at eliminated facilities only for purposes not associated with strategic offensive arms.

28. Each Party undertakes not to base strategic offensive arms subject to the limitations of this Treaty outside its national territory.

29. Each Party undertakes not to use naval vessels that were formerly declared as missile tenders to transport, store, or load SLBMs. Such naval vessels shall not be tied to a ballistic missile submarines for the purpose of supporting such a submarine if such a submarine is located within five kilometers of a submarine base.

30. Each Party undertakes not to remove from production facilities for ICBMs for mobile launchers of ICBMs, solid rocket motors with attached nozzles for the first stages of ICBMs for mobile launchers of ICBMs, except for:

(a) the removal of such motors as part of assembled first stages of ICBMs for ICBMs for mobile launchers of ICBMs that are maintained, stored, and transported in stages;

(b) the removal of such motors as part of assembled ICBMs for mobile launchers of ICBMs that are maintained, stored, and transported as assembled missiles in launch canisters or without launch canisters; and

(c) the removal of such motors as part of assembled first stages of ICBMs for mobile launchers of ICBMs that are maintained, stored, and transported as assembled missiles in

launch canisters or without launch canisters, for the purpose of technical characteristics exhibitions.

ARTICLE VI

1. Deployed road-mobile launchers of ICBMs and their associated missiles shall be based only in restricted areas. A restricted area shall not exceed five square kilometers in size and shall not overlap another restricted area. No more than ten deployed road-mobile launchers of ICBMs and their associated missiles may be based or located in a restricted area. A restricted area shall not contain deployed ICBMs for road-mobile launchers of ICBMs of more than one type of ICBM.
2. Each Party shall limit the number of fixed structures for road-mobile launchers of ICBMs within each restricted areas so that these structures shall not be capable of containing more road-mobile launchers of ICBMs than the number of road-mobile launchers of ICBMs specified for that restricted area.
3. Each restricted area shall be located within a deployment area. A deployment area shall not exceed 125,000 square kilometers in size and shall not overlap another deployment area. A deployment area shall contain no more than one ICBM base for road-mobile launchers of ICBMs.
4. Deployed rail-mobile launchers of ICBMs and their associated missiles shall be based only in rail garrisons. Each Party shall have no more than seven rail garrisons. No point on a portion of track located inside a rail garrison shall be more than 20 kilometers from any entrance/exit for that rail garrison. This distance shall be measured along the tracks. A rail garrison shall not overlap another rail garrison.
5. Each rail garrison shall have no more than two rail entrances/exits. Each such entrance/exit shall have no more than two separate sets of tracks passing through it (a total of four rails).
6. Each Party shall limit the number of parking sites in each rail garrison to no more than the number of trains of standard configuration specified for that rail garrison. Each rail garrison shall have no more than five parking sites.
7. Each Party shall limit the number of fixed structures for rail-mobile launchers of ICBMs in each rail garrison to no more than the number of trains of standard configuration specified for that rail garrison. Each such structure shall contain no more than one train of standard configuration.
8. Each rail garrison shall contain no more than one maintenance facility.
9. Deployed mobile launchers of ICBMs and their associated missiles may leave restricted areas or rail garrisons only for routine movements, relocations, or dispersals. Deployed road-mobile launchers of ICBMs and their associated missiles may leave deployment areas only for relocations or operational dispersals.
10. Relocations shall be completed within 25 days. No more than 15 percent of the total number of deployed road-mobile launchers of ICBMs and their associated missiles or five such launchers and their associated missiles, whichever is greater, may be outside restricted areas at any one time for the purpose of relocation. No more than 20 percent of the total number of deployed rail-mobile launchers of ICBMs and their associated missiles or five such launchers and their associated missiles, whichever is greater, may be outside rail garrisons at any one time for the purpose of relocation.

11. No more than 50 percent of the total number of deployed rail-mobile launchers of ICBMs and their associated missiles may be engaged in routine movements at any one time.

12. All trains with deployed rail-mobile launchers of ICBMs and their associated missiles of a particular type shall be of one standard configuration. All such trains shall conform to that standard configuration except those taking part in routine movements, relocations, or dispersals, and except that portion of a train remaining within a rail garrisons after the other portion of such a train has departed for the maintenance facility associated with that rail garrison, has been relocated to another facility, or has departed the rail garrison for routine movement. Except for dispersals, notification of variations from standard configuration shall be provided in accordance with paragraphs 13, 14, and 15 of Section II of the Notification Protocol.

ARTICLE VII

1. Conversion and elimination of strategic offensive arms, fixed structures for mobile launchers of ICBMs, and facilities shall be carried out pursuant to this Article and in accordance with procedures provided for in the Conversion or Elimination Protocol. Conversion and elimination shall be verified by national technical means of verification and by inspection as provided for in Articles IX and XI of this Treaty; in the Conversion or Elimination Protocol; and in the Protocol on Inspections and Continuous Monitoring Activities Relating to this Treaty, hereinafter referred to as the Inspection Protocol.

2. ICBMs for mobile launchers of ICBMs, ICBM launchers, SLBM launchers, heavy bombers, former heavy bombers, and support equipment shall be subject to the limitations provided for in this Treaty until they have been eliminated, or otherwise cease to be subject to the limitations provided for in this Treaty, in accordance with procedures provided for in the Conversion or Elimination Protocol.

3. ICBMs for silo launchers of ICBMs and SLBMs shall be subject to the limitations provided for in this Treaty until they have been eliminated by rendering them inoperable, precluding their use for their original purpose, using procedures at the discretion of the Party possessing the ICBMs or SLBMs.

4. The elimination of ICBMs for mobile launchers of ICBMs, mobile launchers of ICBMs, SLBM launchers, heavy bombers, and former heavy bombers [Agreed State 10] shall be carried out at conversion or elimination facilities, except as provided for in Sections VII and VIII of the Conversion or Elimination Protocol. Fixed launchers of ICBMs and fixed structures for mobile launchers of ICBMs subject to elimination shall be eliminated in situ. A launch canister remaining at a test range or ICBM base after the flight test of an ICBM for mobile launchers of ICBMs shall be eliminated in the open in situ, or at a conversion or elimination facility, in accordance with procedures provided for in the Conversion or Elimination Protocol.

ARTICLE VIII

1. A data base pertaining to the obligations under this Treaty is set forth in the Memorandum of Understanding, in which data with respect to items subject to the limitations provided for in this Treaty are listed according to categories of data.

2. In order to ensure the fulfillment of its obligations with respect to this Treaty, each Party shall notify the other Party of changes in data, as provided for in subparagraph 3(a) of this Article, and shall also provide other notifications required by paragraph 3 of this Article, in accordance with the procedures provided for in paragraphs 4, 5, and 6 of this Article, the Notification Protocol, and the Inspection Protocol.

