24/5/4203

MONASH UNIVERSITY

THESIS ACCEPTED IN SATISFACTION OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

ON...... 7 December 2001

Under the copyright Act 1968, this thesis must be used only under the normal conditions of scholarly fair dealing for the purposes of research, criticism or review. In particular no results or conclusions should be extracted from it, nor should it be copied or closely paraphrased in whole or in part without the written consent of the author. Proper written acknowledgement should be made for any assistance obtained from this thesis.

Title

The United States Congress and the Cooperative Threat Reduction Program: August 1991 to December 1996

Andrew Minto Clarke Newman

M.A., Monash University

Submitted for the Degree of Doctor of Philosophy

School of Political and Social Inquiry

Monash University

June 29 2001

To my mother and father

Table of Contents

Abstract	VII
Author's Declaration	vii
Acknowledgements	ix
List of Abbreviations	xì
Introduction	
Thesis Aim and Structure	3
Chapter 1: Congress and US Nuclear Weapons Policy — 1945 to 1991	
Aim and Structure	6
Congress and the Constitution	6
Nuclear Monopoly and the Cold War - August 1945 to August 1949	13
Massive Retaliation and Nuclear Options during the Eisenhower Administration	19
Spending More on Everything: Congress and the Kennedy Administration	22
Missile Defences, SALT and the End of the 'Bipartisan Truce'	28
Changing Perceptions of the Nuclear Balance	39
Windows of Vulnerability and Windows of Opportunity	48
The Emergence of Gridlock: the Bush Administration versus a Democratic Congress	59
Common Themes in Congressional Behaviour	62



Chapter 2: Nuclear Devolution in the (Former) Soviet Union

Aim and Structure		64
The Coup		64
The Soviet Nuclear	r Legacy	67
The Challenges		68
Political E	Disintegration and Nuclear Control	68
Economic	Incentives for Leakage	70
Internation	nal Demand for Nuclear Material	72
The Diffic	culties of "Nuclear Accounting"	73
The Huma	an Factor	75
Summation		78
Chapter 3: CTR in Pro	ictice — August 1991 to December 1996	79
	Bilateral Arms Control After the August Coup	79
Country Contexts:	Political Proclivities and Operational Realities	83
Russia		88
Forging N	lunn-Lugar	88
Rejuvenal	ting Nunn-Lugar	96
Realizing	Nunn-Lugar	100
Ukraine		111
Belarus		121
Kazakhstan		126
Assessment		131

Chapter 4: Congress and CTR — August 1991 to December 1996

Aim and Structure	134
CTR on the Hill: Congress in Context	134
Congress and the Dissolution of the Soviet Union: August to December	1991 135
The December 1991 Nunn-Lugar Legislation	144
Programmatic Teething Problems	150
Influencing CTR: 1992 to 1996	157
Defence Conversion: The Power of Constituents?	157
Budgetary Ceilings and CTR Programming	161
Legislative Amendments: Direct Foreign Policy-Making	164
CTR and the Biological Weapons Convention	171
Partisan Politics: The 1994 'Republican Revolution'	175
CTR and Iran	178
Nunn-Lugar II	182
Assessment	185
Chapter 5: US Cooperative Threat Reduction Policy and Internation	onal Relations Theory
Aim and Structure	192
Part 1: Neorealism	193
The United States and Russia: A Neorealist Explanation of CTR	195
The United States and the Non-Russian Republics: A Neorealist Explan	nation of CTR 202
Part 2: Neoliberal Institutionalism	211
Part 2: Neonderal Institutionalism	211
CTR as a Regime	214
The United States and Russia: A Neoliberal Explanation of CTR	216
The United States and the Non-Russian Republics: A Neoliberal Explan	nation of CTR 221

Part 3: Constructivism		227
A Co	onstructivist Explanation of CTR	232
Part 4: Assess	ment	240
Conclusion	l	
Cooperative Threat Reduction		248
CTR	Postscript	249
Cong	gress and CTR	253
Inter	national Relations Theory and CTR	260
Cong	gress, CTR and the Future?	263
Appendice	S .	
Α.	Congress, the Executive and Nuclear Weapons	266
В.	"Soviet Nuclear Threat Reduction Act of 1991"	267
C.	United States CTR Contractor List	269
D.	Nuclear Inheritor States Maps	273
E.	Congressional Dramatis Personae	277
Bibliograp	hy	278

The second of th

Abstract

Following the August 1991 coup in Moscow, the Soviet Union went into political freefall. On December 12 1991 the United States Congress, fearing that the dissolution of the USSR could result in the 'leakage' (ie sale, diversion or theft) of nuclear weapons, materials and expertise, decided to take action. It legislated a program to assist the Soviet Union — or any successor entities — to safely and securely store and dismantle nuclear weapons and to prevent nuclear proliferation. This has become known as the Cooperative Threat Reduction (CTR), or Nunn-Lugar, program.

Between its inception at the end of 1991 and the end of 1996, CTR was central to efforts to return to Moscow all strategic nuclear weapons located in the former Soviet republics of Ukraine, Kazakhstan and Belarus. In addition, and continuing to this day, the program has assisted Russia to store and dismantle those nuclear weapons scheduled for disarmament under the Strategic Arms Reduction Treaties (START I and II).

The thesis addresses two questions. Firstly, precisely what role did the US Congress play in the development of the CTR program between 1991 and 1996? Secondly, which of the three dominant strands of international relations theory — neorealism, neoliberal institutionalism and constructivism — can provide the most plausible explanation of this program? Although there has been considerable research on CTR, the literature on the role of Congress is inadequate and, as far as the author is aware, there has been no sustained attempt thus far to apply international relations theory to the program.

The thesis makes two main arguments. Firstly, Congress was decisive in formulating, shaping and implementing measures to contain nuclear leakage in the former Soviet Union. Secondly, neorealism provides an inadequate basis for explaining CTR; a combination of neoliberalism and constructivism comes closer to illuminating the case study.



Author's Declaration

I declare that this thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other institution.

To the best of my knowledge, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.



Andrew Newman

Acknowledgments

There are a number of people and institutions I would like to thank for their assistance during the writing of this PhD. First and foremost I would like to thank my supervisor, Dr Andrew Butfoy, for his guidance, support and patience. Andy's counsel has stimulated all of the good aspects, and none of the bad aspects, of this thesis. I would also like to thank Dr Peter Lentini for his support, friendship and advice. Although he is moving into other areas of research, Pete's knowledge of Soviet and Russian politics is inspirational and I have benefited greatly from his insights. I count Andy and Pete not only as colleagues, but also as good friends.

My thanks also go to Andy, Pete, Gerry Nagtzaam, Michelle King and Jason Ellis, who read parts or all of the manuscript and offered sound advice. Particular thanks go to Andy, Tamara Griffiths, Gerry and Michelle, who provided critical assistance at very short notice.

My enduring gratitude goes to the staff of Monash University's School of Political and Social Inquiry, in particular, Lesley Whitelaw, Marnie Neal and Sue Stevenson, without whose assistance and friendship my experience at Monash would have been far less satisfying. Thanks also to the Monash Arts Faculty for providing a scholarship in the final months of my candidature. Thanks and best wishes go to my tutoring colleagues and the students I had the good fortune of teaching.

None of those interviewed for this thesis wanted any quotes directly attributed to them. Sincerest thanks go to those who agreed to be interviewed. They include: Ashton Carter, Steven Miller and Jason Ellis of Harvard University; Congressional staffers Ken Myers, Jr (Senator Richard Lugar), Pete Lyons (Senator Pete Domenici), Ed Levine (Senator Joseph Biden), Monica Chavez (Senator Strom Thurmond), Mike Van Dusen (Representative Lee Hamilton), Randy Rydell (Senate Governmental Affairs Committee) and Richard Fieldhouse; Amy Woolf of the Congressional Research Service; Zachary Davis of the Arms Control and Disarmament Agency; and Todd Perry of the Union of Concerned Scientists. Thanks also to those who wished to



remain anonymous. Here particular thanks are extended to Jason Ellis at Harvard and Todd Perry, Zach Davis and Randy Rydell in Washington, for pointing me in the right direction, both intellectually and physically.

Finally I would like to thank my mother and father, without whom this undertaking would never have been possible.

List of Abbreviations

ABMT Anti-Ballistic Missile Treaty

ACDA Arms Control and Disarmament Agency

ACIS Arms Control Impact Statement

AEC Atomic Energy Commission

BW Biological Weapons

BWC Biological Weapons Convention

CCL Continuous Communications Link

CFE Conventional Forces in Europe Treaty

CIA Central Intelligence Agency

CIS Commonwealth of Independent States

CNN Cable News Network

THE PARTY OF THE P

CPD Committee on the Present Danger

CRS Congressional Research Service

CSIA Center for Science and International Affairs, Harvard University

CTR Cooperative Threat Reduction

CW Chemical Weapons

DEF Defense Enterprise Fund

DoD US Department of Defense

DoE US Department of Energy

DoS US Department of State

E-RW Enhanced-Radiation Weapon

Ex-Comm Executive Committee of the National Security Council

FBI Federal Bureau of Investigation

FEMA Federal Emergency Management Agency

FSU Former Soviet Union

FY Fiscal Year

G-7 Group of Seven, seven strongest economic states

GAN Gosatomnadzor, Russian nuclear regulatory agency

GAO General Accounting Office

GGCL Government-to-Government communications link

GOP Grand Old Party, Republican Party

HEU highly enriched uranium

IAEA International Atomic Energy Agency

ICBM Intercontinental Ballistic Missile

INF Intermediate-range Nuclear Forces

IPP Industrial Partnering Program, renamed Initiatives for Proliferation

Prevention

ISTC Russian International Science and Technology Centre

LEU low enriched uranium

LNOs Limited Nuclear Options

MINATOM Russian Ministry of Atomic Energy

MIRV Multiple Independently Targetable Re-entry Vehicle

MOD Ministry of Defence

MPC&A Material, Protection, Control and Accounting

MPS Multiple Protective Shelters

NATO North Atlantic Treaty Organization

NCA National Command Authority

NGOs Non-Government Organizations

NIS Newly Independent States

NNWS Non-Nuclear Weapon State

NPR Nuclear Posture Review

NPT Nuclear Nonproliferation Treaty

NSC National Security Council

NWS Nuclear Weapon State

OTA Office of Technology Assessment

PALs Permissive Action Links

PD Presidential Directive

PL Public Law

PLO Palestinian Liberation Organization

R&D Research and Development

RV Re-entry Vehicle

· 中国中国的社会、中国的社会、中国的社会、中国的社会、中国的社会、中国的社会、中国的社会、中国的社会、中国的社会、中国的社会、中国的社会、中国的社会、中国的社会、中国的社会、中国的社会、中国的社会、

SAC Strategic Air Command

SALT Strategic Arms Limitation Talks

SDI Strategic Defence Initiative

SLBM Submarine-Launched Ballistic Missile

SNDV Strategic Nuclear Delivery Vehicle

SRF Former Soviet Strategic Rocket Forces

SSBM Nuclear Ballistic Missile Submarine

SSD Safe and Secure Dismantlement Talks

START Strategic Arms Reduction Treaty

STCU Science and Technology Centre, Ukraine

STI Safeguards, Transparency and Irreversibility Talks

UN United Nations

US United States (of America)

WMD Weapons of Mass Destruction

Introduction

On Christmas Day 1991 President George Bush reflected:

For over forty years, the United States led the West in the struggle against communism and the threat it posed to our most precious values. This struggle shaped the lives of all Americans. It forced all nations to live under the specter of nuclear destruction. That confrontation is now over.¹

While the nuclear confrontation that characterized the Cold War might have been over, it was replaced by the danger that Soviet nuclear weapons, materials or expertise could, by accident or design, fall into the hands of states or sub-state actors inimical to United States (US) interests. In order to prevent this from happening, a program was legislated in Washington at the end of 1991 to assist Russia, Ukraine, Kazakhstan and Belarus to store, dismantle and safeguard the nuclear weapons, nuclear material and nuclear expertise on their territory. This nuclear threat reduction program was more commonly known as the Nunn-Lugar Program or, since 1993, the Cooperative Threat Reduction (CTR) Program. The CTR Program was to assist Russia to accelerate its strategic arms reduction efforts and, for the non-Russian republics, it was to culminate in the total denuclearisation of their armed forces.²

While it is true that the nuclear threat reduction program grew out of a favourable political climate in the case of Russia³, and mutual interest in the cases of Ukraine,

¹ Quoted in James A. Baker with Thomas DeFrank, *The Politics of Diplomacy: Revolution, War and Peace*, 1989-1992 (New York: G.P. Putnam's Sons, 1995), p.558.

² Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, Cooperative Threat Reduction (Arlington, VA: Cooperative Threat Reduction Program Office, Department of Defense, April 1995), p.8.

³ Under mounting domestic pressure, Russian Foreign Minister Andrei Kozyrev was replaced at the beginning of 1996. Among the criticisms leveled at Kozyrev by both the Duma and Presidential apparatus, were claims that he was unable to provide firm direction to Russian foreign policy and that his policies were "pro-Western" and insufficiently mindful of "Russian national interests". F. Stephen Larrabee and Theodore W. Karasik, Foreign and Security Policy Decisionmaking Under Yeltsin, MR-831-OSD, (Santa Monica, CA: RAND, 1997), p.5-7.

Kazakhstan and Belarus, storm clouds have been gathering in Russia and appear to have set in in Belarus. However, nuclear threat reduction has 'locked in' many of the measures it forged, which will be extremely useful for international security. As of the end of 1996 Ukraine, Kazakhstan and Belarus have been nuclear weapons-free. None of the three appear to desire to develop a nuclear weapons capability in the future. The nuclear threat reduction program has ensured that any process of 'renuclearization' will be very expensive, time-consuming and politically costly. In the case of Russia, nuclear threat reduction helps "to accelerate strategic arms reduction efforts to meet START [Strategic Arms Reduction Treaty] elimination levels earlier than Russia could achieve unassisted" and continues to facilitate the dismantlement of "airplanes, missiles, silos, ind... tries and submarines, all of which were designed to destroy the United States." Nuclear threat reduction ensures that if there is a significant souring of political relations between the parties, the military calculus will either be non-nuclear or nuclear at a greatly reduced level and in a more 'crisis-stable' environment.

The preceding description has outlined why the author believes CTR to be an effective program and a subject worthy of close attention. There has been much published on the successes and failures of CTR since its inception and simply another contribution to this burgeoning literature would be neither original nor interesting.

⁴ For a more detailed treatment see Andrew Newman, "Cooperative Threat Reduction: 'Locking In' Tomorrow's Security", Contemporary Security Policy, Vol. 22, No. 1, April 2001.