3. Each Party shall provide to the other Party, in accordance with the Notification Protocol, and, for subparagraph (i) of this paragraph, in accordance with Section III of the Inspection Protocol:

- (a) notifications concerning data with respect to items subject to the limitations provided for in this Treaty, according to categories of data contained in the Memorandum of Understanding and other agreed categories of data;
- (b) notifications concerning movement of items subject to the limitations provided for in this Treaty;
- (c) notifications concerning data on ICBM and SLBM throw-weight in connection with the Protocol on ICBM and SLBM Throw-weight Relating to this Treaty, hereinafter referred to as the Throw-weight Protocol;
- (d) notifications concerning conversion or elimination of items subject to the limitations provided for in this Treaty or elimination of facilities subject to this Treaty;
- (e) notifications concerning cooperative measures to enhance the effectiveness of national technical means of verification;
- (f) notifications concerning flight tests of ICBMs or SLBMs and notifications concerning telemetric information;
- (g) notifications concerning strategic offensive arms of new types and new kinds;
- (h) notifications concerning changes in the content of information provided pursuant to this paragraph, including the rescheduling of activities;
- (i) notifications concerning inspections and continuous monitoring activities; and
- (j) notifications concerning operational dispersals.

4. Each Party shall use the Nuclear Risk Reduction Centers, which provide for continuous communication between the Parties, to provide and receive notifications in accordance with the Notification Protocol and the Inspection Protocol, unless otherwise provided for in this Treaty, and to acknowledge receipt of such notifications no later than one hour after receipt.

5. If a time is to be specified in a notification provided pursuant to this Article, that time shall be expressed in Greenwich Mean Time. If only a date is to be specified in a notification, that date shall be specified as the 24-hour period that corresponds to the date in local time, expressed in Greenwich Mean Time.

6. Except as otherwise provided in this Article, each Party shall have the right to release to the public all data current as of September 1, 1990, that are listed in the Memorandum of Understanding, as well as the photographs that are appended thereto. Geographic coordinates and site diagrams that are received pursuant to the Agreement Between the Government of the United States of America and the Government of the Union of Soviet Socialist Republics on Exchange of Geographic Coordinates and Site Diagrams Relating to the Treaty of July 31, 1991, shall not be released to the public unless otherwise agreed. The Parties shall hold consultations on releasing to the public data and other information provided pursuant to this Article or received otherwise in fulfilling the obligations provided for in this Treaty. The provisions of this Article shall not affect the rights and

obligations of the Parties with respect to the communication of such data and other information to those individuals who, because of their official responsibilities, require such data or other information to carry out activities related to the fulfillment of the obligations provided for in this Treaty.

ARTICLE IX

1. For the purpose of ensuring verification of compliance with the provisions of this Treaty, each Party shall use national technical means of verification at its disposal in a manner consistent with generally recognized principles of international law.
2. Each Party undertakes not to interfere with the national technical means of verification of the other Party operating in accordance with paragraph 1 of this Article.
3. Each Party undertakes not to use concealment measures that impede verification, by national technical means of verification, of compliance with the provisions of this Treaty. In this connection, the obligation not to use concealment measures includes the obligation not to use them at test ranges, including measures that result in the concealment of ICBMs, SLBMs, mobile launchers of ICBMs, or the association between ICBMs or SLBMs and their launchers during testing. The obligation not to use concealment measures shall not apply to cover or concealment practices at ICBM bases and deployment areas, or to the use of environmental shelters for strategic offensive arms.
4. To aid verification, each ICBM for mobile launchers of ICBMs shall have a unique identifier as provided for in the Inspection Protocol.

ARTICLE X

1. During each flight test of an ICBM or SLBM, the Party conducting the flight test shall make on-board technical measurements and shall broadcast all telemetric information obtained from such measurements. The Party conducting the flight test shall determine which technical parameters are to be measured during such flight test, as well as the methods of processing and transmitting telemetric information.
2. During each flight test of an ICBM or SLBM, the Party conducting the flight test undertakes not to engage in any activity that denies full access to telemetric information, including:
 - (a) the use of encryption;
 - (b) the use of jamming;
 - (c) broadcasting telemetric information from an ICBM or SLBM using narrow directional beaming; and
 - (d) encapsulation of telemetric information, including the use of ejectable capsules or recoverable reentry vehicles.
3. During each flight test of an ICBM or SLBM, the Party conducting the flight test undertakes not to broadcast from a reentry vehicle telemetric information that pertains to the functioning of the stages or the self-contained dispensing mechanism of the ICBM or SLBM.
4. After each flight test of an ICBM or SLBM, the Party conducting the flight test shall provide, in accordance with Section I of the Protocol on Telemetric Information Relating to the Treaty, hereinafter referred to as the Telemetry Protocol, tapes that contain a recording of all telemetric information that is broadcast during the flight test.

5. After each flight test of an ICBM or SLBM, the Party conducting the flight test shall provide, in accordance with Section II of the Telemetry Protocol, data associated with the analysis of the telemetric information.
6. Notwithstanding the provisions of paragraphs 1 and 2 of this Article, each Party shall have the right to encapsulate and encrypt on-board technical measurements during no more than a total of eleven flight tests of ICBMs or SLBMs each year. Of these eleven flight tests each year, no more than four shall be flight tests of ICBMs or SLBMs of each type, any missile of which has been flight-tested with a self-contained dispensing mechanism. Such encapsulation shall be carried out in accordance with Section I and paragraph 1 of Section III of the Telemetry Protocol, and such encryption shall be carried out in accordance with paragraph 2 of Section III of the Telemetry Protocol. Encapsulation and encryption that are carried out on the same flight test of an ICBM or SLBM shall count as two flight tests against the quotas specified in this paragraph.

ARTICLE XI

1. For the purpose of ensuring verification of compliance with the provisions of this Treaty, each Party shall have the right to conduct inspections and continuous monitoring activities and shall conduct exhibitions pursuant to this Article and the Inspection Protocol. Inspections, continuous monitoring activities, and exhibitions shall be conducted in accordance with the procedures provided for in the Inspection Protocol and the Conversion or Elimination Protocol.
2. Each Party shall have the right to conduct baseline data inspections at facilities to confirm the accuracy of data on the numbers and types of items specified for such facilities in the initial exchange of data provided in accordance with paragraph 1 of Section I of the Notification Protocol.
3. Each Party shall have the right to conduct data update inspections at facilities to confirm the accuracy of data on the numbers and types of items specified for such facilities in the notifications and regular exchanges of updated data provided in accordance with paragraphs 2 and 3 of Section I of the Notification Protocol.
4. Each Party shall have the right to conduct new facility inspections to confirm the accuracy of data on the numbers and types of items specified in the notifications of new facilities provided in accordance with paragraph 3 of Section I of the Notification Protocol.
5. Each Party shall have the right to conduct suspect-site inspections to confirm that covert assembly of ICBMs for mobile launchers of ICBMs or covert assembly of first stages of such ICBMs is not occurring.
6. Each Party shall have the right to conduct reentry vehicle inspections of deployed ICBMs and SLBMs to confirm that such ballistic missiles contain no more reentry vehicles than the number of warheads attributed to them.
7. Each Party shall have the right to conduct post-exercise dispersal inspections of deployed mobile launchers of ICBMs and their associated missiles to confirm that the number of mobile launchers of ICBMs and their associated missiles that are located at the inspected ICBM bases and those that have not returned to it after completion of the dispersal does not exceed the number specified for that ICBM base.
8. Each Party shall conduct or shall have the right to conduct conversion or elimination inspections to confirm the conversion or elimination of strategic offensive arms.