⁵ However, Belarusian President Alexander Lukashenko has made several statements concerning a possible reversal of Belarusian non-nuclear status. See, for example, Craig Cerniello, "Belarus Completes Transfer Of Nuclear Warheads to Russia", *Arms Control Today*, Vol.26, No.9, November/December 1996, p.18. On March 24 1999 the Ukrainian parliament adopted a resolution calling on the government to abandon its non-nuclear status. However, two days later President Kuchma stated that Ukraine would not reconsider the nuclear option. Craig Cerniello, "NATO Strikes Against Yugoslavia Cloud U.S.-Russian Arms Control", *Arms Control Today*, Vol.29, No.2, March 1999, p.27.

[&]quot;De-nuclearization' assists in the removal of nuclear warheads from delivery vehicles for return to Russia, but also assists in the destruction of delivery vehicles and their associated platforms.

Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, Cooperative Threat Reduction, p.8, 16.

By eliminating land-based intercontinental ballistic missiles (ICBMs) with multiple independently targetable re-entry vehicles (MIRVs), START II encourages Russia to deploy additional single warhead SS-25s to meet the ICBM ceiling. Two thirds of the SS-25 force will be mobile. Single warhead missiles, particularly the mobile variant, are less cost-effective for counterforce strikes, and hence do not generate the same fears of a potential first strike capability as MIRVed ICBMs. This development challenges the "arms control paradox" thesis, which holds that "an arms control regime negotiable only under ephemeral conditions of great good will is unlikely to have the features that would enable it to survive, let alone help accomplish anything useful for international security, in stormy political weather." Colin Gray, *House of Cards: Why Arms Control Must Fail* (Ithaca: Cornell University Press, 1992), p.188. See also Kenneth Adelman. *The Great Universal Embrace: Arms Summitry - An Skeptic's Account* (New York: Simon & Schuster, 1989).

Rather, this thesis proposes to investigate some neglected aspects of CTR and these are outlined below.

Thesis Aim and Structure

The CTR Program has developed into an important aspect of post-Cold War US foreign policy. However, it is not easily accounted for by mainstream international relations theory. Explaining its origins and impact presents some difficulties for traditional neorealist and neoliberal approaches to international relations. The constructivist approach to international relations presents a more comprehensive account as it allows for an appropriate consideration of the role of Congress. Indeed, it is a central tenet of this dissertation that the CTR Program cannot be understood without reference to the role of Congress. The material presented in this dissertation supports this tenet by firstly, examining the role of Congress and secondly, by examining the ability of major international relations theories to explain CTR and its outcomes.

Finally, a few words on some key terms and the thesis structure are warranted. Three terms recur quite regularly during these chapters and it is important, at the outset, to be precise about what they do, and do not, mean. Throughout this thesis, the terms 'Cooperative Threat Reduction Program' and 'Nunn-Lugar Program' are often used interchangeably. This does not mean that they are synonymous. The CTR Program is a creature of the Department of Defense (DoD). Nunn-Lugar is a broader framework, involving the threat reduction activities (many of which were divested by DoD) carried out by the Departments of Defense, Energy, State and Commerce. When referring to non-CTR Nunn-Lugar activities, the distinction is made clear. The term 'denuclearisation' refers only to the dismantlement and removal of nuclear weapons. It does not incorporate 'loose nuclear material' (plutonium and highly enriched uranium not within nuclear warheads or removed directly from nuclear warheads), nuclear infrastructure, nuclear expertise or civilian applications of nuclear technology, such as nuclear power plants. If the latter are being included in a denuclearisation program, this will be made explicit. The term 'nuclear inheritor states' applies only to Russia, Ukraine, Kazakhstan and Belarus. These were the only four states to inherit strategic



nuclear weapons from the Soviet Union and were the only four states to receive CTR assistance during the years covered by the case study.

The thesis is structured as follows. Chapter 1 discusses Congress's role in US nuclear weapons policy, both in theory and in practice, between 1945 and 1991. The discussion is necessarily broad because it encompasses elements of arms control and disarmament, proliferation and nuclear force structure. This provides a frame of reference from which to analyze the Congressional role in the nuclear threat reduction program. Chapter 2 sets the scene for the case study. It describes the political, economic and military situation in the disintegrating Soviet Union during the second half of 1991 and how this led to the development of the nuclear threat reduction program.

Chapters 3 and 4 constitute the case study and cover the period from August 1991 to December 1996. The case study begins in August 1991 because it was only in the immediate aftermath of the August coup in the USSR that Washington began to take practical steps to prevent potential nuclear leakage in the Soviet Union. December 1996 has been chosen as the end-point of the case study because by this date the last of the three non-Russian inheritor states, Belarus, had become nuclear weapons-free. Thus one of the nuclear threat reduction program's core objectives had been achieved: denuclearizing Ukraine, Belarus and Kazakhstan. Russia, as the sole remaining nuclear successor to the Former Soviet Union (FSU), can in some ways be considered a separate case and its nuclear dismantlement activities are expected to continue indefinitely. While nuclear threat reduction is still very much a 'work in progress', the end of 1996 marked a watershed in the assistance program and provides a logical point at which to draw some conclusions. Chapter 3 focuses on the implementation of the nuclear threat reduction program and traces the development of individual projects at ground level from 1991 to 1996. Using this as a basis, Chapter 4 documents and explains the Congressional impact on the program.

With the case study established, Chapter 5 introduces the theoretical debate and examines which of the competing paradigms in mainstream international relations theory can most plausibly explain the nuclear threat reduction process. This chapter posits that the CTR Program cannot be fully grasped without an understanding of the fundamental role that the US Congress and other domestic factors played in formulating what were the interests of the United States. Therefore it is necessary to



[&]quot;While it is true that thousands of so-called tactical nuclear weapons were deployed in fourteen of the fifteen former Soviet republics, they were returned to Russia quickly and lay outside the scope of CTR.

look beyond the systematic paradigms of neorealism and neoliberal institutionalism to a theory that takes into account the role of domestic *and* international factors. Constructivism goes further towards providing that theory. Here, it is important to note that the thesis does not seek to offer a comprehensive theoretical explanation of Congressional behaviour. Such a task would perhaps be better suited to theories of bureaucratic politics. ¹⁰ Rather, the purpose is to determine how the three international relations theories can be applied to the CTR program as expounded in Chapters 3 and 4. In the conclusion, the Congressional impact on CTR and the theoretical analysis are drawn together to recapitulate the case study findings; additionally, some tentative suggestions about the implications of this research for the future study US national security policy are proffered.

Panna Andrews

Two of the best examples of the bureaucratic politics model referred to in the research are, Graham Allison, Essence of Decision: Explaining the Cuban Missile Crisis (USA: HarperCollins, 1971); and Desmond Ball, Politics and Force Levels: The Strategic Missile Program of the Kennedy Administration (Berkeley: University of California Press, 1980). See also the seminal treatment by Morton Halperin, with Priscilla Clapp and Arnold Kanter, Bureaucratic Politics and Foreign Policy (Washington, D.C.: Brookings, 1974).

Chapter 1

Congress and US Nuclear Weapons Policy -1945 to 1991

Aim and Structure

This analysis seeks to highlight common themes in Congressional behaviour that have persisted, despite the end of the Cold War. By isolating such threads of continuity, a contextual basis is provided for understanding Congress's role in the development of the CTR program since 1991. The chapter first describes the rights, powers and obligations of Congress in the formulation and implementation of US nuclear weapons policy as derived from the Constitution. The second section is chronologically structured, with subsections covering nuclear issues and events during successive administrations. It assesses how Congress's constitutional role has actually evolved and been translated into practice from 1945 through to 1991.

Congress and the Constitution

The division of power between the executive and Congress, as mandated by the US Constitution, has been described as "an invitation to struggle for the privilege of directing American foreign policy." This is because the role of each in its formulation and execution, while broadly defined, often intersect and overlap. In the foreign policy 'subset' of nuclear weapons, the precise relationship and delineation of power between Congress and the executive is even more hazy because it involves a military technology which, in the words of Bernard Brodie, created "a wholly novel form of war"², that the nation's Founding Fathers could not have even imagined, much less made provision for. This is further complicated by a civil-military relationship that has been described as "an uneven adherence to the Clausewitzean division of labor."³

¹ Edward Corwin, *The President: Office and Powers, 1787-1957*, 4th ed. (New York: New York University Press, 1957), p.171, quoted in Roger Davidson and Walter Oleszek (eds), *Congress And Its Members*, 3rd ed. (Washington, D.C.: Congressional Quarterly Inc., 1990), p.394.

² Bernard Brodie, ed., *The Absolute Weapon* (New York: Harcourt, Brace, 1946), p.83, quoted in Bernard Brodie, "The Development of Nuclear Strategy", *International Security*, Vol. 2, No.4, Spring 1978, p.66.

³ Peter Douglas Feaver, Guarding the Guardians: Civilian Control of Nuclear Weapons in the United States (Ithaca: Cornell University Press, 1992), p.9.

The Constitution divides foreign policy power between the president and his executive departments, and the Congress. The president is commander-in-chief of the armed forces, manages day-to-day relations with foreign governments, appoints and receives ambassadors and negotiates treaties. According to a Supreme Court ruling, the President acts "as the sole organ of the Federal Government in the field of international relations." Congress has the power to declare war, confirm the appointment of ambassadors, regulate foreign commerce, raise an army, prepare for the common defence and ratify treaties. This last responsibility lies with the Senate. In addition, Congress has the 'power of the purse', or control of appropriations. This enables Congress to decide which programs and policies will be funded and which will not.

The interaction between the executive branch and Congress has been described by Senator Henry Jackson as follows:

[The executive departments] receive their money annually from Congress; the programs they administer are authorized by Congress and changed by Congress. And Congress has the independent power to investigate the work of all departments. Under our Constitution, therefore, the Secretaries of State and Defense and other department chiefs—granted public funds to expend and given government power to exercise—not only are politically responsible to the President, but are also accountable for the discharge of their duties to the Congress.⁶

This division of power has led Richard Neustadt to observe that "Presidential power is the *power to persuade.*" According to this view: "Underneath our images of Presidents-in-boots, astride decisions, are the half-observed realities of *Presidents-in-sneakers*, stirrups in hand, trying to induce particular department heads, or Congressmen or Senators, to climb aboard." In relation to Executive departments,

⁴ Charles Kegley and Eugene Wittkopf, *American Foreign Policy: Pattern and Process*, 5th ed. (New York; St Martins Press, 1991), p.341.

Davidson and Oleszek (eds), Congress And Its Member, p.394-395; Paul Petersen, "The President's Dominance in Foreign Policy Making", Political Science Quarterly, Volume 109, No. 2, Summer 1994, p.220; Kegley and Wittkopf, American Foreign Policy, p.439-441.

⁶ Senator Henry M. Jackson (ed), *The National Security Council: Jackson Subcommittee Papers on Policy-Making at the Presidential Level* (New York: Frederick A, Praeger, 1965), p.x.

⁷ Richard Neustadt, *Presidential Power* (New York: 1960) quoted in Graham Allison, *Essence of Decision: Explaining the Cuban Missile Crisis* (USA: HarperCollins, 1971), p.148. Emphasis is Allison's.

⁸ Richard Neustadt, "Whitehouse and Whitehall", *The Public Interest*, No. 2, Winter 1966, p.64, quoted in *Ibid.*, p.148. Emphasis is Allison's.

Roger Hilsman has observed that to "the head of a department or agency, the Congress, with its power to reward and punish, is as much his boss as is the President."

This really constitutes the crux of Congress's power as regards nuclear weapons procurement and employment policy. Writing in 1989, Janne Nolan observed that there are no formal channels for Congress to examine nuclear war plans or to influence nuclear force structure and organization. SAC briefings, for members of the relevant committees and staffers with security clearance, are superficial, covering only overall planning and employment of nuclear forces. Few members of Congress take advantage of these briefings and "even fewer are able to ask intelligent questions when they get there." The arcane nature of the topic also mitigates against a broad Congressional understanding of, and contribution to, nuclear strategy. In 1967, Senator Karl Mundt was quite explicit on this point. As a result of the qualitative and quantitative increase in information on defence decisions provided to Congress, facilitated in large part by the "Planning-Programming-Budgeting System" instituted by Defence Secretary McNamara in 1961, Mundt complained:

We used to face the question, 'How much should we spend for a weapons system?' Defense had a united front and asked for a certain amount of money. Now we have to make decisions . . . on which defense system and techniques we should have. . . . It is in the wrong arena at our end of the Avenue, because we are not the experts in defense, and we are not the economists and the engineers. . . That shouldn't be the kind of decision we have to make.¹¹

All but a very few Congressmen and their staffs have the interest, time or the inclination to study the issues in any depth. Most members of Congress have more immediate concerns, and this is even more pronounced in the House. If sufficiently prepared, executive branch officials can turn this problem into an advantage of sorts. Charles Bohlen recalled that, in his successful dealings with Congress, Secretary of

⁹ Roger Hilsman, To Move A Nation (New York: Dell Publishing, 1964), p.9.

¹⁰ Janne E. Nolan, *Guardians of the Arsenal: The Politics of Nuclear Strategy* (USA: Basic Books, 1989), p.249, 277. The influence of the executive, particularly civilians in the Department of Defense, is not much greater. See, for example, Marc Trachtenberg, *History and Strategy* (Princeton, N.J.: Princeton University Press, 1991), p.249, footnote 37.

¹¹ Alain C. Enthoven and K. Wayne Smith, *How Much Is Enough? Shaping the Defense Program, 1961-1969* (New York: Harper and Row, 1971), p.42.

State George Marshall would "study the backgrounds of the senators and representatives carefully so that he understood not only the questions they asked but why they were asking them."

Time constraints and lack of interest corresponds with the priorities facing the US President. In 1980, Bill Gulley, former Director of the White House Military Office under Presidents' Johnson, Nixon, Ford and Carter, declared:

No new President in my time ever had more than one briefing on the contents of the Football [containing nuclear retaliatory options, Presidential evacuation locations, procedures for the Emergency Broadcast system and nuclear weapons authentication codes], and that was before each one took office, when it was one briefing among dozens. Not one President, to my knowledge, and I know because it was in my care, ever got an update on the contents of the Football, although material in it is changed constantly.¹³

With the possible exception of Jimmy Carter, apparently none had the time or interest to ask. If the Commander-in-Chief has neither the time or interest, the average Congressman has even less reason to be cognizant of nuclear weapons issues, which, in any case, have low political salience domestically.

The majority of Congressional members may be interested in nuclear weapons issues to the extent that they can generate jobs in electorates. For this reason 'big ticket' weapons contracts attract a great deal of interest. Administration and military advocates of proposed weapons systems understand this and, as such, pork barrelling is a common practice. As David Halberstam noted, the Pentagon's relationship with Congress, based in the past on patriotism and minor pork barrelling, was strengthened during the Cold War "by a new loyalty, based on immense defense contracts conveniently placed around the homes of the most powerful committee chairmen." 14

This focus on specific weapon systems means that much of the Congressional debate centres on budgetary items. In more general terms, Henry Jackson has argued:

Except in the State of the Union and budget messages, it [the executive branch] presents national security information and program requests to

⁴² Charles Bohlen, Witness to History, 1929-1969 (London: Weidenfeld and Nicolson, 1973), p. 271.