9. Each Party shall have the right to conduct close-out inspections to confirm that the elimination of facilities has been completed.

10. Each Party shall have the right to conduct formerly declared facility inspections to confirm that facilities, notification of the elimination of which has been provided in accordance with paragraph 3 of Section I of the Notification Protocol, are not being used for purposes inconsistent with this Treaty.

11. Each Party shall conduct technical characteristics exhibitions, and shall have the right during such exhibitions by the other Party to conduct inspections of an ICBM and an SLBM of each type, and each variant thereof, and of a mobile launcher of ICBMs and each version of such launcher for each type of ICBM for mobile launchers of ICBMs. The purpose of such exhibitions shall be to permit the inspecting Party to confirm that technical characteristics correspond to the data specified for these items.

12. Each Party shall conduct distinguishability exhibitions for heavy bombers, former heavy bombers, and long-range nuclear ALCMs, and shall have the right during such exhibitions by the other Party to conduct inspections, of:

(a) heavy bombers equipped for long-range nuclear ALCMs. The purpose of such exhibitions shall be to permit the inspecting Party to confirm that the technical characteristics of each type and each variant of such heavy bombers correspond to the data specified for these items in Annex G to the Memorandum of Understanding; to demonstrate the maximum number of long-range nuclear ALCMs for which a heavy bomber of each type and each variant is actually equipped; and to demonstrate that this number does not exceed the number provided for in paragraph 20 or 21 of Article V of this Treaty, as applicable;

(b) for each type of heavy bomber from any one of which a long-range nuclear ALCM has been flight-tested, heavy bombers equipped for nuclear armaments other than long-range nuclear ALCMs, heavy bombers equipped for non-nuclear armaments, training heavy bombers, and former heavy bombers. If, for such a type of heavy bomber, there are no heavy bombers equipped for long-range nuclear ALCMs, a test heavy bomber from which a long-range nuclear ALCM has been flight-tested shall be exhibited. The purpose of such exhibitions shall be to demonstrate to the inspecting Party that, for each exhibited type of heavy bomber, each variant of heavy bombers equipped for nuclear armaments other than long-range nuclear ALCMs, each variant of heavy bombers equipped for non-nuclear armaments, each variant of training heavy bombers, and a former heavy bomber are distinguishable from one another and from each variant of heavy bombers of the same type equipped for long-range nuclear ALCMs; and

(c) long-range nuclear ALCMs. The purpose of such exhibitions shall be to permit the inspecting Party to confirm that the technical characteristics of each type and each variant of such long-range ALCMs correspond to the data specified for these items in Annex H to the Memorandum of Understanding. The further purpose of such exhibitions shall be to demonstrate differences, notification of which has been provided in accordance with paragraph 13, 14, or 15 of Section VII of the Notification Protocol, that make long-range non-nuclear ALCMs distinguishable from long-range nuclear ALCMs.

13. Each Party shall conduct baseline exhibitions, and shall have the right during such exhibitions by the other Party to conduct inspections, of all heavy bombers equipped for long-range nuclear ALCMs equipped for non-nuclear armaments, all training heavy bombers, and all former heavy bombers specified in the initial exchange of data provided

in accordance with paragraph 1 of Section I of the Notification Protocol. The purpose of these exhibitions shall be to demonstrate to the inspecting Party that such airplanes satisfy the requirements for conversion in accordance with the Conversion or Elimination Protocol. After a long-range nuclear ALCM has been flight-tested from a heavy bomber of a type, from none of which a long-range nuclear ALCM had previously been flight-tested, the Party conducting the flight test shall conduct baseline exhibitions, and the other Party shall have the right during such exhibitions to conduct inspections, of 30 percent of the heavy bombers equipped for long-range nuclear ALCMs of such type equipped for nuclear armaments other than long-range nuclear ALCMs at each air base specified for such heavy bombers. The purpose of these exhibitions shall be to demonstrate to the inspecting Party the presence of specified features that make each exhibited heavy bomber distinguishable from heavy bombers of the same type equipped for long-range nuclear ALCMs.

14. Each Party shall have the right to conduct continuous monitoring activities at production facilities for ICBMs for mobile launchers of ICBMs to confirm the number of ICBMs for mobile launchers of ICBMs produced.

ARTICLE XII

1. To enhance the effectiveness of national technical means of verification, each Party shall, if the other Party makes a request in accordance with paragraph 1 of Section V of the Notification Protocol, carry out the following cooperative measures:

(a) a display in the open of the road-mobile launchers of ICBMs located within restricted areas specified by the requesting Party. The number of road-mobile launchers of ICBMs based at the restricted areas specified in each such request shall not exceed ten percent of the total number of deployed road-mobile launchers of ICBMs of the requested Party, and such launchers shall be contained within one ICBM base for road-mobile launchers of ICBMs. For each specified restricted area, the roofs of fixed structures for road-mobile launchers of ICBMs shall be open for the duration of a display. The road-mobile launchers of ICBMs located within the restricted area shall be displayed either located next to or moved halfway out of such fixed structures;

(b) a display in the open of the rail-mobile launchers of ICBMs located at parking sites specified by the requesting Party. Such launchers shall be displayed by removing the entire train from its fixed structure and locating the train within the rail garrison. The number of rail-mobile launchers of ICBMs subject to display pursuant to each such request shall include all such launchers located at no more than eight parking sites, provided that no more than two parking sites may be requested within any one rail garrison in any one request. Requests concerning specific parking sites shall include the designation for each parking site as provided for in Annex A to the Memorandum of Understanding; and

(c) a display in the open of all heavy bombers and former heavy bombers located within one air base specified by the requesting Party, except those heavy bombers and former heavy bombers that are not readily movable due to maintenance or operations. Such heavy bombers and former heavy bombers shall be displayed by removing the entire airplane from its fixed structure, if any, and locating the airplane within the air base. Those heavy bombers and former heavy bombers at the air base specified by the requesting Party that are not readily movable due to maintenance or operations shall be

specified by the requested Party in a notification provided in accordance with paragraph 2 of Section V of the Notification Protocol. Such a notification shall be provided no later than 12 hours after the request for display has been made.

2. Road-mobile launchers of ICBMs, rail-mobile launchers of ICBMs, heavy bombers, and former heavy bombers subject to each request pursuant to paragraph 1 of this Article shall be displayed in open view without using concealment measures. Each Party shall have the right to make seven such requests each year, but shall not request a display at any particular ICBM base for road-mobile launchers of ICBMs, any particular parking site, or any particular air base more than two times each year. A Party shall have the right to request, in any single request, only a display of road-mobile launchers of ICBMs, a display of rail-mobile launchers of ICBMs, or a display of heavy bombers and former heavy bombers. A display shall begin no later than 12 hours after the request is made and shall continue until 18 hours have elapsed from the time that the request was made. If the requested Party cannot conduct a display due to circumstances brought about by force majeure, it shall provide notification to the requesting Party in accordance with paragraph 3 of Section V of the Notification Protocol, and the display shall be cancelled. In such a case, the number of requests to which the requesting Party is entitled shall not be reduced.