¹¹ Bill Gulley, with Mary Ellen Reese, Breaking Cover (New York: Simon and Schuster, 1980), p.188.

¹⁴ David Halberstam, *The Best and the Brightest* (Greenwich, Conn. Fawcett Publications, 1969), p.300.

the Congress in bits and pieces. The present mode of operation of the Congressional system compounds the problem. The authorization process treats as separable matters that are not really separable. Foreign affairs, defense matters, space policies, and atomic energy programs are handled in different committees.¹⁵

For the majority of Congressmen and women, strategic concepts and doctrines play little, if any, role in their thinking. This mindset is exacerbated by the format of the defence budget. The budget titles, which include *operations and maintenance*, *procurement* and *research and development*, "are devoid of any strategic meaning or measure of military output. . . This structural characteristic tends to decouple resource allocation decisions from the strategic goals of national security policy." Thus long-term strategic objectives pursued by the executive may be ham-strung by Congressional votes to authorize funding for one program while cutting funding for another based often on very short-term parochial considerations; a tendency reinforced by the fact that authorization and appropriation votes have a shelf-life of one year. Senator Sam Nunn articulated this point in 1985 when he stated:

I cannot remember when we have had a floor debate on our national military strategy and how well we are doing in carrying out that strategy. We have not had a serious debate about the important relationship between our national objectives, our military strategy, our capabilities, and the resources to support that strategy... Instead, we are preoccupied with trivia...[It] is preventing us from carrying out our basic responsibilities for broad oversight.¹⁷

In this way Congress may have the effect of forcing trade-offs which leave noone better off; for example, in 1958, the Senate Armed Services Committee told Secretary of Defence McElroy to select either the Army's Nike-Hercules or the Air Force's Bomarc as the continental air defence missile. A year later McElroy reported that his office could not decide. The Senate and House Committees examined the facts

¹⁵ Jackson (ed), The National Security Council, p.70.

¹⁶ Eugene Wittkopf, The Domestic Sources of American Foreign Policy: Insights and Evidence, 2nd ed., (New York: St Martins Press, 1994), p.115.

¹⁷ Quoted in Barry Blechman, *The Politics of National Security: Congress and U.S. Defense Policy* (New York: Oxford University Press, 1990), p.27.

and arrived at opposite conclusions. "Since no agreement could be reached among the Services, an arbitrary cut was made across all forces involved." As Barry Blechman has argued, "Congress continues to get lost in the 'trees' of detailed defense programs, losing sight of the 'forest' of broader issues in defense planning and military strategy." ¹⁹

This tendency to focus on specific weapons systems and issues has also increased dramatically over time, as is evidenced by the Congressional use of 'one time reports'. These are requests for agencies to undertake studies of specific issues. Such requests to DoD rose from approximately 30 per year during the 1960s to over 500 per year during the 1980s.²⁰

In addition to 'one time reports', at the end of 1975, Congress passed legislation requiring the Administration to supply Arms Control Impact Statements (ACIS) discussing the arms control policy and negotiation impact of military programs that were nuclear weapons-related, the current budgetary request exceeded \$50 million, the anticipated life cycled exceeded \$250 million and / or that the National Security Council recommended to be accompanied by the submission of an ACIS.²¹ Reports of this nature have proved to be a particularly effective way for Congress to oversee defence programs and, as is shown in Chapter Four, his practice was continued for CTR.

Just because Congress rarely considers the broader questions of nuclear strategy, does not mean that Congress has no impact on strategy. Choices about the structure of strategic forces, as occur through funding decisions for weapons systems define "the options available at the time the President is faced with a decision to use the forces."

This is not to say that Congress necessarily forces unsatisfactory compromise, as it has on occasion pushed for more funding than the executive has asked for, has

¹⁸ Enthoven and Smith, How Much Is Enough?, p.15.

¹⁹ Blechman, The Politics of National Security, p.28.

²⁰ Wittkopf, The Domestic Sources of American Foreign Policy, p.200.

The first set of 16 statements (August 6, 1976) were described by a Congressional Research Service report as "short, spare and superficial" and were heavily criticised by Congress as inadequate and not complying with the law. The second set of 26 (January 18, 1977) were similarly received by Congress. The third set of 32 (March 13, 1978) met a mixed reaction. By 1979, House Foreign Affairs Committee Chairman Zablocki was praising the ACIS as having "become increasingly informative and useful in the last two years." 'Arms Control Impact Statements: Overview', in "Congress and Foreign Policy – 1978", Committee on Foreign Affairs, House of Representatives, 95th Congress, 1979, p.68-9; and Hearings and Markup before the Committee on Foreign Affairs and its Subcommittee on International Security and Scientific Affairs, House of Representatives, 96th Congress, First Session on H.R. 2774, March 6 1979, p.1.

Alton Frye, A Responsible Congress: The Politics of National Security (New York: McGraw-Hill, 1975), p.3.

often reached mutually acceptable compromise and has had a critical moderating influence on policy. Indeed, former Director of Central Intelligence Robert Gates has argued that the "obstructionism and complicating role of Congress, however, did have a useful function. I sat in the Situation Room in secret meetings for nearly twenty years under five Presidents, and all I can say is that some awfully crazy schemes might well have been approved had everyone present not known and expected hard questions, debate, and criticism from the Hill."

However, with its direct responsibility to constituents and competing domestic and international responsibilities, Congress is not well equipped to manage long-term nuclear force requirements. This does not always reflect the institutional weakness of Congress. Administration officials will often 'shift the battleground' to Congressional committees if they are unsuccessful in negotiating the executive bureaucratic jungle.

Despite the inherent weaknesses outlined above, Constitutionally-mandated rights, combined with general legislative powers, grant Congress "nearly limitless authority to affect the flow and form of foreign relations." Such guidelines make for a complex interaction in practice, to the exasperation of more than one Washington policy-maker. Indeed, in the words of one commentator, the division of powers "immeasurably complicates dealings with other nations and provides a unitateral escape clause to agreements freely entered into." Given that nuclear weapons, like many contemporary instruments of foreign policy, are not specifically mentioned in the Constitution, the precise balance between Congressional and executive involvement has evolved over time. This evolution has been influenced both by Congressional perceptions of the 'correct balance' and the vicissitudes of the Cold War. Appendix A



²³ Robert Gates, From the Shadows (New York: Simon and Schuster, 1996), p.559.

²⁴ Kegley and Wittkopf, American Foreign Policy, p.341.

In 1948 George F. Kennan complained that he "resented the State Department being put in the position of lobbyists before Congress in favor of the US people . . ." and in 1979 Henry Kissinger ruefully observed that, during the SALT negotiations, "The Administration had to marshal all its strength to keep the Congress from imposing unilaterally what we were seeking to negotiate reciprocally with the Soviets." More recently John Holum asserted that " . . . troubling the Executive's conduct of foreign policy is by no means an invention of today's Congress. But I do think the intensity and range of the assault now goes well beyond anything in recent memory – to the point of undercutting American leadership in an area that is of growing importance in the post-Cold war world." George F. Kennan, Memoirs: 1925-1950 (Great Britain: Hutchinson and Co., 1968), p.405; Henry Kissinger, The White House Years (Sydney: Hodder and Stoughton, 1979), p.538; and John Holum. "Remarks of the Honorable John D. Holum Director, U.S. Arms Control and Disarmament Agency" October 31 1995 http://www.csis.org/html/9holumsp.html Accessed 02/22/97.

²⁶ Michael MccGwire, *Perestroika and Soviet National Security* (Washington, D.C.: Brookings, 1991), p.209.

depicts the relationship between Congress and the executive as regards nuclear weapons.

Nuclear monopoly and the Cold War —August 1945 to August 1949

The detonation of atomic bombs on Hiroshima and Nagasaki in August 1945 confirmed predictions that the destructive power of such weapons would be "beyond the wildest nightmares of the imagination." However, it was not readily apparent how these new weapons would be incorporated into post-war US military strategy. Indeed it was not readily apparent, in the years immediately proceeding the end of the Second World War, how the US national security establishment would function, given that the traditionally isolationist United States was assuming a global role. This 'global mission' was reflected in the passing by Congress of the National Security Act of 1947, which created the National Security Council, a 'national security establishment' (the Joint Chiefs of Staff), the Department of Defense and the CIA.³¹

The US nuclear arsenal was small and cumbersome in the immediate post-war years, rendering its practical military value questionable, although this would only become public knowledge years later. As late as April 1947 Atomic Energy Commission chairman David Lilienthal informed President Truman that no nuclear weapons were ready for use, only components waiting for final assembly.³² Uncertainty over the precise role of nuclear weapons was exacerbated by excessive

University Press, 1945), p.223.

Marican National Security: Policy and Process, rev. ed., (Baltimore:

Johns Hopkins University Press, 1984), p.56, 154, 133, 180.



²⁷ Gordon Thomas and Max Morgan-Witts, Ruin From The Air (London: Hamish Hamilton, 1977), p.335.

²⁸ Leon Sigal, Fighting to a Finish: The Politics of War Termination in the United States and Japan, 1945 (Ithaca: Cornell University Press, 1988), p.94.

²⁹ Edwin Fogelman (ed), Hiroshima: The Decision To Use The A-Bomb (New York: Scribners, 1964), p.1.
³⁰ Henry DeWolf Smyth, Atomic Energy for Military Purposes: The Official Report on the Development of the Atomic Bomb under the Auspices of the United States Government, 1940-1945 (Princeton: Princeton

³² McGeorge Bundy, Danger and Survival: Choices About The Bomb in the First Fifty Years (Melbourne: Schwartz and Wilkinson, 1990), p.202.

secrecy regarding nuclear technology in general and the US nuclear stockpile in particular.

The first Congressional foray into the 'nuclear era' reflected the uncertainty that pervaded US policy-making circles in general. A bill for the control of atomic energy, the May-Johnson bill, was being considered. Essentially it proposed to place atomic energy under military control. Drawn up shortly after V-J Day (August 15, 1945), legislative action had been delayed by a territorial dispute between Senate committees as to which would be responsible for atomic energy matters. This turf battle was resolved late in 1945 with the establishment of a Special Committee on Atomic Energy under the chairmanship of Senator Brien McMahon.³³

The Senators on this new committee "went back to school for a while to learn the rudiments of atomic science . . . [and] visited atomic energy projects, before they settled down to try to map out a national legislative policy on the subject."³⁴

McMahon sympathised with President Truman's view that civilians should exercise ultimate control over the peaceful and military applications of nuclear energy, despite forceful views to contrary put forward by the Secretaries of War and the Navy, and introduced an amendment to the May-Johnson bill on December 20 to this effect. It proposed to set up an Atomic Energy Commission (AEC)³⁵, composed exclusively of civilians, to control atomic energy and an "absolute Government monopoly of ownership, production and processing of all fissionable materials . . ."³⁶ However, it soon became clear that the Truman/McMahon view was not universally supported. A large segment of Congressional opinion endorsed military control of nuclear energy, reflecting a perception that national security was primarily the responsibility of the armed forces.³⁷

In March 1946 the McMahon bill came under direct attack from McMahon's own colleagues when an amendment offered by Senator Vandenberg — proposing to establish a Military Liaison Board, with all the rights and powers of the AEC — was passed by the Senate Atomic Energy Commission. However, Truman made clear, during a meeting with Congressional leaders on March 18, that he "would not accept a law without civilian control." Truman won out: the Atomic Energy Act was signed

³³ Harry S. Truman, Years of Trial and Hope (New York: Hodder and Stoughton, 1956), p.2-3.

³⁴ Arthur Vandenberg, Jr., with Joe Alex Morris, *The Private Papers of Senator Vandenberg* (Cambridge, MA: Houghton Miflin Co., 1952), p.223.

³⁵ The AEC formed the basis of what was to become the Department of Energy.

³⁶ Truman, Years or Trial and Hope, p.4.

¹⁷ Ibid., p.8.

³⁸ Ibid., p.9.

into law on August 1 1946 and the AEC began operation on January 1, 1947. The AEC was headed by five civilians and was responsible for weapons research and development, manufacture and delivery to the military services. The AEC also controlled the civilian application of atomic energy.³⁹

However, at the same time, Truman was placed in the unenviable position of being a Democratic president with the Republican Party in control of Congress. In Truman's words, while "expecting the help of such fine supporters of the idea of bipartisanship in foreign affairs as Senator Vandenberg and Congressman Eaton of New Jersey, I realized the situation was more precarious than it would have been with a preponderantly Democratic Congress."

Much has been made of the 'bipartisan trace', engineered largely by Truman and Senator Arthur Vandenberg⁴¹ (an isolationist until the Japanese attack on Pearl Harbour⁴²), that emerged in American foreign policy during the first years of the Cold War but in 1946 this was not so obvious. The Republicans rode to victory in the 1946 Congressional elections on slogans such as "To err is Truman" and "Had enough?" and made it clear that "taxes had to be cut and the budget balanced." This predicament was exacerbated by problems within Truman's own foreign policy entourage, highlighted by the firing of Commerce Secretary Henry Watlace in September 1946, who had suggested adopting a more conciliatory approach to Russia⁴⁵, as well as the increasingly 'strained' relationship between the President and his first Secretary of State, James Byrnes.⁴⁶

Richard Smoke, National Security and the Nuclear Dilemma (New York: MacGraw-Hill, 1993), p.45. On Congressional perceptions of how the AEC was to function see the exchange between Senators Vandenberg, Millikin, Knowland, Johnson, McKellar and Hickenlooper and AEC member David Lilienthal in "Confirmation of Atomic Energy Commission and General Manager", Hearings before the Senate Section of the Joint Committee on Atomic Energy, 80th Congress, First Session, January 27, 1947, p.6-15.

⁴⁰ Truman, Years of Trial and Hope, p.108.

Truman described the relationship as follows: "There were occasions when Senator Vandenberg disagreed with my policies but he never attempted to sabotage them." *Ibid.*, p.456.

⁴² Vandenberg Jr., *The Private Papers of Senator Vandenberg*, p.1.

⁴³ Robert Schulzinger, American Diplomacy in the Twentieth Century (New York: Oxford University Press, 1984), p.207.

⁴⁴ Stephen Ambrose, Rise To Globalism, 5th rev. ed. (New York: Penguin, 1988), p.70.

⁴⁵ Vandenberg, Jr., The Private Papers of Senator Vandenberg, p.300; Walter Millis (ed), The Forrestal Diaries (New York: The Viking Press, 1951), p.206.

⁴⁶ The memoirs of some of the important foreign policy 'players' of the time reflect this. See, for example, George F. Kennan, *Memoirs: 1925-1950* (London: Hutchinson and Co., 1968), p.287-8; Dean Acheson, *Present at the Creation* (London: Hamish Hamilton, 1969), p.135-8; Charles E. Bohlen, *Witness To History: 1929-1969* (London: Weidenfeld and Nicolson, 1973), p.256; Vandenberg, Jr, *The Private Papers of Senator Vandenberg*, p.225.