3. A request for cooperative measures shall not be made for a facility that has been designated for inspection until such an inspection has been completed and the inspectors have departed the facility. A facility for which cooperative measures have been requested shall not be designated for inspection until the cooperative measures have been completed or until notification has been provided in accordance with paragraph 3 of Section V of the Notification Protocol.

ARTICLE XIII

1. Each Party shall have the right to conduct exercise dispersal of deployed mobile launchers of ICBMs and their associated missiles from restricted areas or rail garrisons. Such an exercise dispersal may involve either road-mobile launchers of ICBMs or rail-mobile launchers of ICBMs, or both road-mobile launchers of ICBMs and rail-mobile launchers of ICBMs. Exercise dispersals of deployed mobile launchers of ICBMs and their associated missiles shall be conducted as provided for below:

(a) An exercise dispersal shall be considered to have begun as of the date and time specified in the notification provided in accordance with paragraph 11 of Section II of the Notification Protocol.

(b) An exercise dispersal shall be considered to be completed as of the date and time specified in the notification provided in accordance with paragraph 12 of Section II of the Notification Protocol.

(c) Those ICBM bases for mobile launchers of ICBMs specified in the notification provided in accordance with paragraph 11 of Section II of the Notification Protocol shall be considered to be involved in an exercise dispersal.

(d) When an exercise dispersal begins, deployed mobile launchers of ICBMs and their associated missiles engaged in a routine movement from a restricted area or rail garrison of an ICBM base for mobile launchers of ICBMs that is involved in such a dispersal shall be considered to be part of the dispersal.

- b(e) When an exercise dispersal begins, deployed mobile launchers of ICBMs and their associated missiles engaged in a relocation from a restricted area or rail garrisons of an ICBM base for mobile launchers of ICBMs that is involved in such a dispersal shall continue to be considered to be engaged in a relocation. Notification of the completion of the relocation shall be provided in accordance with paragraph 10 of Section II of the Notification Protocol, unless notification of the completion of the relocation was provided in accordance with paragraph 12 of Section II of the Notification Protocol.
- (f) During an exercise dispersal, all deployed mobile launchers of ICBMs and their associated missiles that depart a restricted area or rail garrison of an ICBM base for mobile launchers of ICBMs involved in such a dispersal shall be considered to be part of the dispersal, except for such launchers and missiles that relocate to a facility outside their associated ICBM base during such a dispersal.
- (g) An exercise dispersal shall be completed no later than 30 days after it begins.
- (h) Exercise dispersals shall not be conducted:
- (i) more than two times in any period of two calendar years;
 - (ii) during the entire period of time provided for baseline data inspections;
 - (iii) from a new ICBM base for mobile launchers of ICBMs until a new facility inspection has been conducted or until the period of time provided for such an inspection has expired; or
 - (iv) from an ICBM base for mobile launchers of ICBMs that has been designated for a data update inspection or reentry vehicle inspection, until completion of such an inspection.
- (i) If a notification of an exercise dispersal has been provided in accordance with paragraph 11 of Section II of the Notification Protocol, the other Party shall not have the right to designate for data update inspection or reentry vehicle inspection an ICBM base for mobile launchers of ICBMs involved in such a dispersal, or to request cooperative measures for such an ICBM base, until the completion of such a dispersal.
- (j) When an exercise dispersal is completed, deployed mobile launchers of ICBMs and their associated missiles involved in such a dispersal shall be located at their restricted areas or rail garrisons, except for those otherwise accounted for in accordance with paragraph 12 of Section II of the Notification Protocol.
2. A major strategic exercise involving heavy bombers, about which a notification has been provided pursuant to the Agreement Between the Government of the United States of America and the Government of the Union of Soviet Socialist Republics on Reciprocal Advance Notification of Major Strategic Exercises of September 23, 1989, shall be conducted as provided for below:
- (a) Such exercise shall be considered to have begun as of the date and time specified in the notification provided in accordance with paragraph 16 of Section II of the Notification Protocol.
 - (b) Such exercise shall be considered to be completed as of the date and time specified in the notification provided in accordance with paragraph 17 of Section II of the Notification Protocol.
 - (c) The air bases for heavy bombers and air bases for former heavy bombers specified in the notification provided in accordance with paragraph 16 of Section II of the Notification Protocol shall be considered to be involved in such exercise.

- (d) Such exercise shall begin no more than one time in any calendar year, and shall be completed no later than 30 days after it begins.
- (e) Such exercise shall not be conducted during the entire period of time provided for baseline data inspections.
- (f) During such exercise by a Party, the other Party shall not have the right to conduct inspections of the air bases for heavy bombers and air bases for former heavy bombers involved in the exercise. The right to conduct inspections of such air bases shall resume three days after notification of the completion of a major strategic exercise involving heavy bombers has been provided in accordance with paragraph 17 of Section II of the Notification Protocol.
- (g) Within the 30-day period following the receipt of the notification of the completion of such exercise, the receiving Party may make a request for cooperative measures to be carried out in accordance with subparagraph 1(c) of Article XII of this Treaty at one of the air bases involved in the exercise. Such a request shall not be counted toward the quota provided for in paragraph 2 of Article XII of this Treaty.

ARTICLE XIV

1. Each Party shall have the right to conduct operational dispersals of deployed mobile launchers of ICBMs and their associated missiles, ballistic missile submarines, and heavy bombers. There shall be no limit on the number and duration of operational dispersals, and there shall be no limit on the number of deployed mobile launchers of ICBMs and their associated missiles, ballistic missile submarines, or heavy bombers involved in such dispersals. When an operational dispersal begins, all strategic offensive arms of a Party shall be considered to be part of the dispersal. Operational dispersals shall be conducted as provided for below:

- (a) An operational dispersal shall be considered to have begun as of the date and time specified in the notification provided in accordance with paragraph 1 of Section X of the Notification Protocol.
- (b) An operational dispersal shall be considered to be completed as of the date and time specified in the notification provided in accordance with paragraph 2 of Section X of the Notification Protocol.

2. During an operational dispersal each Party shall have the right to:

- (a) suspend notifications that it would otherwise provide in accordance with the Notification Protocol except for notification of flight tests provided under the Agreement Between the United States of America and the Union of Soviet Socialist Republics on Notifications of Launches of Intercontinental Ballistic Missiles and Submarine-Launched Ballistic Missiles of May 31, 1988; provided that, if any conversion or elimination processes are not suspended pursuant to subparagraph (d) of this paragraph, the relevant notifications shall be provided in accordance with Section IV of the Notification Protocol;
- (b) suspend the right of the other Party to conduct inspections;
- (c) suspend the right of the other Party to request cooperative measures; and
- (d) suspend conversion and elimination processes for its strategic offensive arms. In such case, the number of converted and eliminated items shall correspond to the number that has actually been converted and eliminated as of the date and time of the beginning of the

operational dispersal specified in the notification provided in accordance with paragraph 1 of Section X of the Notification Protocol.