The leading proponent of the return to a policy of predominantly isolationism, and partisan foreign policy, was Senator Robert Taft. Taft argued, in 1939, that "There are some who say that politics should stop at the water's edge...! do not at all agree...", and in 1951 he called bipartisan foreign policy "a very dangerous fallacy threatening the very existence of the Nation." However, Taft was in the minority. According to Arthur Schlesinger Jr., even as the Congress "hacked away at Truman's domestic program, [it] would not oppose his foreign policy when the President could persuade Vandenberg to go along." In this endeavour, Truman and Vandenberg were assisted by influential members of Congress, such as Senator Joseph Ball and Congressman J.W. Fulbright, who had shown interest in an American role in the postwar international order; "perhaps in penance for the years in which it [Congress] had repudiated the League of Nations and passed ill-conceived neutrality laws..."

The 'bipartisan truce' between the executive and Congress reflected a number of shared perceptions on the Hill in the immediate post-war period. The emergence of the communist threat played a large part in fostering a bipartisan foreign policy. Only in the wake of the war did Americans become aware, to quote George Kennan, "

of the horrible reality of the postwar world—of the fact that this earnest and upright partner [the Soviet Union] was not there at all, and that in his place there was only another one of these great inexplicable monsters, more formidable this time than all the others, sitting astride the resources of half the world and the prostrate peoples of Eastern Europe and China"⁵⁰

The apparent Soviet intent to subjugate all of Europe produced a Congressional belief that foreign policy required a united front and also required the executive branch to be able to react to Soviet strategic moves quickly and forcefully. To impose tight restrictions on the President's room to manoeuvre could conceivably result in political, psychological and military loses to the Soviet bloc. This did not, however, obviate Congressional scrutiny of Administration policy.⁵¹



⁴⁷ Quoted in Arthur M. Schlesinger Jr., *The Imperial Presidency* (Boston: Houghton Mifflin Co., 1973), p.129.

⁴⁸ Ibid.

⁴⁹ *lbid.*, p.119,

⁵⁰ George Kennan, Realities Of American Foreign Policy (London: Oxford University Press, 1954), p.26-7.

⁵¹ See, for example, the concerns of Senators Connally, Smith and Vandenberg relating to the Truman Administration's March 12 1947 'blank cheque' request for assistance to Greece and Turkey, "Legislative

Linnware

Congress was also hampered by institutional factors. Although a number of Senators and Congressmen were highly knowledgeable in international relations and shared a close relationship with the executive, Congress as a whole was comparatively inexperienced in the conduct of foreign policy, particularly in the novel and immensely secretive area of nuclear weapons strategy. While it can be argued that government officials had only marginally more experience in these matters, Congress lacked both the staff and resources to challenge the executive even if it wanted to.

The pursuit of a largely bipartisan foreign policy and the desire to balance the budget dovetailed nicely with a reliance on atomic weapons. The US had conducted the most rapid demobilisation in history and Congress had made clear its refusal to maintain a large standing army in Europe. In the eloquent words of Walter Lippmann: "Here is the panacea which enables us to be the greatest military power on earth without investing time, energy, sweat, blood and tears, and - as compared with the cost of a great Army, Navy, and Air Force - not even much money."52 In contrast to men like Oppenheimer, who came to view their creation with moral revulsion, Congress as a whole embraced the new weapon. Although extreme, Senator Edwin Johnson's view that "God Almighty in His infinite wisdom [has] dropped the atomic bomb in our lap. . . [Now] with vision and guts and plenty of atomic bombs, . . . [the US could] compel mankind to adopt the policy of lasting peace . . . or be burned to a crisp"53, reflected a perception that nuclear weapons had political and military utility. Rollback of the communist bloc may have been the ideal, but containment in the form of "adroit and vigilant application counter-force at a series of constantly shifting geographical and became the object of America's Soviet policy.⁵⁵

Columbia University Press, 1972), p.245.

Origins of the Truman Doctrine", Hearings held in Executive Session before the Committee on Foreign Relations, United States Senate, 80th Congress, First Session on S. 938, Executive Hearings held on March 13, 1947; made public January 12 1973, p.6.

Quoted in Lawrence Freedman, The Evolution of Nuclear Strategy (London: MacMillan, 1981), p.48.
 John Lewis Gaddis, The United States and the Origins of the Cold War, 1941-1947 (New York:

George Kennan, "X", "The Sources of Soviet Conduct", reprinted in George Kennan, American Diplomacy: 1900-1950 (London; Secker and Warburg, 1952), p.117-8. It is important to note that Kennan had never meant the article to be 'doctrinal', as it did in fact become, and as such it suffered from some serious deficiencies. It also lent itself to misrepresentation, particularly as regards the political-military distinction. See Kennan, Memoirs: 1925-1950, p.356-9.

On Congressional fears of communist expansion and the perceived danger of not supporting the executive's containment policy see the exchange between Senator Vandenberg and US Ambassador to Greece Lincoln MacVeagh in "Legislative Origins of the Truman Doctrine", March 28, 1947; made public January 12, 1973, p.46.

fell swoop telescoping mass and time **56 as a response to potential Soviet expansion into Western Europe, Although there was a great deal of fear that atomic weapons would be developed by the Soviet Union, there was very little opposition to the development and refinement of atomic weapons by the US, as they were seen as a cheap and effective deterrent. However, in August 1949, the "feeling of security that the American public, if not their policy-makers, had enjoyed was gone" 57, with the Soviet explosion of an atomic device. Although the US arsenal was expanding and the USSR's was virtually non-existent, the demise of the American nuclear monopoly had a deep psychological effect on Congress and the American people. 58

The Soviet test also had tangible consequences. Within six days of the President's

atomic weapons and acquiesced to the policy of atomic reprisal on the USSR "in one

In this way, Congress approved the decision to increase the production of

The Soviet test also had tangible consequences. Within six days of the President's announcement of the Soviet atomic explosion (September 22 1949), NATO appropriations passed in the House.⁵⁹ It also strengthened calls for the development of the 'super', or hydrogen bomb. The decision to proceed with the development of the hydrogen bomb was the first example in the post-war period of what was to be a recurring theme in US national security and nuclear weapons employment policy: the decision to exploit technological advantages to keep ahead in the qualitative arms race. This choice attracted broad support from the military, the executive and Congress.

President Truman announced the decision to develop the super on March 10 1950, and *The New York Times* observed, "No Presidential announcement since Mr. Truman entered the White House seemed . . . to strike such an instant or general chord of nonpartisan congressional support." According to Oppenheimer, the super "caught the imagination both of the Congressional and of military people, as the answer to the problem posed by the Russian advance."

⁵⁶ The description was Curtis LeMay's, in David Alan Rosenberg, "The Origins of Overkill: Nuclear Weapons and American Strategy, 1945-1960", *International Security*, Vol.7, No.4, Spring 1983, p.19.

⁵⁷ Adam Ulam, Expansion and Coexistence: Soviet Foreign Policy, 1917-73, 2nd ed. (New York: Holt, Rinehart and Winston, Inc., 1974), p.497.

⁵⁸ Ibid., p.496-7.

⁵⁹ Walter LaFeber, America, Russia, and the Cold War: 1945-1990, 6th ed. (New York: McGraw-Hill, Inc., 1991), p.84.

⁶⁰ Quoted in John Newhouse, War and Peace in the Nuclear Age (New York: Alfred A. Knopf, 1989), p.79.

⁶¹ Quoted in Ibid., p.75.

Janus No.

Massive Retaliation and Nuclear Options during the Eisenhower Administration

Under the Truman Administration, US nuclear strategy in the event of war with the Soviet Union could be gleaned from the nuclear war plans developed by the Joint Chiefs of Staff, which called for immediate nuclear strikes on the Soviet homeland. Given the small size of the US arsenal in relation to the proposed Soviet target set, this was unavoidable. This policy was carried over into the first term of the Eisenhower Administration but, in contrast to the secrecy and confusion that marked the Truman days, the nuclear strategy of 'massive retaliation' was publicly enunciated by Secretary of State John Foster Dulles in a speech to the Council on Foreign Relations in January 1954.

Dulles' speech argued that the "way to deter aggression is for the free community to be willing and able to respond vigorously at places and with means of its own choosing." This "deterrent of massive retaliatory power" would result in a "selection of military means instead of a multiplication of means . . . [and would achieve] more basic security at less cost." Achieving 'security at less cost' fulfilled the requirement that the US meet the Soviet threat without adversely affecting its economy in the process and it also reflected frustration with the inconclusive prosecution of the Korean War. This was spelled out in National Security Council Document (NSC) 162/2, approved by Eisenhower on October 30, 1953. Reliance on nuclear weapons also suited the traditional Republican predilection for a balanced budget and a unilateral foreign policy. 64

According to Alton Frye, there was "no discernible congressional opposition to the early American drift into heavy reliance on the threat of nuclear retaliation as the keystone of national strategy", and during the 1950s and much of the 1960s, "Congressional debates and reports still hinted that, under some circumstances, the United States might be able to undertake a nuclear strike against the Soviet Union."

Less discussed at the time was the political question of how the decision to implement a nuclear strike on the USSR, should it be deemed necessary, would be carried out. Writing in his diary in January 1956, President Eisenhower noted the

⁶² See, for example, Rosenberg, "The Origins of Overkill"; and Anthony Cave Brown, *Operation: World War III* (London: Arms and Armour Press, 1979).

⁶³ John Lewis Gaddis, Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy (Oxford: Oxford University Press, 1982), p.147.

⁶⁴ Arthur M. Schlesinger, Jr, A Thousand Days: John F. Kennedy in the White House (Boston: Hodder Mifflin Company, 1965), p.261

Frye, A Responsible Congress, p.5, 6.

The contract of the contract o

"insurmountable problems associated with launching a surprise preemptive attack against the Soviet Union", and concluded that such an attack "would be not only against our traditions, but it would appear to be impossible unless the Congress would meet in a highly secret session and vote a declaration of war which would be implemented before the session was terminated. It would appear impossible that any such thing would occur." Writing six years later, Bernard Brodie came to the opposite conclusion. Brodie surmised that "the operational powers of the President are such that the attitudes of the public, and of the Congress too, can be disregarded for long enough to accomplish a commitment to [nuclear] war." This issue appeared little more than semantic to senior Strategic Air Command (SAC) officials, who were sure that they would "get the weapons when the bell rings". The debate remained hypothetical as nuclear weapons were not used in conflict, but it did raise real questions as to whether Congress could be expected to play any role in arguably the most critical decision the US might be forced to make.

The attraction of nuclear weapons as the guarantor of US security and as a deterrent against Soviet designs on Western Europe and elsewhere were threefold for Congress: they were cheaper than maintaining a large standing army in Europe; they constituted an area of US quantitative and qualitative advantage; and they fostered the belief that the US could influence international events simply by its presence in America's diplomatic 'hip pocket'. In addition, the executive and the military were strong advocates of reliance on nuclear weapons and there was a strong feeling in Congress that the Soviet threat required a united front in the pursuit of containment. In accordance with this feeling, the qualitative and quantitative expansion of the nuclear arsenal and the qualitative and quantitative expansion of SAC were supported by Congress.

Until 1957, the Congressional debate on nuclear weapons benefited from one important fact, the distance separating Washington and Moscow. The Soviet Union did

⁶⁶ David Alan Rosenberg, "A Smoking Radiating Ruin at the End Of Two Hours: Documents on American Plans for Nuclear War with the Soviet Union, 1954-55", *International Security*, Vol. 6, No. 3, Winter 1981/82, p.15.

⁶⁷ Bernard Brodie, Strategy In The Missile Age (Princeton: Princeton University Press, 1959), p.239-40.

⁶⁸ Gregg Herken, Counsels of War (New York: Oxford University Press, 1987), p.97.

⁶⁹ According to Dutles, "we needed to be ready to fight in the Arctic and in the Tropies; in Asia, the Near East, and in Europe; by sea, by land, and by air; with old weapons and with new weapons." Quoted in Bundy, *Danger and Survival*, p.256.

⁷⁰ Henry Stimson described Secretary of State James Byrnes as carrying the atomic bomb in his 'hip pocket' when attending the Council of Foreign Ministers in London during September 1945. See Daniel Yergin, Shattered Peace: The Origins of the Cold War, rev. ed. (New York: Penguin, 1990), p.122.

not possess the capability to effectively strike at the continental US.⁷¹ The alleged 'bomber gap' of the 1950s, which set off alarm bells in Congress and was investigated by a subcommittee of the Senate Armed Services Committee under Stuart Symington, proved illusory.⁷²

However, on October 4 1957 the Soviets launched the Sputnik satellite on board an SS-6 missile, followed one month later by the launch of the larger Sputnik II.⁷³ The Soviet victory in the 'race for space' and the resulting 'missile gap' allegations, fuelled by leaks from intelligence officials to Democratic senators and sympathetic members of the press⁷⁴, set off a fire-storm in Congress. Not surprisingly, potential Democratic Presidential candidates like Senators Symington, John F. Kennedy and Lyndon B. Johnson led the 'missile gap' charge.⁷⁵ On August 14 1958 Senator John F, Kennedy claimed:

We are rapidly approaching that dangerous period which General Gavin and others have called the 'gap' or the 'missile-lag period'—a period . . . 'in which our own offensive and defensive missile capabilities will lag so far behind those of the Soviets as to place us in a position of great peril.' The most critical years of the gap would appear to be 1960-64.⁷⁶

The 'missile gap', like the 'bomber gap' before it, proved chimeric, as Eisenhower knew and as the Kennedy Administration was forced to admit early in its first term.⁷⁷ Despite this, the rapid quantitative and qualitative expansion of the US nuclear arsenal was given overwhelming support in Congress.

This became clear in 1958 when Congressmen began discussing the need for a large ICBM force, far in excess of that being advocated by the Administration. It was also at this time that the Air Force began to push for larger ICBM programs and

⁷¹ The Tu-4 Bull medium-range bomber of the late 1940s could only reach the US on a one-way suicide mission, and the Mya-4 Bison and Tu-95 Bear were not produced in sufficient numbers to pose a serious threat to the US during the early to mid-1950s.

⁷² See John Prados, *The Soviet Estimate: U.S. Intelligence Analysis and Soviet Strategic Forces* (Princeton: Princeton University Press, 1986), p.38-50.

⁷³ Ibid., p.57. Sputnik II also carried a dog.

⁷⁴ Hilsman, *To Move A Nation*, p.10.

⁷⁵ Desmond Ball, *Politics and Force Levels: The Strategic Missile Program of the Kennedy Administration* (Berkeley: University of California Press, 1980), p.12.

⁷⁶ John F. Kennedy, *The Strategy Of Peace*, edited by Allan Nevins (New York: Harper and Row, 1960), p.34

⁵⁷ See Prados, *The Soviet Estimate*, p.114-5 and Lawrence Freedman, *U.S. Intelligence and the Soviet Strategic Threat* (London: MacMillan, 1977), p.73.

to those requested by the administration.⁷⁸ This combined pressure resulted in the Eisenhower Administration consenting to approximately twice as many Atlas and Titan ICBMs as it had believed necessary, fifty more Minuteman missiles than it had initially approved and successive increases in Polaris submarine authorisations.⁷⁹

Congress generally supported the Air Force, in some cases providing additional funds

Spending More On Everything: Congress and the Kennedy Administration

Before the Kennedy Administration took office, a congressional subcommittee under the chairmanship of Henry Jackson, had begun hearings on the policy-making mechanisms of the National Security Council. 80 According to Jackson, the subcommittee's inquiry "was not directed to the substance of policy decisions. Rather, it was concerned with how the processes of government help or hamper prompt and effective action in national security affairs. The Subcommittee assumed that this was a problem, transcending either political party or any national administration."81 These hearings were complemented, two years later, with hearings chaired once more by Jackson focused, in part, on the "responsibilities of the Secretary of State and other senior officials in relation to Congress" and "sought practical steps that could be taken to improve the making and execution of foreign policy".82 The work of these committees is important for three main reasons. Firstly, members of Congress felt it necessary to conduct such inquiries. This reflected a concern with how US foreign policy had been formulated through the 1950s. Secondly, it influenced how the Kennedy and Johnson Administrations structured their foreign policy establishments. According to Roger Hilsman, it was "[p]erhaps the most important work of all that contributed to the thinking of the Kennedy administration on organizational problems⁸³ Thirdly, the conclusions that the committees drew endorsed executive pre-eminence in the formulation of foreign policy.

⁷⁸ Ball, Politics and Force Levels, p.44.

¹⁹ *Ibid.*, p.44-6.

⁸⁰ This was the Subcommittee on National Policy Machinery of the Senate Committee on Government Operations.

⁸¹ Jackson (ed), The National Security Council, p.xi.

Senator Henry M. Jackson (ed), *The Secretary of State and the Ambassador: Jackson Subcommittee Papers on the Conduct of American Foreign Policy* (New York: Frederick A. Praeger, 1964), p.x. This was the Subcommittee on National Security Staffing and Operations of the Senate Committee on Government Operations.

⁸¹ Hilsman, *To Move A Nation*, p.22. According to then President-elect Kennedy, it would "provide a useful starting point for the work that Mr. [McGeorge] Bundy will undertake in helping me to strengthen and to

Manual Common

Both committees affirmed the primacy of the President and the Secretary of State, stating that the "making of policy and its execution are aspects of a continuous process, and responsibility for both needs to be lodged in the same hands." In the US, "the President has the pivotal role in matters of national security. He is responsible for the conduct of foreign affairs . . ." 85

The Congressional role was clearly seen as 'reactive'. Congress "should concern itself less with efforts to prevent executives from abusing power by restricting their ability to manage, and should instead give them the authority to act as executives and hold them accountable for their use of it." Accordingly, a Secretary of State and his Department "come to Capitol Hill as a kind of counsel for 'the vast external realm' beyond our borders. There they confront members of Congress who are, in effect, counsels for the 'folks back home' with the duty to represent them and to take care of their interests." 87

These hearings reinforced both the bipartisan approach to US national security policy and the primacy of the executive in formulating and implementing that policy. This is not to say that the Kennedy Administration dealt with a Congress that acquiesced to its every whim or that this bipartisan approach dominated executive-Congressional relations in all areas, as it definitely did not. 88 However, in the area of nuclear weapons procurement, the bipartisan 'truce' held.

Alton Frye has argued that Congress failed to influence US nuclear force posture and strategy during the 1960s because it did not really favour certain weapons systems over others; it wanted more spending on everything. Similarly, Alain Enthoven and K. Wayne Smith have argued that in

practically every conflict between the Secretary of Defense and the Congress over spending, the Congress wanted to spend more. . . [The Armed Services Committees'] main theme was that the military leaders

simplify the operations of the National Security Council." Quoted in Jackson (ed), *The National Security Council*, p.xiii.

⁸⁴ Jackson (ed), The Secretary of State and the Ambassador, p.31

⁸⁵ Jackson (ed), The National Security Council, p.5.

⁸⁶ Jackson (ed), The Secretary of State and the Ambassador, p.35

⁸⁷ Ibid., p.59.

Arthur Schlesinger has observed that members of Congress did not feel "that they owed the President anything", as a Democratic Congressman told *U.S. News and World Report*, "A good many of them were elected in 1960 in spite of his presence on the ticket rather than because his name was there. They feel they have more of a mandate for their point of view than he does for his program." Schlesinger, *A Thousand Days*, p.590.

⁸⁹ Frye, A Responsible Congress, p.11-12.

are the experts; they know best what the nation needs for national defense; any reduction from what they recommend means risking the nation's security; and such shortfalls must be exposed and attacked as such.⁹⁰

Congress also favoured nuclear superiority over the Soviet Union. According to Desmond Ball, "the very committees . . . with authorization and appropriation powers in the military field were the most vocal in the call for the expansion of U.S. military strength." Les Aspin has convincingly argued that this theme reflected a Congressional tendency to equate uniforms with expertise. Given that the military generally advise spending more, and Congress has traditionally displayed a bias towards 'playing it safe' on national security matters, "playing it safe usually means buying more." While accurate, these assertions require explanation.

Before discussing US nuclear policy during the 1960s, it is worth noting an important example of the limits to Congressional involvement in the actual implementation of nuclear policy. On October 14 1962 the US discovered that the Soviet Union had deployed offensive nuclear missiles in Cuba. On the 16th, President Kennedy assembled an Executive Committee (Ex-Comm) of the National Security Council to advise him on his policy options. There was no Congressional representation in the Ex-Comm and the Congressional leadership was merely informed of Ex-Comm decisions. According to Roger Hilsman, at an intelligence briefing for Congressional leadership on Monday October 22nd, Senator Richard B. Russell, Chairman of the Senate Armed Services Committee, and Senator J. William Fulbright, Chairman of the Senate Forcign Relations Committee, urged immediate invasion. "The President listened politely." The decision to impose a 'quarantine' had already been made. According to impose a 'quarantine' had already been made.

This did not mean that Congress played no role in the Cuban Missile Crisis, only that this role was indirect. For example, in the months preceding the 1962 Congressional elections, which were also the weeks preceding the missile crisis, the

Timus o

⁵⁰ Enthoven and Smith, How Much Is Enough?, p.1.

⁹¹ Ball, Politics and Force Levels, p.183.

⁹² Les Aspin, "The Defense Budget and Foreign Policy: The Role of Congress", *Daedalus*, 104, Summer 1975, p.157.

⁹³ For the members of the Ex-Comm, see Robert Kennedy, *Thirteen Days* (London: MacMillan and Co., 1969), p.34-5.

⁹⁴ Hilsman, To Move A Nation, p.207.

⁹⁵ Ibid., p.209.

Republican Campaign Committee, sensing the Administration's vulnerability in the wake of the Bay of Pigs fiasco, announced that Cuba would be "the dominant issue of the 1962 campaign" and pushed hard for action during the crisis. "These attacks drew blood. Prudence demanded a vigorous administration reaction, and the President decided to meet the issue head-on. His best hope was to overwhelm the critics with a barrage of official statements disclaiming any Soviet provocation in Cuba, thus deflating the opposition's case." This pressure eventually ensured a hard-line from the administration. Indeed, Secretary of the Treasury Douglas Dillon summed up the situation bluntly in a note written during an Ex-Comm meeting: "Flave you considered the very real possibility that if we allow Cuba to complete installation and operational readiness of missile bases, the next House of Representatives is likely to have a Republican majority? This would completely paralyze our ability to react sensibly and coherently to further Soviet advances."

President Kennedy's foreign policy team brought to the job a desire to 'reinvigorate' US strategic posture. Indicative of this was the official shift from the rigid policy of massive retaliation to a nuclear strategy of 'controlled' and 'flexible' response. This took the specific form, by the end of 1961, of 'no-cities' counterforce: "a posture which would be so designed and controlled that it could attack enemy bomber and missile sites, retaliate with reserve forces against enemy cities if that should prove necessary, and also exert pressure on the enemy to end the war on terms acceptable to the United States."98 It was hoped that such a posture would encourage the USSR to show similar restraint in attacking US cities. However, the policy was not received favourably either by US allies or in some domestic quarters. Particular attention was paid to the first strike implications of the policy, given that attacking targets after the bombers and missiles had flown would defeat the whole purpose of the strategy. McNamara began publicly backtracking in mid-1962. 99 This did not necessarily mean that Congress was opposed to the potential first strike implications of the 'no-cities' doctrine. A member of the House Appropriations Committee stated that his committee had "been on record since 1961 in favor of a first-strike posture under certain conditions . . ." and Alton Frye has argued that many Congressmen were

Allison, Essence of Decision, p.188.

⁹⁹ Ball, Politics and Force Levels, p.198.

Theodore Sorensen, Kennedy (London: Hodder and Stoughton, 1965), p.688. Dillon was a Republican.

⁹⁸ Harland Moulton, "American Strategic Power: Two Decades of Nuclear Strategy and Weapons Systems 1945-1965," Ph.D. thesis, University of Minnesota, 1969 quoted in Ball, *Politics and Force Levels*, p.32.

McNamara's backtracking culminated, in early 1964, in the adoption of an 'assured destruction' capability and a 'damage limitation' strategy, to which Congress acquiesced. 101 'Assured destruction' was defined by McNamara as "maintaining a highly reliable ability to inflict unacceptable damage upon any single aggressor or combination of aggressors at any time during the course of a strategic nuclear exchange, even after absorbing a surprise first strike." Damage limitation', according to a 1962 Department of Defence study headed by General Glenn Kent, referred to the capability to "reduce the weight of the enemy attack by both offensive and defensive measures and to provide a degree of protection for the population against the effects of nuclear detonations. "103 This doctrine was an attempt to provide a ceiling on expenditure and forestall some of the excesses in nuclear weapons acquisition being requested by sections of the military and Congress. However, assured destruction and damage limitation prompted a Congressional perception that McNamara had abandoned the goal of US superiority and fuelled pressures for more weapons and bigger budgets -- "the antithesis of what McNamara had hoped to achieve."104

One of the most far-reaching programs in terms of its impact on future nuclear posture was the decision to deploy the solid-fuel Minuteman ICBM. Although General Thomas Power, Commander-in-Chief of Strategic Air Command, spoke of acquiring 10,000 missiles¹⁰⁵, more realistic estimates talked in numbers ranging from 800-900, as envisioned by the Defence Department (DoD), to 1,200, as advocated by most of the Joint Chiefs, the Air Force and leading Democratic Senators.¹⁰⁶ The result was a compromise of 1,000 missiles. The strong Air Force lobby in Congress ensured that there would be pressure for more missiles than DoD wanted and, according to Roswell Gilpatric, McNamara's deputy, "1,000 was really just a horse trade." Arthur

¹⁰⁰ Frye, A Responsible Congress, p.10, 11.

¹⁰¹ Enthoven and Smith, How Much Is Enough?, p.175.

Robert S. McNamara, *The Essence of Security: Reflections in Office* (Great Britain: Hodder and Stoughton, 1968), p.52. In practical terms this was said to require the destruction of 25 to 33% of the Soviet population and 67% of Soviet industry to ensure deterrence in a retaliatory strike. Jeffrey Richelson, "Population Targeting and U.S. Strategic Doctrine", in Desmond Ball and Jeffrey Richelson (eds), *Strategic Nuclear Targeting* (New York: Cornell University Press, 1986), p.240.

Ouoted in Ball, Politics and Force Levels, p.204.

¹⁰⁴ Nolan, Guardians of the Arsenal, p.85-6.

¹⁰⁵ Enthoven and Smith, How Much Is Enough?, p.195.

¹⁰⁶ Ball, Politics and Force Levels, p.273, 160.

¹⁰⁷ *Ibid.*, p.252.

Schlesinger, Jr concurred, surmising that because McNamara was already engaged in a bitter fight with the Air Force over the B-70 bomber, he and the President agreed to multiply Minuteman numbers. ¹⁰⁸

Somewhat surprisingly, Congress did not push the Polaris ballistic missile submarine program in the same way that it pushed Minuteman, although it did favour Polaris over such systems as the liquid-fuelled Jupiter missiles in Turkey. For example, although it added funds to the FY 1959 budget request, during 1961 Republican Congressman Gubser twice proposed to increase the Polaris program but was easily defeated by the Democratic majority. This reflected not only the relative strength of the Air Force lobby but also the initial naval resistance to the Polaris program.

Not only did Congress authorize all modernization programs that were presented to it, McNamara was forced to reject some programs favoured by Congress, such as a tifteenth Wing of the B-52 bomber force and the production of the B-70 bomber. In fact, Representative Carl Vinson, Chairman of the House Armed Services Committee, went so far as to propose a resolution, which ultimately proved unsuccessful, ordering the Secretary of the Air Force to go ahead with full development of the B-70. Its

It should be noted that while the majority of Congress wholeheartedly supported the rapid expansion of the US nuclear arsenal, a small minority expressed concern that the US had developed an overkill capability. In September 1963 Senator George McGovern proposed an amendment that would have cut the procurement and research and development portions of the FY 1964 defence bill by ten per cent. However, the amendment was defeated by a vote of seventy-four to two. 114

While it is difficult to talk of nuclear weapons policy during the Kennedy Administration without emphasising the rapid build-up of strategic forces, one of Congress's least known contributions to the US nuclear arsenal may well prove to be its most valuable and enduring contribution to averting accidental or unauthorized



tos Schlesinger, A Thousand Days, p.418.

See the Joint Committee on Atomic Energy Report, "The Study of US and NATO Nuclear Arrangements" dated February 11, 1961, quoted in Allison, Essence of Decision, p.311-12, footnote 175.

¹³⁰ Frye, A Responsible Congress, p.8; Ball, Politics and Force Levels, p.248.

Polaris was considered a national rather than a traditional Navy mission and so senior officers felt that it should not be funded out of the Navy's budget where it would adversely impact on other programs. Enthoven and Smith, *How Much Is Enough?*, p.17.

¹¹² Ball, Politics and Force Levels, p.137.

¹¹³ Enthoven and Smith, How Much Is Enough?, p.250-1.