3. Notifications suspended pursuant to paragraph 2 of this Article shall resume no later than three days after notification of the completion of the operational dispersal has been provided in accordance with paragraph 2 of Section X of the Notification Protocol. The right to conduct inspections and to request cooperative measures suspended pursuant to paragraph 2 of this Article shall resume four days after notification of the completion of the operational dispersal has been provided in accordance with paragraph 2 of Section X of the Notification Protocol. Inspections or cooperative measures being conducted at the time a Party provides notification that it suspends inspections or cooperative measures during an operational dispersal shall not count toward the appropriate annual quotas provided for by this Treaty.

4. When an operational dispersal is completed:

(a) All deployed road-mobile launchers of ICBMs and their associated missiles shall be located within their deployment areas or shall be engaged in relocations.

(b) All deployed rail-mobile launchers of ICBMs and their associated missiles shall be located within their rail garrisons or shall be engaged in routine movements or relocations .

(c) All heavy bombers shall be located within national territory and shall have resumed normal operations. If it is necessary for heavy bombers to be located outside national territory for purposes not inconsistent with this Treaty, the Parties will immediately engage in diplomatic consultations so that appropriate assurances can be provided.

5. Within the 30 day period after the completion of an operational dispersal, the Party not conducting the operational dispersal shall have the right to make no more than two requests for cooperative measures, subject to the provisions of Article XII of this Treaty, for ICBM bases for mobile launchers of ICBMs or air bases. Such requests shall not count toward the quota of requests provided for in paragraph 2 of Article XII of this Treaty.

ARTICLE XV

To promote the objectives and implementation of the provisions of this Treaty, the Parties hereby establish the Joint Compliance and Inspection Commission. The Parties agree that, if either Party so requests, they shall meet within the framework of the Joint Compliance and Inspection Commission to:

(a) resolve questions relating to compliance with the obligations assumed;

(b) agree upon such additional measures as may be necessary to improve the viability and effectiveness of this Treaty; and

(c) resolve questions related to the application of relevant provisions of this Treaty to a new kind of strategic offensive arm, after notification has been provided in accordance with paragraph 16 of Section VII of the Notification Protocol.

ARTICLE XVI

To ensure the viability and effectiveness of this Treaty, each Party shall not assume any international obligations or undertakings that would conflict with its provisions. The Parties shall hold consultations in accordance with Article XV of this Treaty in order to resolve any ambiguities that may arise in this regard. The Parties agree that this provision

does not apply to any patterns of cooperation, including obligations, in the area of strategic offensive arms, existing at the time of signature of this Treaty, between a Party and a third State.

ARTICLE XVII

1. This Treaty, including its Annexes, Protocols, and Memorandum of Understanding, all of which form integral parts thereof, shall be subject to ratification in accordance with the constitutional procedures of each Party. This Treaty shall enter into force on the date of the exchange of instruments of ratification.

2. This Treaty shall remain in force for 15 years unless superseded earlier by a subsequent agreement on the reduction and limitation of strategic offensive arms. No later than one year before the expiration of the 15-year period, the Parties shall meet to consider whether this Treaty will be extended. If the Parties so decide, this Treaty will be extended for a period of five years unless it is superseded before the expiration of that period by a subsequent agreement on the reduction and limitation of strategic offensive arms. This Treaty shall be extended for successive five-year periods, if the Parties so decide, in accordance with the procedures governing the initial extension, and it shall remain in force for each agreed five-year period of extension unless it is superseded by a subsequent agreement on the reduction and limitation of strategic offensive arms.

3. Each Party shall, in exercising its national sovereignty, have the right to withdraw from this Treaty if it decides that extraordinary events related to the subject matter of this Treaty have jeopardized its supreme interests. It shall give notice of its decision to the other Party six months prior to withdrawal from this Treaty. Such notice shall include a statement of the extraordinary events the notifying Party regards as having jeopardized its supreme interests.

ARTICLE XVIII

Each Party may propose amendments to this Treaty. Agreed amendments shall enter into force in accordance with the procedures governing entry into force of this Treaty.

ARTICLE XIX

This Treaty shall be registered pursuant to Article 102 of the Charter of the United Nations.

Done at Moscow on July 31, 1991, in two copies, each in the English and Russian languages, both texts being equally authentic.

FOR THE UNITED STATES OF AMERICA: George Bush
President of the United States of America

FOR THE UNION OF SOVIET SOCIALIST REPUBLICS: M. Gorbachev
President of the Union of Soviet Socialist Republics

APPENDIX E: SORT TREATY

TEXT OF THE TREATY BETWEEN THE UNITED STATES OF AMERICA AND
THE RUSSIAN FEDERATION ON STRATEGIC OFFENSIVE REDUCTIONS⁵

Signed May 24, 2002

The United States of America and the Russian Federation, hereinafter referred to as the Parties,

Embarking upon the path of new relations for a new century and committed to the goal of strengthening their relationship through cooperation and friendship,

Believing that new global challenges and threats require the building of a qualitatively new foundation for strategic relations between the Parties,

Desiring to establish a genuine partnership based on the principles of mutual security, cooperation, trust, openness, and predictability,

Committed to implementing significant reductions in strategic offensive arms,

Proceeding from the Joint Statements by the President of the United States of America and the President of the Russian Federation on Strategic Issues of July 22, 2001 in Genoa and on a New Relationship between the United States and Russia of November 13, 2001 in Washington,

Mindful of their obligations under the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Reduction and Limitation of Strategic Offensive Arms of July 31, 1991, hereinafter referred to as the START Treaty,

Mindful of their obligations under Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons of July 1, 1968, and Convinced that this Treaty will help to establish more favorable conditions for actively promoting security and cooperation, and enhancing international stability,

Have agreed as follows:

⁵ Arms Control Association, "Strategic Offensive Reductions Treaty (SORT)," *Arms Control Association website*, 2010. <http://www.armscontrol.org/documents/sort> (accessed June 17, 2010). The Arms Control Association cites the State Department as the original source. The current Department of State website does not contain a copy of the agreement.

Article I

Each Party shall reduce and limit strategic nuclear warheads, as stated by the President of the United States of America on November 13, 2001 and as stated by the President of the Russian Federation on November 13, 2001 and December 13, 2001 respectively, so that by December 31, 2012 the aggregate number of such warheads does not exceed 1700-2200 for each Party. Each Party shall determine for itself the composition and structure of its strategic offensive arms, based on the established aggregate limit for the number of such warheads.

Article II

The Parties agree that the START Treaty remains in force in accordance with its terms.

Article III

For purposes of implementing this Treaty, the Parties shall hold meetings at least twice a year of a Bilateral Implementation Commission.

Article IV

1. This Treaty shall be subject to ratification in accordance with the constitutional procedures of each Party. This Treaty shall enter into force on the date of the exchange of instruments of ratification.
2. This Treaty shall remain in force until December 31, 2012 and may be extended by agreement of the Parties or superseded earlier by a subsequent agreement.
3. Each Party, in exercising its national sovereignty, may withdraw from this Treaty upon three months written notice to the other Party.

Article V

This Treaty shall be registered pursuant to Article 102 of the Charter of the United Nations.

Done at Moscow on May 24, 2002, in two copies, each in the English and Russian languages, both texts being equally authentic.

FOR THE UNITED STATES OF
AMERICA: [signed]

George W. Bush

FOR THE RUSSIAN FEDERATION:
[signed]

Vladimir Putin

APPENDIX F: NEW START TREATY

TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE RUSSIAN
FEDERATION ON MEASURES FOR THE FURTHER REDUCTION AND
LIMITATION OF STRATEGIC OFFENSIVE ARMS⁶

The United States of America and the Russian Federation, hereinafter referred to as the Parties,

Believing that global challenges and threats require new approaches to interaction across the whole range of their strategic relations,

Working therefore to forge a new strategic relationship based on mutual trust, openness, predictability, and cooperation,

Desiring to bring their respective nuclear postures into alignment with this new relationship, and endeavoring to reduce further the role and importance of nuclear weapons,

Committed to the fulfillment of their obligations under Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons of July 1, 1968, and to the achievement of the historic goal of freeing humanity from the nuclear threat,

Expressing strong support for on-going global efforts in non-proliferation,

Seeking to preserve continuity in, and provide new impetus to, the step-by-step process of reducing and limiting nuclear arms while maintaining the safety and security of their nuclear arsenals, and with a view to expanding this process in the future, including to a multilateral approach,

Guided by the principle of indivisible security and convinced that measures for the reduction and limitation of strategic offensive arms and the other obligations set forth in this Treaty will enhance predictability and stability, and thus the security of both Parties,

Recognizing the existence of the interrelationship between strategic offensive arms and strategic defensive arms, that this interrelationship will become more important as strategic nuclear arms are reduced, and that current strategic defensive arms do not undermine the viability and effectiveness of the strategic offensive arms of the Parties, Mindful of the impact of conventionally armed ICBMs and SLBMs on strategic stability,

⁶ Department of State, "Treaty Between The United States of America and The Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms," *Department of State website*, 2010. <http://www.state.gov/documents/organization/140035.pdf> (accessed June 17, 2010). This website contains a photocopy of the original English text and signatures.

Taking into account the positive effect on the world situation of the significant, verifiable reduction in nuclear arsenals at the turn of the 21st century,

Desiring to create a mechanism for verifying compliance with the obligations under this Treaty, adapted, simplified, and made less costly in comparison to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Reduction and Limitation of Strategic Offensive Arms of July 31, 1991, hereinafter referred to as the START Treaty,

Recognizing that the START Treaty has been implemented by the Republic of Belarus, the Republic of Kazakhstan, the Russian Federation, Ukraine, and the United States of America, and that the reduction levels envisaged by the START Treaty were achieved,

Deeply appreciating the contribution of the Republic of Belarus, the Republic of Kazakhstan, and Ukraine to nuclear disarmament and to strengthening international peace and security as non-nuclear-weapon states under the Treaty on the Non-Proliferation of Nuclear Weapons of July 1, 1968,

Welcoming the implementation of the Treaty Between the United States of America and the Russian Federation on Strategic Offensive Reductions of May 24, 2002, Have agreed as follows:

Article I

1. Each Party shall reduce and limit its strategic offensive arms in accordance with the provisions of this Treaty and shall carry out the other obligations set forth in this Treaty and its Protocol.
2. Definitions of terms used in this Treaty and its Protocol are provided in Part One of the Protocol.

Article II

1. Each Party shall reduce and limit its ICBMs and ICBM launchers, SLBMs and SLBM launchers, heavy bombers, ICBM warheads, SLBM warheads, and heavy bomber nuclear armaments, so that seven years after entry into force of this Treaty and thereafter, the aggregate numbers, as counted in accordance with Article III of this Treaty, do not exceed:

(a) 700, for deployed ICBMs, deployed SLBMs, and deployed heavy bombers;

(b) 1550, for warheads on deployed ICBMs, warheads on deployed SLBMs, and nuclear warheads counted for deployed heavy bombers;

(c) 800, for deployed and non-deployed ICBM launchers, deployed and non-deployed SLBM launchers, and deployed and non-deployed heavy bombers.

2. Each Party shall have the right to determine for itself the composition and structure of its strategic offensive arms.

Article III

1. For the purposes of counting toward the aggregate limit provided for in subparagraph 1 (a) of Article II of this Treaty:

- (a) Each deployed ICBM shall be counted as one.
- (b) Each deployed SLBM shall be counted as one.
- (c) Each deployed heavy bomber shall be counted as one.

2. For the purposes of counting toward the aggregate limit provided for in subparagraph 1 (b) of Article II of this Treaty:

(a) For ICBMs and SLBMs, the number of warheads shall be the number of reentry vehicles emplaced on deployed ICBMs and on deployed SLBMs.

(b) One nuclear warhead shall be counted for each deployed heavy bomber.

3. For the purposes of counting toward the aggregate limit provided for in subparagraph 1(c) of Article II of this Treaty:

- (a) Each deployed launcher of ICBMs shall be counted as one.
- (b) Each non-deployed launcher of ICBMs shall be counted as one.
- (c) Each deployed launcher of SLBMs shall be counted as one.
- (d) Each non-deployed launcher of SLBMs shall be counted as one.
- (e) Each deployed heavy bomber shall be counted as one.
- (f) Each non-deployed heavy bomber shall be counted as one.

4. For the purposes of this Treaty, including counting ICBMs and SLBMs:

(a) For ICBMs or SLBMs that are maintained, stored, and transported as assembled missiles in launch canisters, an assembled missile of a particular type, in its launch canister, shall be considered to be an ICBM or SLBM of that type.

(b) For ICBMs or SLBMs that are maintained, stored, and transported as assembled missiles without launch canisters, an assembled missile of a particular type shall be considered to be an ICBM or SLBM of that type.

(c) For ICBMs or SLBMs that are maintained, stored, and transported in stages, the first stage of an ICBM or SLBM of a particular type shall be considered to be an ICBM or SLBM of that type.

(d) Each launch canister shall be considered to contain an ICBM or SLBM from the time it first leaves a facility at which an ICBM or SLBM is installed in it, until an ICBM or SLBM has been launched from it, or until an ICBM or SLBM has been removed from it for elimination. A launch canister shall not be considered to contain an ICBM or SLBM if it contains a training model of a missile or has been placed on static display. Launch canisters for ICBMs or SLBMs of a particular type shall be distinguishable from launch canisters for ICBMs or SLBMs of a different type.