¹¹⁴ Ball, Politics and Force Levels, p.80.

nuclear war. This was the introduction of Permissive Action Links (PALs). PALs are electromechanical locks on nuclear warheads that require "an essentially unbreakable code to be inserted before the warhead will explode." The catalyst for this decision was provided in June 1959 when Congressman Charles Porter visited a *Thor* missile base in England. Porter discovered that the British launch control officer possessed his key as well as the key supposed to be under US control. The A year and a half later, in December 1960, a Congressional tour of NATO military bases "had been deeply disturbed by a fundamental lack of precaution against unauthorized use of nuclear weapons." Of particular concern were 'Quick Reaction Alert' bombers loaded with live nuclear weapons and only a single armed sentry standing guard. As a result, in June 1962 Kennedy ordered PALs to be placed on all nuclear weapons in Europe and government officials publicly described the devices in order to encourage the Soviet Union to reciprocate. The

Missile Defences, SALT and the End of the 'Bipartisan Truce'

The public debate of the late 1960s and the early 1970s on US missite defences marked a turning point in executive-Congressional relations. No longer were any nuclear weapons issues, or indeed foreign policy matters, above intense Congressional scrutiny as had once been the case. It was not the Anti-Ballistic Missile (ABM) issue in particular, although this was a very controversial and many-sided debate, but rather a more general Congressional trend borne of despair with the debacle in Vietnam and an influx of freshman Congressmen during the early 1970s. This Congressional 'resurgence' has been described as "a multifaceted onslaught of changes, or reforms, that shattered the older seniority leaders' power, opened up the decision-making game



¹¹⁸ Similar devices called coded switch systems are used on delivery vehicles. Bruce Blair, *The Logic of Accidental Nuclear War* (Washington, D.C.: Brookings, 1993), p.278-9.

¹¹⁶ Dan Caldwell, "Permissive Action Links: A description and proposal", *Survival*, Vol. 29, May/June 1987, p.224.

¹¹⁷ Scott Sagan, Moving Targets: Nuclear Strategy and National Security (Princeton: Princeton University Press, 1989), p.138.

¹¹⁸ Ibid. According to Bruce Blair, "many Russian strategic weapons, such as air- and sea-launched cruise missiles and most tactical weapons, lack sufficient PAL protection. In those cases the primary safeguard is on the container or launcher rather than on the weapon itself." Blair, The Logic of Accidental Nuclear War, p.279. On the uncertainty of then-Soviet PALs, see Kurt Campbell et al, Soviet Nuclear Fission: Control of the Nuclear Arsenal in a Disintegrating Soviet Union (CSIA Studies in International Security, Cambridge, MA: Center for Science and International Affairs, Harvard University, 1991), p.14-15.

to wider circles of players, and dramatically recast House and Senate rules and procedures." 119

According to one observer, this trend was actively resisted by the Nixon Administration, and was in large part a reflection of the personalities of the White House staff. For example, Nixon's chief of staff, H.R. Haldeman, who scheduled the President's time,

determined whom he would see and for how long. Congressmen were rarely welcome because, according to one who was there, Haldeman regarded them as 'venal, vulnerable politicians willing, in most cases, to barter away their corrupt souls for a project in their state, a social invitation to the White House, a few words of praise from the President, or, in a few instances, to avoid investigation by the Internal Revenue Service or the Justice Department.' 120

In retrospect, the ABM debate was fraught with pitfalls on all sides. It emerged just as Congress and the US public's opposition to 'Johnson's war' in Southeast Asia began to crystallise. This was complemented by a backlash against civilian defence analysts. Critics charged that they had relied on "technology plus managerial skills" but had been proven disastrously wrong, most notably in the jungles of Vietnam. This led to a profound sense of scepticism with civilian defence budgeting and procurement policy and resulted in increased micromanagement of the defence budget. In the

¹¹⁹ Roger H. Davidson, "The Emergence of the Postreform Congress", in Roger H. Davidson (ed), *The Postreform Congress* (New York: St Martin's Press, 1992), p.3.

Clark R. Mollenhoff, Game Plan For Disaster (New York: W.W. Norton, 1970), p.140 quoted in Joseph C. Spear, Presidents and the Press: The Nixon Legacy (Cambridge, MA: The MIT Press, 1984), p.71. Arthur Schlesinger described the Nixon view of Congress as follows: "[Congress] could not make intelligent use of its war-making authority. It had no ordered means of setting national priorities or of controlling aggregate spending. It was not to be trusted with secrets. It was fragmented, parochial, selfish, cowardly, without dignity, discipline or purpose. The Presidency had not stolen its power; rather Congress had surrendered it out of fear of responsibility and recognition of incapacity. Congress was even without pride and, if ignored or disdained, waited humbly by the White House and licked the hand of its oppressor." Schlesinger, The Imperial Presidency, p.253.

Henry Kissinger, American Foreign Policy, expanded edition (New York, W. W. Norton, 1974), p.57, quoted in James William Gibson, The Perfect War: Technowar in Vietnam (Boston: The Atlantic Monthly Press, 1986), p.15.

Executive frustration at this "intrusion" was characterised by John Lane and Donald Latham as follows: "... many congressional professional staff members perceive themselves to be experts on almost everything... Congress often adjusts program funding without a clear concept of the effect on the program itself or on other programs dependent on it... Congressional and OMB [Office of Management and Budget] staffs go into every detail of every program and make microscopic decisions on everything—including intricate management, schedule, and funding decisions." John Lane and Donald Latham,

Senate, doves, believing that they had been proved correct and the executive wrong, beefed up their staffs in preparation to play a larger role in foreign policy. 123

The anti-ballistic missile debate had its proximate cause in 1962 when the Soviet Union began construction of an air defence system around Leningrad. This project was stopped two years later but construction had also begun on a similar system around Moscow. This defensive system proved to be the catalyst for such varied (and contradictory) US responses as its own ABM system, MIRV and the pursuit of arms control. During the early to mid-1960s, the perceived Soviet lead in ABM technology provided very little incentive for the Soviets to negotiate on ABM. In his January 10 1967 State of the Union Address, President Johnson proffered an invitation to Soviet officials to enter negotiations on the subject of a mutual freeze on ABM deployments. During a press conference in London in February 1967, Chairman of the Soviet Council of Ministers Alexei Kosygin replied indignantly that defensive systems were not "a cause of the arms race but designed instead to prevent the death of people. However, by 1968, the Soviets had become concerned with US ABM advances and in January of that year agreed in principle to offensive and defensive arms limitation talks.

During the mid-1960s the Johnson Administration had found itself under increasing Congressional pressure to deploy defences to match Soviet ABM deployments. Yet the Sentinel ABM system, announced by Robert McNamara in September 1967, also generated criticism. Of particular concern was the fact that the Sprint interceptors to be deployed in the immediate vicinity of the cities to be defended were to be nuclear-armed.¹²⁷

In March 1969 President Nixon declared that population defence was not viable and announced that Sentinel, renamed Safeguard, would be reoriented to defend missile silos. 128 However, enthusiasm began to wane immediately. In August the precariousness of the ABM debate was made painfully clear to the new

[&]quot;Management Issues: Planning, Acquisition, and Oversight", in Ashton Carter, John Steinbruner and Charles Zracket (eds), Managing Nuclear Operations (Washington, D.C.; Brookings, 1987), p.660.

¹²³ Halberstam, The Best and the Brightest, p.798.

Albert Carnesale and Richard Haass, Superpower Arms Control: Setting the Record Straight (Cambridge, MA: Ballinger, 1987), p.66.

¹²⁵ Thomas Wolfe, Soviet Power and Europe, 1945-1970 (Baltimore: Johns Hopkins University Press, 1970), p.269.

¹²⁶ David Holloway, *The Soviet Union and the Arms Race*, 2^{6d} ed., (New Haven: Yale University Press, 1984), p.45.

¹²⁷ Matthew Bunn, Foundation for the Future: The ABM Treaty and National Security (Washington, D.C.: The Arms Control Association, 1990), p 13-14.

¹²⁸ Ibid., p.14.

Administration. The Senate approved the first phase of Safeguard by one vote, thanks in large part to the 'floor managing' efforts of Senator Henry Jackson. ¹²⁹ The impact of Vietnam was beginning to be felt, the limitations of ABM technology were becoming apparent, the cost seemed to be increasing exponentially, the location of the ABM sites were being seen by the locals more as a target for Soviet warhead saturation than as a safe haven and many critics believed deployment of an ABM system would merely spark a more intensive offensive arms race. ¹³⁰ In addition, the military was split on ABM deployment. Both advocates and critics in Congress could marshal military support for their views, Indeed, it was not just the military narrowly defined. As Jerome Kahan has observed, "defense experts, many of whom had recently left government service, were contributing to the congressional and public debates." ¹³¹

The executive did not make its job any easier. By constantly changing the rationale for ABM deployment, and at times choosing the most dubious, officials gave the impression that they possessed a defensive system in search of a mission. For example, ABM research and development, since its inception, was directed to counter the Soviet threat, yet McNamara's September 1967 decision to deploy a 'thin' (defence of selected sites as opposed to a 'thick' countrywide defence) ABM system was justified in terms of defending against an emerging Chinese missile threat. ¹³²

Congressional scepticism became action in 1970. For Fiscal Year 1971, Congress denied funds to begin construction of area ABM sites. Efforts also began to reduce the number of ICBM defence sites. The President did not request funding for the program for Fiscal Year 1972, yet the Fiscal Year 1973 request was \$1-483 billion, up until then the highest Safeguard request in any given year. The seemingly inevitable showdown over ABM was avoided, however, by the signing of the Anti-Ballistic Missile Treaty on May 26, 1972 in Moscow. The Senate ratified the treaty by the overwhelming vote of 88 to 2. In this context, Jerome Kahan keenly observed

¹²⁹ Ibid., p.14; Patrick Glynn, Closing Pandora's Box: Arms Races, Arms Control, and the History of the Cold War (New York: BasicBooks, 1992), p.242.

¹³⁰ Carnesale and Haass, Superpower Arms Control, p.68-9.

⁴³ Jerome Kahan, Security in the Nuclear Age: Developing U.S. Strategic Arms Policy (Washington, D.C.: Brookings, 1975), p.443.

¹¹² Bunn, Foundation for the Future, p.13.

Kahan, Security in the Nuclear Age, p.153, 159; "Fiscal Year 1973 Authorization for Military Procurement, Research and Development, Construction Authorization for the Safeguard ABM and Active Duty and Selected Reserve Strengths", Hearing before the Committee on Armed Services, United States Senate, 92nd Congress, Second Session on S. 3108, Part 2 of 6 Parts, Authorizations, February 15, 1972, p.299

p.299.

134 Coit Blacker and Gloria Duffy (eds), *International Arms Control: Issues and Agreements*, 2nd ed. (Stanford: Stanford University Press, 1984), p.248.

that it is quite plausible that the ABM Treaty "saved the administration from the dilemma of either being forced by Congress to halt Safeguard, with no guarantee that the Soviet Union would refrain from expanding its ABM system, or having to complete an expensive program of dubious value simply to match the USSR's program." While it is unclear how decisive was the Congressional impact on the US decision to negotiate the ABM Treaty, Congressional concerns clearly played a reinforcing role. Had interested members of Congress taken another tack, things may have been very different.

The ABM Treaty has come under a great deal of political pressure since 1972, most notably after the announcement of the Strategic Defence Initiative in 1983 but, as of this writing, the ABM Treaty has not been reinterpreted or abrogated. Arms control advocates hailed the ABM Treaty as "the centrepiece of strategic arms control [during the Cold War] and a bulwark of U.S. national security. More recently, however, Congressional and executive interest in reinterpreting or, as some have suggested, abrogating, the treaty has become a source of real friction in the US-Russian relationship.

The ABM debates proceeded in tandem with the first Strategic Arms Limitations Talks (SALT 1). However, Congress suffered from a severe lack of information regarding the US negotiating position during the talks, which began in November 1969 and culminated in the signing of the SALT Interim Agreement on May 26, 1972. As John Newhouse wrote at the time, "[k]ey committees and individuals are consulted, but only rarely do they learn enough to have a rounded view of what is happening and why; most important SALT decisions are taken without reference to the Congress." The first serious briefing occurred in the spring of 1970, to fifteen Congressmen unprepared and unsupported by expert help. Efforts to allow Senators to participate in the negotiations, even as observers, were rebuffed and as a final insult, requests for a Senate staff to attend the signing ceremony in Moscow were

The second of th

¹³⁸ Kahan, Security in the Nuclear Age, p.153.

^{1 ho} It should be noted that the 1972 treaty allowed the US and the USSR to deploy two ABM sites, no less than 1,300 kilometres apart. On July 3 1974, both parties agreed to limit deployment to one site. The texts of these agreements can be found in Blacker and Duffy (eds), *International Arms Control*, p.413-417, 438-439.

¹³⁷ Bunn, Foundation for the Future, p.4.

¹³⁸ John Newhouse, Cold Dawn: The Story of SALT (New York: Holt, Rhinehart and Winston, 1973), p.32.

rejected.¹³⁹ This reflected Kissinger's "close-to-the-vest negotiating style, which cut out many players in the American foreign policy community."¹⁴⁰

It comes as somewhat of a surprise, therefore, to read the House's formal report recommending approval of SALT, which stated that the "willingness of the Executive to be candid about the U.S. negotiating position and developments at SALT...[has] established a model of executive-legislative cooperation." It is all the more surprising in light of the chief US negotiator's frank admission that while SALT generated a great deal of interest in Congress, "I got the impression that few members found the time to do the 'homework' needed to get a confident understanding of the major issues. Many members were ready to sign resolutions urging various SALT moves. But few took the trouble to visit the SALT negotiations in Europe and talk to the delegates at length about issues and prospects."

This is not to say that Congress was completely kept in the dark during SALT. Gerard Smith also stated that Senator John Sherman "steeped himself in SALT", visited the delegation and played an important role in garnering Congressional support. Clement Zabłocki was "the most persistent overseer of SALT in the House" and a strong supporter. Most importantly, Senator Henry Jackson possessed the best technical grasp of the subject. ¹⁴³

It is worth pausing briefly to discuss the influential role of Senator Henry 'Scoop' Jackson. In February 1988, during an address to the Henry M. Jackson School of International Studies at the University of Washington, then Secretary of State George Schultz reminisced:

Our relationship with the Soviet Union has preoccupied American foreign policy for nearly half a century. Few public figures in the post-



¹³⁰ Blechman, The Politics of National Security, p.73-4.

Bruce Berkowitz, Calculated Risks (New York: Simon and Schuster, 1987), p.14. According to one biographer, for Kissinger, members of Congress could not "be expected or allowed to play any meaningful role in policymaking; the lack the training and temperament of the seasoned diplomat, and they remain more responsive to the uninformed concerns of their voters, to the shoddy tug-and-pull of the popular political process, than to the arduous twists and turns of great power relationships." David Landau, Kissinger: The Uses of Power (New York: Thomas Cromwell Company, 1972), p.129.

¹⁴¹ Blacker and Duffy (eds), International Arms Control, p.248.

¹⁴² Gerard Smith, Doubletalk: The Story of SALT I (New York: Doubleday and Co., 1980), p.112.

thid., p.112. Smith observed that Jackson believed "American adjustments in position in the negotiating process were signs of weakness reflecting a failure to understand that the Soviets were aiming for strategic superiority. . . Senator Jackson carried the additional burden of suspecting that those who did not agree with him were soft-headed, woolly thinkers—'arms controllers'." *Ibid.*, p.112-3.

war world have done so much as Scoop Jackson to shape American thinking about that relationship. 444

Certainly Soviet officials did not forget Henry Jackson. In his 1995 memoirs, Anatoly Dobrynin described the Senator as one of the leaders who orchestrated a campaign against any agreement with the Soviet Union. 145

Jackson had been at the forefront of Congressional advocacy for a robust US nuclear posture and had earned a reputation for expertise on strategic issues. Jackson, and his assistant Richard Perle, 'berated' SALT in 1972. Their chief concern was that, with the Soviet advantage in 'heavy' or larger missiles, the technology to place multiple warheads capable of hitting different targets on missiles (multiple independently targetable re-entry vehicles, or MIRV) would favour Soviet forces in the near future. Given this asymmetry, it was reasoned, the Soviets could conceivably launch a surprise strike on US ICBMs and bombers, leaving the President with only two options: retaliate against Soviet cities and invite response in-kind, or surrender. The Administration had previously strengthened Jackson's case. In testimony before the Senate Foreign Relations Committee during March 1969, Defence Secretary Melvin Laird had insisted that the Soviet Union was "going for a first strike capability. There is no question about it." 148

Despite reservations that SALT was 'selling out' US national security interests¹⁴⁹, Jackson did not force a showdown.¹⁵⁰ However, he soon had his revenge. Firstly, Jackson demanded that the SALT delegation and the ACDA be purged, which

¹⁴¹ Quoted in Dorothy Fosdick (ed), *Henry M. Jackson and World Affairs: Selected Speeches, 1953-1983* (Seattle: University of Washington Press, 1990), p.5.

Anatoly Dobrynin, In Confidence: Moscow's Ambassador to America's Six Cold War Presidents (New York: Times Books, 1995), p.309.

One of the main criticisms of SALT was that the unequal force ceilings placed the US in a numerically inferior position to the USSR. The response to this criticism was that US MIRV technology evened the balance. Ironically, in October 1979 the Senate Select Committee on Intelligence observed: "The Soviets unanticipated ability to emplace the much larger [six warhead] SS-19 in a slightly enlarged [single warhead] SS-11 silo circumvented the safeguards the United States thought it had obtained in SALT I against the substitution of heavy for light ICBMs." "Principal Findings on the Capabilities of the United States to Monitor the SALT II Treaty", Report of the Senate Select Committee on Intelligence, United States Senate, 96th Congress, First Session, October 1979, p.3.

Lawrence Freedman, The Evolution of Nuclear Strategy (London: MacMillan, 1981), p.388.

Quoted in Kahan, Security in the Nuclear Age, p.150-51.

Raymond Garthoff, Detente and Confrontation: American-Soviet Relations from Nixon to Reagan (Washington, D.C.: Brookings, 1985), p.412.

¹⁵⁰ The Interim Agreement passed the Senate 88-2 and the House 307-4.

the Administration dutifully did.¹⁵¹ Secondly, on September 30 1972 the Senator attached an amendment to SALT in the form of a Joint Resolution. The 'Jackson Amendment' consisted of three non-binding 'Sense of Congress' provisions. Of greatest import was the request that the President "seek a future treaty that, inter alia, would not limit the United States to levels of intercontinental strategic forces inferior to the limits provided for the Soviet Union." ¹⁵² It also expressed support for a "vigorous research and development and modernization program as required by a prudent strategic posture." ¹⁵³ Charges of US strategic inferiority always struck a responsive chord in Congress and the Jackson Amendment served as a warning for future agreements; a warning that would come back to haunt SALT II.

Congressional influence was not limited to nuclear arms control. It also impacted on weapons systems procurement. Many of these issues would remain controversial well into the 1980s. Of the many weapon systems under debate at the time, the focus here will be on two of the most far-reaching, namely the Trident ballistic missile submarine and the development of MIRV technology.

One of the central elements of arms control as practised by the US in the 1970s and 1980s was the perceived need to 'negotiate from strength'. Then-Secretary of Defense Melvin Laird's 1972 remarks encapsulated this approach succinctly:

I could not support the SALT agreements if the Congress fails to act on the movement forward of the Trident system, on the B-1 bomber and on the other programs that we have outlined to improve our strategic offensive systems during this five-year period.¹⁵¹

As Jerome Kahan has observed, "senators interested in arms control found themselves in the paradoxical position of voting in favor of weapon projects for fear of harming prospects at SALT." The Trident SSBN (nuclear ballistic missile submarine) was the perfect example.



¹⁵¹ Strobe Talbott, *Deadly Gambits* (London: Pan Books, 1985), p.16; Joseph Nye (ed), *The Making of America's Soviet Policy* (New Haven: Yale University Press, 1984), p.255.

¹⁵² "Legislation on Foreign Relations with Explanatory Notes", Committee on Foreign Relations, United States Senate, Committee on Foreign Affairs, House of Representatives, Joint Committee Print, March 1973, p.665-6.

¹⁵¹ Ibid., p.666.

Kahan, Security in the Nuclear Age, p.176. See also testimony of Laird in "Agreements on Limitation of Strategic Offensive Weapons", Hearings before the Committee on Foreign Relations, House of Representatives, 92nd Congress, Second Session on Joint Resolutions, August 2 1972, p.45, 55, 79-80, 83-4. Kahan, Security in the Nuclear Age, p.176.

In addition to defence hawks, such as Senators Jackson and John Stennis, Trident attracted support from groups who saw it as "an opportunity to force the abandonment of several other systems". The administration's desire to negotiate from strength was partly fuelled by the deal it expected to cut with the Russians and partly by an appreciation that, with the Moscow Summit just announced and Nixon's intent to sign SALT, "sizable and visible increases in defense spending were necessary to appease congressional hardliners . . ."¹⁵⁷

This is not the place for an in-depth study of the politics of Trident. However, two issues do stand out. Firstly, on August 1, 1973, in what has been described as "perhaps one of the most crucial votes in the entire legislative history of the Trident program", the Senate Armed Services Committee trimmed Trident funds by \$885 million. Senator Barry Goldwater, absent on voting day and who had just received a 'special presentation' from Admiral Hyman Rickover (head of the Naval Reactors Branch), announced that his proxy vote had been miscast. Two days later, the Senate voted 49-47 to restore the \$885 million. While it is unclear what, precisely, Goldwater and Rickover discussed, it does provide a rather stark illustration of how Congressional interests can become 'malleable' with the 'right' lobbying.

The story did not quite end there. Senators McIntyre and Domenici carried the funding debate to the floor. Admirals Zumwalt (Chief of Naval Operations) and Rickover, as well as Secretary of the Navy John Warner, went to the Hill and gave a classified briefing on Soviet advances in anti-submarine warfare. The McIntyre-Domenici amendment was defeated, "but not until after a knock-down, punch-out floor fight in the Senate directed at the votes of eighteen 'undecided' senators in which the administration was criticized for resorting to scare tactics."

Secondly, cost overruns increasingly caught the attention of legislators. While cost overruns and a deliberately distorted tendering process have become



¹⁵⁰ D. Douglas Dalgleish and Larry Schweikart, *Trident* (Carbondale: Southern Illinois University Press, 1984), p.45. For example, Members of Congress for Peace through Law described Trident as cost-effective compared to land-based missiles. *Ibid.*, p.46.

¹⁵⁷ Fen Hampson, *Unguided Missiles: How America Buys Its Weapons* (New York: W. W. Norton and Co., 1989), p.93.

¹⁵⁸ Dalgleish and Schweikart, Trident, p.63-4.

¹⁵⁰ Ibid., p.64. Goldwater had voted in the two previous years against acceleration of the Trident program.

¹⁶⁰ Hampson, Unguided Missiles, p.100-101.

See, for example, "Inaccuracy of Department of Defense Weapons Acquisition Cost Estimates", Ninth Report by the Committee on Government Operations, House of Representatives, 96th Congress, First Session, November 15 1979; and "Reprogramming Action -- Trident Submarine", Hearing before the Scapower and Strategic and Critical Materials Subcommittee c the Committee on Armed Services, House of Representatives, 96th Congress, Second Session, September 23, 1980.

commonplace in defence contracting, the Trident experience — exemplified by D. Douglas Dalgleish and Larry Schweikart's 1984 admission that, had the US Navy presented a "complete and thorough estimate of program costs . . . the *Ohio* [the first Trident submarine put to sea] would still be a preliminary design, buried in a file cabinet . . ." ¹⁶² — only served to reinforce the arguments made by critics of defence spending.

According to Fred Kaplan, MIRV technology "began life as a figment inside the flighty imagination of a physicist at the RAND Corporation named Richard Latter." ¹⁶³ In what must have been one of the greatest ironies of the nuclear arms race, Latter surmised in 1962 that if the USSR MIRVed its missile force, it could threaten the US Minuteman force. ¹⁶⁴ Knowledgeable members of Congress understood this, as evidenced by a September 1968 Senate Armed Services Committee Report stating "that the greater throwweight which many of their [Soviet] missiles possess gives them greater flexibility to proceed with such warhead improvements as MIRVing . . ." ¹⁶⁵ This was precisely what happened. The first Soviet MIRV was tested in 1973, spawning the increasingly public US ICBM vulnerability debate of the late 1970s and early 1980s. ¹⁶⁶

As late as the end of the 1960s, the executive was justifying MIRV to Congress on the basis of a potential large-scale Soviet ABM threat. However, MIRVs "potential for increasing target coverage" and, therefore, its importance for a counterforce strategy, had been "the dominant consideration", at least for the Air Force, since its conception. 168

MIRV was not anywhere near as controversial as the ABM issue. For all the speechmaking, Congressional testimony and behind-the-scenes manoeuvring, Ted Greenwood concluded that opponents "did not in any important way inhibit or even

¹⁶² Dalgleish and Schweikart, Trident, p.360.

¹⁶³ Fred Kaplan, The Wizards of Armageddon (New York: Simon and Schuster, 1983), p.361.

¹⁶⁴ Ibid.

¹⁶⁵ Nolan, Guardians of the Arsenal, p.84.

Representative of the analysis sounding this particular tocsin was Paul Nitze, "Deterring Our Deterrent", Foreign Policy, No.25. Winter 1976-1977, p.195-210. For a critique see Fred Kaplan, Dubious Specter: A Skeptical Look at the Soviet Nuclear Threat (Washington, D.C.: Institute for Policy Studies, 1980). See also Michio Kaku and Daniel Axelrod, To Win A Nuclear War (Boston: South End Press, 1987); and Gerry Sanders, Peddlers of Crisis (Boston: South End Press, 1983).

Matthew Evangelista, Innovation and the Arms Race: How the United States and the Soviet Union Develop New Military Technologies (Ithaca: Cornell University Press, 1988), p.68.

¹⁶⁸ Ted Greenwood, Making the MIRV: A Study of Defense Decision Making (Cambridge, MA: Ballinger, 1975), p.59. MIRV was also a way for McNamara to sell his decision to field 1,000 ICBMs to the Air Force, Kaplan, The Wizards of Armageddon, p.363.

delay the MIRV deployments." This was due, in large part, to the ABM issue. Many anti-ABM Senators, who also opposed MIRV, decided to defer a fight over MIRV, partly because they feared that they would lose, and partly because it threatened to divert energy from the more important ABM fight. Attempts to delay MIRV testing, including a letter from Senators Cooper and Hart to President Johnson, displayed a conspicuous lack of coordination, and did not even elicit the support of colleagues in Congress, let alone sympathetic interest groups and executive branch officials. 171

The Trident and MIRV cases are instructive. Coming as they did at the same time as the ABM debate, Congress really only had enough time, energy and resources to challenge one big issue. In addition, Trident and MIRV were seen by many ABM opponents as bargaining chips. The logic was that opposition to ABM could only be maintained if one supported alternative weapons systems. To oppose everything (indeed, more than one weapon) would be seen to be supporting the erosion of US military power and to encourage the tipping of the strategic balance in favour of the Soviet Union. ¹⁷²

On the plane of strategy, Defence Secretary Schlesinger's 'Limited Nuclear Options' (LNOs) "did not generate the enormous debate that the Administration appeared to have anticipated." Indeed, for Henry Jackson and other like-minded Senators on the Armed Services Committee, these options were long overdue. According to Lawrence Freedman, this was partly because it was difficult to object to flexibility and options *per se.* In 1974 hearings, Senate Foreign Relations Subcommittee on Arms Control chairman Edmund Muskie stated at the outset that he felt "certain that there [were] few, if any, members of Congress who doubt the desirability of improving our command and control systems." In 1976

This is not to say that opposition was non-existent. Numerous strategic analysts and members of Congress argued that "the development of limited nuclear options was

¹⁶⁰ Greenwood, *Making the MIRV*, p.135. Congress did, however, delete the Hard Target Re-Entry Vehicle from the 1972 Defence Budget on procedure. See Aspin, "The Defense Budget and Foreign Policy", p.166. ¹⁷⁰ *Ibid.*, p.122.

¹⁷¹ Ibid., p.126-7.

¹⁷² See, for example, the exchange between Defense Secretary Laird and Senator Ervin in "Military Implications of the Treaty on the Limitations of Anti-Ballistic Missile Systems and the Interim Agreement on Limitation of Strategic Offensive Arms", *Hearing before the Committee on Armed Services*, United States Senate, 92nd Congress, Second Session, June 6 1972, p.48.

Freedman, *The Evolution of Nuclear Strategy*, p.379. For a richer description of the 'Schlesinger Doctrine' see James Schlesinger, "Annual Defense Department Report 1975", in Philip Bobbitt et al (eds), US Nuclear Strategy: A Reader (London: MacMillan, 1989), p.366-86.

¹⁷⁴ Alan Platt, The U.S. Senate and Strategic Arms Policy (Boulder, CO: Westview Press, 1978), p.74.

¹⁷⁵ Freedman, The Evolution of Nuclear Strategy, p.379.

¹⁷⁶ Platt, The U.S. Senate and Strategic Arms Policy, p.74.

destabilizing, increasing the likelihood of nuclear war⁵¹⁷⁷ and several amendments to delete funding for counterforce programs were introduced (but rejected), predominantly by Senate Armed Services Subcommittee on Research and Development chairman Thomas McIntyre. 178 In a 1974 briefing to the Senate Foreign Relations Committee on LNOs by Schlesinger, Senator Case argued that limited options, by reducing the risk of all-out retaliation, might actually invite an enemy "to consider the possibility of nuclear exchanges as a more viable course of action than at present."179 Several Senators expressed incredulity that Schlesinger could speak in terms of the distinctions between 1, 5, 10 or 15 million people killed. 180 A number of Senators also feared that LNOs would undermine the nuclear balance by raising the spectre of a US first-strike capability, that accurate counterforce nuclear weapons would be more 'usable', that LNOs would jeopardize SALT II and that the modest budget requests for counterforce improvements would soon mushroom. 181 According to Alan Platt, "debate inside and outside the Senate on U.S. counterforce policy and alternatives to that policy was considerable." Yet ultimately, executive branch requests for counterforce funding were approved. As a result, Congress had a negligible impact on nuclear employment strategy during the early to mid-1970s because it provided the money for DoD to procure the vast majority of requirements for an emerging counterforce capability.