5. Newly constructed strategic offensive arms shall begin to be subject to this Treaty as follows:

(a) an ICBM, when it first leaves a production facility;

(b) a mobile launcher of ICBMs, when it first leaves a production facility;

(c) a silo launcher of ICBMs, when the silo door is first installed and closed;

(d) an SLBM, when it first leaves a production facility;

(e) an SLBM launcher, when the submarine on which that launcher is installed is first launched;

(f) a heavy bomber equipped for nuclear armaments, when its airframe is first brought out of the shop, plant, or building in which components of such a heavy bomber are assembled to produce complete airframes; or when its airframe is first brought out of the shop, plant, or building in which existing bomber airframes are converted to such heavy bomber airframes.

6. ICBMs, SLBMs, ICBM launchers, SLBM launchers, and heavy bombers shall cease to be subject to this Treaty in accordance with Parts Three and Four of the Protocol to this Treaty. ICBMs or SLBMs of an existing type shall cease to be subject to this Treaty if all ICBM or SLBM launchers of a type intended for such ICBMs or SLBMs have been eliminated or converted in accordance with Part Three of the Protocol to this Treaty.

7. For the purposes of this Treaty:

(a) A missile of a type developed and tested solely to intercept and counter objects not located on the surface of the Earth shall not be considered to be a ballistic missile to which the provisions of this Treaty apply.

(b) Within the same type, a heavy bomber equipped for nuclear armaments shall be distinguishable from a heavy bomber equipped for non-nuclear armaments.

(c) Heavy bombers of the same type shall cease to be subject to this Treaty or to the limitations thereof when the last heavy bomber equipped for nuclear armaments of that type is eliminated or converted, as appropriate, to a heavy bomber equipped for non-nuclear armaments in accordance with Part Three of the Protocol to this Treaty.

8. As of the date of signature of this Treaty:

(a) Existing types of ICBMs are:

(i) for the United States of America, the Minuteman II, Minuteman III, and Peacekeeper;

(ii) for the Russian Federation, the RS-12M, RS-12M2, RS-18, RS-20, and RS-24.

(b) Existing types of SLBMs are:

(i) for the Russian Federation, the RSM-50, RSM-52, RSM-54, and RSM-56;

(ii) for the United States of America, the Trident II.

(c) Existing types of heavy bombers are:

(i) for the United States of America, the B-52G, B-52H, B-1B, and B-2A;

(ii) for the Russian Federation, the Tu-95MS and Tu-160.

(d) Existing types of ICBM launchers and SLBM launchers are:

(i) for the Russian Federation, ICBM launchers RS-12M, RS-12M2, RS-18, RS-20, and RS-24; SLBM launchers RSM-50, RSM-52, RSM-54, and RSM-56;

(ii) for the United States of America, ICBM launchers Minuteman II, Minuteman III, and Peacekeeper; the SLBM launchers Trident II.

Article IV

1. Each Party shall base:

(a) deployed launchers of ICBMs only at ICBM bases;

(b) deployed heavy bombers only at air bases.

2. Each Party shall install deployed launchers of SLBMs only on ballistic missile submarines.

3. Each Party shall locate:

(a) non-deployed launchers of ICBMs only at ICBM bases, production facilities, ICBM loading facilities, repair facilities, storage facilities, conversion or elimination facilities, training facilities, test ranges, and space launch facilities. Mobile launchers of prototype ICBMs shall not be located at maintenance facilities of ICBM bases;

(b) non-deployed ICBMs and non-deployed SLBMs only at, as appropriate, submarine bases, ICBM or SLBM loading facilities, maintenance facilities, repair facilities for ICBMs or SLBMs, storage facilities for ICBMs or SLBMs, conversion or elimination facilities for ICBMs or SLBMs, test ranges, space launch facilities, and production facilities. Prototype ICBMs and prototype SLBMs, however, shall not be located at maintenance facilities of ICBM bases or at submarine bases.

4. Non-deployed ICBMs and non-deployed SLBMs as well as nondeployed mobile launchers of ICBMs may be in transit. Each Party shall limit the duration of each transit between facilities to no more than 30 days.

5. Test launchers of ICBMs or SLBMs may be located only at test ranges.

6. Training launchers may be located only at ICBM bases, training facilities, and test ranges. The number of silo training launchers located at each ICBM base for silo launchers of ICBMs shall not exceed one for each type of ICBM specified for that ICBM base.

7. Each Party shall limit the number of test heavy bombers to no more than ten.

8. Each Party shall base test heavy bombers only at heavy bomber flight test centers. Non-deployed heavy bombers other than test heavy bombers shall be located only at repair facilities or production facilities for heavy bombers.

9. Each Party shall not carry out at an air base joint basing of heavy bombers equipped for nuclear armaments and heavy bombers equipped for non-nuclear armaments, unless otherwise agreed by the Parties.

10. Strategic offensive arms shall not be located at eliminated facilities except during their movement through such facilities and during visits of heavy bombers at such facilities.

11. Strategic offensive arms subject to this Treaty shall not be based outside the national territory of each Party. The obligations provided for in this paragraph shall not affect the Parties' rights in accordance with generally recognized principles and rules of international law relating to the passage of submarines or flights of aircraft, or relating to

visits of submarines to ports of third States. Heavy bombers may be temporarily located outside the national territory, notification of which shall be provided in accordance with Part Four of the Protocol to this Treaty.

Article V

1. Subject to the provisions of this Treaty, modernization and replacement of strategic offensive arms may be carried out.
2. When a Party believes that a new kind of strategic offensive arm is emerging, that Party shall have the right to raise the question of such a strategic offensive arm for consideration in the Bilateral Consultative Commission.
3. Each Party shall not convert and shall not use ICBM launchers and SLBM launchers for placement of missile defense interceptors therein. Each Party further shall not convert and shall not use launchers of missile defense interceptors for placement of ICBMs and SLBMs therein. This provision shall not apply to ICBM launchers that were converted prior to signature of this Treaty for placement of missile defense interceptors therein.

Article VI

1. Conversion, elimination, or other means for removal from accountability of strategic offensive arms and facilities shall be carried out in accordance with Part Three of the Protocol to this Treaty.
2. Notifications related to conversion, elimination, or other means for removal from accountability shall be provided in accordance with Parts Three and Four of the Protocol to this Treaty.
3. Verification of conversion or elimination in accordance with this Treaty shall be carried out by:
 - (a) national technical means of verification in accordance with Article X of this Treaty; and
 - (b) inspection activities as provided for in Article XI of this Treaty.

Article VII

1. A database pertaining to the obligations under this Treaty shall be created in accordance with Parts Two and Four of the Protocol to this Treaty. Categories of data for this database are set forth in Part Two of the Protocol to this Treaty.
2. Each Party shall notify the other Party about changes in data and shall provide other notifications in a manner provided for in Part Four of the Protocol to this Treaty.

3. Each Party shall use the Nuclear Risk Reduction Centers in order to provide and receive notifications, unless otherwise provided for in this Treaty.
4. Each Party may provide additional notifications on a voluntary basis, in addition to the notifications specified in paragraph 2 of this Article, if it deems this necessary to ensure confidence in the fulfillment of obligations assumed under this Treaty.
5. The Parties shall hold consultations within the framework of the Bilateral Consultative Commission on releasing to the public data and information obtained during the implementation of this Treaty. The Parties shall have the right to release to the public such data and information following agreement thereon within the framework of the Bilateral Consultative Commission. Each Party shall have the right to release to the public data related to its respective strategic offensive arms.
6. Geographic coordinates relating to data provided for in Part Two of the Protocol to this Treaty, unique identifiers, site diagrams of facilities provided by the Parties pursuant to this Treaty, as well as coastlines and waters diagrams provided by the Parties pursuant to this Treaty shall not be released to the public unless otherwise agreed by the Parties within the framework of the Bilateral Consultative Commission.
7. Notwithstanding paragraph 5 of this Article, the aggregate numbers of deployed ICBMs, deployed SLBMs, and deployed heavy bombers; the aggregate numbers of warheads on deployed ICBMs, deployed SLBMs, and nuclear warheads counted for deployed heavy bombers; and the aggregate numbers of deployed and nondeployed ICBM launchers, deployed and non-deployed SLBM launchers, and deployed and non-deployed heavy bombers, may be released to the public by the Parties.

Article VIII

In those cases in which one of the Parties determines that its actions may lead to ambiguous situations, that Party shall take measures to ensure the viability and effectiveness of this Treaty and to enhance confidence, openness, and predictability concerning the reduction and limitation of strategic offensive arms. Such measures may include, among other things, providing information in advance on activities of that Party associated with deployment or increased readiness of strategic offensive arms, to preclude the possibility of misinterpretation of its actions by the other Party. This information shall be provided through diplomatic or other channels.

Article IX

By mutual agreement of the Parties, telemetric information on launches of ICBMs and SLBMs shall be exchanged on a parity basis. The Parties shall agree on the amount of exchange of such telemetric information.

Article X

1. For the purpose of ensuring verification of compliance with the provisions of this Treaty, each Party undertakes:

(a) to use national technical means of verification at its disposal in a manner consistent with generally recognized principles of international law;

(b) not to interfere with the national technical means of verification of the other Party operating in accordance with this Article; and

(c) not to use concealment measures that impede verification, by national technical means of verification, of compliance with the provisions of this Treaty.

2. The obligation not to use concealment measures includes the obligation not to use them at test ranges, including measures that result in the concealment of ICBMs, SLBMs, ICBM launchers, or the association between ICBMs or SLBMs and their launchers during testing. The obligation not to use concealment measures shall not apply to cover or concealment practices at ICBM bases or to the use of environmental shelters for strategic offensive arms.

Article XI

1. For the purpose of confirming the accuracy of declared data on strategic offensive arms subject to this Treaty and ensuring verification of compliance with the provisions of this Treaty, each Party shall have the right to conduct inspection activities in accordance with this Article and Part Five of the Protocol to this Treaty.

2. Each Party shall have the right to conduct inspections at ICBM bases, submarine bases, and air bases. The purpose of such inspections shall be to confirm the accuracy of declared data on the numbers and types of deployed and non-deployed strategic offensive arms subject to this Treaty; the number of warheads located on deployed ICBMs and deployed SLBMs; and the number of nuclear armaments located on deployed heavy bombers. Such inspections shall hereinafter be referred to as Type One inspections.

3. Each Party shall have the right to conduct inspections at facilities listed in Section VII of Part Five of the Protocol to this Treaty. The purpose of such inspections shall be to confirm the accuracy of declared data on the numbers, types, and technical characteristics of non-deployed strategic offensive arms subject to this Treaty and to confirm that strategic offensive arms have been converted or eliminated. In addition, each Party shall have the right to conduct inspections at formerly declared facilities, which are provided for in Part Two of the Protocol to this Treaty, to confirm that such facilities are not being used for purposes inconsistent with this Treaty. The inspections provided for in this paragraph shall hereinafter be referred to as Type Two inspections.

4. Each Party shall conduct exhibitions and have the right to participate in exhibitions conducted by the other Party. The purpose of such exhibitions shall be to demonstrate distinguishing features and to confirm technical characteristics of new types, and to demonstrate the results of conversion of the first item of each type of strategic offensive arms subject to this Treaty.

Article XII

To promote the objectives and implementation of the provisions of this Treaty, the Parties hereby establish the Bilateral Consultative Commission, the authority and procedures for the operation of which are set forth in Part Six of the Protocol to this Treaty.

Article XIII

To ensure the viability and effectiveness of this Treaty, each Party shall not assume any international obligations or undertakings that would conflict with its provisions. The Parties shall not transfer strategic offensive arms subject to this Treaty to third parties. The Parties shall hold consultations within the framework of the Bilateral Consultative Commission in order to resolve any ambiguities that may arise in this regard. This provision shall not apply to any patterns of cooperation, including obligations, in the area of strategic offensive arms, existing at the time of signature of this Treaty, between a Party and a third State.

Article XIV

1. This Treaty, including its Protocol, which is an integral part thereof, shall be subject to ratification in accordance with the constitutional procedures of each Party. This Treaty shall enter into force on the date of the exchange of instruments of ratification.
2. This Treaty shall remain in force for 10 years unless it is superseded earlier by a subsequent agreement on the reduction and limitation of strategic offensive arms. If either Party raises the issue of extension of this Treaty, the Parties shall jointly consider the matter. If the Parties decide to extend this Treaty, it will be extended for a period of no more than five years unless it is superseded earlier by a subsequent agreement on the reduction and limitation of strategic offensive arms.
3. Each Party shall, in exercising its national sovereignty, have the right to withdraw from this Treaty if it decides that extraordinary events related to the subject matter of this Treaty have jeopardized its supreme interests. It shall give notice of its decision to the other Party. Such notice shall contain a statement of the extraordinary events the notifying Party regards as having jeopardized its supreme interests. This Treaty shall terminate three months from the date of receipt by the other Party of the aforementioned notice, unless the notice specifies a later date.

4. As of the date of its entry into force, this Treaty shall supersede the Treaty Between the United States of America and the Russian Federation on Strategic Offensive Reductions of May 24, 2002, which shall terminate as of that date.

Article XV

1. Each Party may propose amendments to this Treaty. Agreed amendments shall enter into force in accordance with the procedures governing entry into force of this Treaty.
2. If it becomes necessary to make changes in the Protocol to this Treaty that do not affect substantive rights or obligations under this Treaty, the Parties shall use the Bilateral Consultative Commission to reach agreement on such changes, without resorting to the procedure for making amendments that is set forth in paragraph 1 of this Article.

Article XVI

This Treaty shall be registered pursuant to Article 102 of the Charter of the United Nations.

Done at Prague, this eighth day of April, 2010, in two originals, each in English and Russian languages, both texts being equally authentic.

FOR THE
UNITED STATES OF AMERICA:
(signed)
(BARACK OBAMA)

FOR THE
RUSSIAN FEDERATION:
(signed)

VITA

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