Changing Perceptions of the Nuclear Balance

Jimmy Carter entered the White House in large part due to the backlash against Vietnam and Watergate. 183 The need for a genuine reduction in strategic nuclear weapons featured prominently in the 1976 Democratic election campaign. 184 During

¹⁷⁷ Sagan, Moving Targets, p.43.

¹⁷⁸ See Platt, The U.S. Senate and Strategic Arms Policy, p.82-91.

¹⁷⁹ Letter of Senator Case to Secretary of Defense James Schlesinger in "Briefing on Counterforce Attacks", Hearing before the Subcommittee on Arms Control, International Law and Organization of the Committee on Foreign Relations, United States Senate, 93rd Congress, Second Session, September 11 1974, p.2.

For example, Senator Symington called such gradation "real insanity" and Senator Muskie labelled the whole notion of limited nuclear options "unreal". *Ibid.*, p.20, 25, See also the comments of Senator Pearson, p.28.

ist Platt, The U.S. Senate and Strategic Arms Policy, p.80-81.

¹⁸² *lbid.*, p.91.

¹⁸³ See Adam Ulam, Dangerous Relations: The Soviet Union in World Politics, 1970-1982 (New York: Oxford University Press, 1983), p.164; Gaddis Smith, Morality, Reason and Power: American Diplomacy in the Carter Years (New York: Hill and Wang, 1986), p.28; and Jimmy Carter, Keeping Faith: Memoirs of a President (New York: Bantam, 1982), p.125.

¹⁸⁴ Smith, Morality, Reason and Power, p.30.

his inaugural address, the new President proclaimed the elimination of nuclear weapons as his ultimate goal. At a meeting with the Joint Chiefs of Staff in January 1977, Carter seemed to consider making good on his vision when he suggested (to the horror of those in uniform) that 200 ICBMs on each side might be sufficient for mutual deterrence. Blowever, this executive guidance proved to be quite untenable.

Not all of the blame for what followed can be laid with the Carter team. The political environment, by 1977, was becoming decidedly harsh for a Democratic President determined to be "free of that inordinate fear of communism . ." Détente was increasingly seen as a dirty word and, in many minds, had only served to encourage the USSR to greater activism in the Third World. In addition, the Soviet Union had finally achieved nuclear parity with the US; a fact which led increasing numbers of Congressmen to charge that the USSR was cheating on arms control agreements and to demand that the US regain its lead in the arms race. ¹⁸⁸

Carter's relations with the Hill, which have been described as 'frequently strained' despite Democratic control of Congress 189, got off to a bad start with the nomination of Paul Warnke as chief SALT II negotiator and head of the Arms Control and Disarmament Agency (ACDA). At the SALT confirmation hearings 190, the Senate affirmed Warnke 58 to 40; short of the two thirds majority required to ratify the treaty that Warnke was about to negotiate. 191

¹⁸⁵ Carter, Keeping Faith, p.215; Ambrose, Rise To Globalism, 8th rev. ed., p.281.

¹⁸⁶ Strobe Talbott, Endgame: The Inside Story of SALT II (New York: Harper and Row, 1979), p.43.

¹⁸⁷ Smith, Morality, Reason and Power, p.66.

In 1979, the Senate Select Committee on Intelligence declared: "On the basis of the SALT I record, the committee believes that the Soviet Union will push to the greatest extent possible any advantages which the provisions or ambiguities of the SALT II Treaty might permit. Further, the Soviet Union will probably continue nearly all its present concealment and deception practices, and additional concealment and deception practices may be attempted." "Principal Findings on the Capabilities of the United States to Monitor the SALT II Treaty", p.1-2.

¹⁸⁹ James A. Baker III, with Thomas DeFrank, *The Politics of Diplomacy* (New York; G.P. Putnam's Sons, 1995), p.334.

Paul Nitze, who had described Warnke's views as 'asinine' and 'screwball', believed himself to be a better American than Warnke. Warnke did himself no favours by replying to a question on civil defence with the flippant attitude that since he lived near the District of Columbia and stood little chance of surviving, he was not going to worry about what happened elsewhere. Strobe Talbott, *The Master of the Game: Paul Nitze and the Nuclear Peace* (New York: Random House, 1989), p.152.

Warnke's ACDA nomination was, however, approved by a vote of 70 to 29. Smith, *Morality, Reason and Power*, p.75-6. The vote was reflective of the relative importance attached to the offices by the Senate. In July 1979 hearings on SALT II, former admiral and Joint Chiefs member Thomas Moorer described Warnke and his entourage as "the world's worst" negotiators. "Chronologies of Major Developments in Selected Areas of Foreign Affairs: January – November 1979", *Foreign Affairs Committee Print*, House of Representatives, 96th Congress, December 1979, p.13.

One may be forgiven, in a study of Congress and nuclear weapons during the Carter years, for focusing almost exclusively on SALT II. This and the Iranian hostage crisis were two of the most enduring memories of the period. It was not, however, the only issue during the second half of the 1970s and a brief discussion of the other key issues and weapons systems (as well as SALT II) will give a feel for the broader currents of Congressional perception as well as providing an explanation for the election of Ronald Reagan and the US military build-up of the early 1980s.

Popular history portrays Jimmy Carter as a 'unilateral disarmer'. This was the line pushed by the Reagan team during the 1980 election campaign and, despite a legacy of nuclear weapons systems and nuclear war-fighting plans eagerly inherited by the Republicans in 1980, the perception of the Carter years was of a "catastrophic erosion of American military and economic strength . . ." Two decisions epitomize this characterization.

On June 30 1977, Jimmy Carter made what John Newhouse described as "a world-class political error." The President cancelled production of the B-I bomber. The Air Force had been lobbying unsuccessfully since the 1950s for a new bomber, but Carter, acting on a campaign pledge, rejected the B-I (of which prototypes had already been built) in favour of air-launched cruise missiles and the promise of 'stealth' (what became the B-2 bomber) technology. While the decision may have been fiscally responsible, it was political dynamite for the President's opponents. Critics charged that the President was "soft" on defense and was practicing "unilateral arms control." Republican Representative Bob Dornan seethed, "They are breaking open the vodka in Moscow." According to Strobe Talbott, "[e]ven many of those who agreed that the B-1 was too expensive wished he had waited until

¹⁹³ John Newhouse, War and Peace in the Nuclear Age (New York: Alfred A Knopf, 1989), p.303.

195 Hampson, Unguided Missiles, p.171; Carter, Keeping Faith, p.82-3.

¹⁹² Kenneth Oye, "International Systems Structure and American Foreign Policy", in Oye et al (eds), Eagle Defiant: United States Foreign Policy in the 1980s (Boston: Little, Brown and Co., 1983), p.4.

Carter's decision did not, in fact, cancel the B-1 program. Dr Hans Mark, Secretary of the Air Force, Dr Seymour Zeiberg, Deputy Undersecretary of Defense for Research, Engineering and Space as well as Air Force Generals Tom Stafford and Kelly Burke managed to channel \$450 million into B-1 from Rockwell funds designated for such projects as 'penetration aids', 'advanced avionics' and 'electronic-countermeasure studies', Nick Kotz, Wild Blue Yonder: Money, Politics, and the B-1 Bomber (Princeton, N.J.: Princeton University Press, 1988), p.182-5.

Cyrus Vance, Hard Choices: Critical Years in America's Foreign Policy (New York: Simon and Schuster, 1983), p.57. Even Democrats charged Carter with practicing "unilateral arms restraint". See comments of House Armed Services Committee Chairman Melvin Price in "Hearings on H.R. 8390, Supplemental Authorization for Appropriations for Fiscal Year 1978 and Review of the State of U.S. Strategic Forces also Reprogramming Action Nos. FY 78-2 P/A, FY 78-3 P/A, and 78-4 P/A", Committee on Armed Services, House of Representatives, 95th Congress, First Session, July 21, 1977, p.2-4.

after SALT II.³¹⁹⁸ Among the legion of Congressmen furious over the B-1 decision was the Senator from Washington, Henry Jackson, along with his assistant Richard Perle. Jackson and Perle were shortly to "declare war" on SALT II and the Administration.¹⁰⁹

Less than a year later, on April 7 1978, Carter repeated the performance. In one of the most maladroit decisions made by the Carter White House, the President incurred the wrath of his European NATO allies, the defence community, right-wing members of Congress, as well as some Democrats on the Hill, and lobby groups such as the Committee on the Present Danger, by deferring production of the Enhanced-Radiation Weapon (E-RW), or 'neutron bomb'.²⁰⁰ Then, on October 18, the Administration announced that it would continue research and development by producing E-RW warhead components.²⁰¹ It was the worst of both worlds. Liberals chastised him for backing away from a commitment to effectively cancel the weapon while conservatives were less than grateful for the decision to keep the weapon on life-support. Thus Carter reversed his own decision but only succeeded in projecting the impression of indecisiveness. The E-RW fiasco reinforced the image of a President weak on defence.²⁰²

In what Gaddis Smith has described as an attempt to "demonstrate the Administration's new tough line and to signal the Russians" the White House leaked Presidential Directive – 59 (PD-59); the executive guidance for US nuclear war plans, in the summer of 1980. Despite authorising the development of such weapons as MX, Trident and cruise, perceived weakness in the face of the Soviet challenge had become a major liability for Carter in the 1980 election campaign. PD-59 was a

¹⁰⁸ Talbott, Endgame, p.104-5.

Smith, Morality, Reason and Power, p.209. In his memoirs, Carter stated that B-1 provided a good case study of "the difficulty in competing with powerful lobbyists, as well as with forces within Congress itself." Carter, Keeping Faith, p.80.

²⁰⁰ "Chronologies of Major Developments in Selected Areas of International Relations, January – May 1978", *International Relations Committee Print*, June 1978, p.6.

²⁰¹ "Congress and Foreign Policy – 1978", p.210.

²⁰² Smith, Morality, Reason and Power, p.81; Thomas Cochran et al, Nuclear Weapons Databook – Volume 1: U.S. Nuclear Forces and Capabilities (Cambridge, MA: Ballinger, 1984), p.285. See also David Schwartz, NATO's Nuclear Dilemmas (Washington, D.C.: Brookings, 1983), p.207-09, 223-24; and Ivo Daalder, The Nature and Practice of Flexible Response: NATO Strategy and Theater Nuclear Forces Since 1967 (New York: Columbia University Press, 1991), p.178-81.

Smith, Morality, Reason and Power, p.237. According to Janne Nolan, PD-59 was "a political document, a domestic message sent to a beleaguered electorate in the misguided effort to reassure." Nolan, Guardians of the Arsenal, p.138. Similarly, Desmond Ball has noted that PD-59 was originally drafted in early 1979 but "was shelved for more than fifteen months — until it was retrieved just prior to the 1980 Democratic Convention . . ." Ball, "The Development of the SIOP, 1960-1983", in Ball and Richelson (eds), Strategic Nuclear Targeting, p.77.

belated attempt to reverse this image by demonstrating the US intention to acquire the capability to endure a 'prolonged' nuclear war and maintain a favourable strategic balance at the termination of hostilities.²⁰⁴

Yet, reminiscent of the E-RW decisions, PD-59 failed to mollify the right and frightened the left. In order to effect a degree of damage control, the Administration spent the following months "clarifying the policy and assuring the Soviet Union, allies, and the American public that the United States did not seek to fight a nuclear war or obtain a first-strike capability."

All of these issues had a corrosive impact on the SALT II debate. Indeed SALT II provided the forum for Congress to hand down its verdict on the Administration's Soviet policy. ²⁰⁶ Jimmy Carter put the full weight of the office of the President of the United States behind SALT II. In a speech to a Democratic congressional audience, he described the importance of the treaty:

I will never have a chance so momentous to contribute to world peace as to negotiate and to see ratified this SALT treaty. And I don't believe that any member of the Senate will ever cast a more important vote than when a final judgment is made to confirm and ratify this negotiated treaty.²⁰⁷

However, the President's plea cut both ways. Failure to realise SALT II would totally discredit his foreign policy.

It has been estimated that during the Carter years of the SALT II debate, roughly forty members of the Senate were 'arms controllers' broadly defined, about twenty were swinging voters, about fifteen were sceptics who could be satisfied with a tough accord while approximately twenty senators were 'irreconcilables'. This presented immense problems for the Administration. Nixon's hard-line Republican credentials

²⁰⁴ See Harold Brown, "Report to Congress", January 19 1981, reprinted in Jeffrey Porro et al (eds), *The Nuclear Age Reader* (New York: Alfred A. Knopf, 1989), p.393-4. See also Peter Pringle and William Arkin, *SIOP: Nuclear war from the inside* (London: Sphere Books, 1983), p.18.

²⁰⁵ Eric Mlyn, *The State, Society, and Limited Nuclear War* (New York: State University of New York Press, 1995), p.124. See also Nolan, *Guardians of the Arsenal*, p.138.

A February 1979 conference of Republican leaders called for the SALT II debate to be an occasion for examining the "total military and foreign policy relationship" between the US and USSR, "Chronologies of Major Developments in Selected Areas of Foreign Affairs: January – November 1979", p.2.

²⁰⁷ Carter, Keeping Faith, p.240. Carter's advisers also attached great importance to SALT II, albeit for different reasons. See Zbigniew Brzezinski, Power and Principle: Memoirs of the National Security Adviser, 1977-1981 (New York: Farrar, Straus, Giroux, 1983), p.50.

Stephen Flanagan, "The Domestic Politics of SALT II: Implications for the Foreign Policy Process", in John Spanier and Joseph Nogee (eds), Congress, the Presidency and American Foreign Policy (New York: Pergamon Press, 1981), p.50.

ensured that hawks could be mollified in the first SALT agreement. With his perception as a soft Democrat, Carter could only depend on the support of the arms control faction, and as the debate deepened, even some of these supporters began to have doubts.

In addition to Carter's public image problem, influential sections of Congress had endorsed SALT 1 "on the assumption that the numerical advantages that it accorded the Soviets in missile launchers would be more than offset by a virtual U.S. monopoly on MIRV technology for the foreseeable future." Yet the Soviets had mastered MIRV technology quicker than expected and had also begun to field a new generation of large ICBMs which, when MIRVed, threatened to confer on them an advantage in the nuclear balance. Compounding the situation were several National Intelligence Estimate revisions that incorrectly predicted a significant increase in Soviet missile accuracy, based on 1977 tests with a new guidance package. 211

This was precisely the type of situation that Senator Jackson's SALT I 'Sense of Congress' resolution had been intended to combat. Indeed, throughout the negotiations, Congress was receptive to the 'bargaining from strength' thesis.²¹² Congress also ran with a policy of linkage, largely based on Soviet adventurism in Angola and the Horn of Africa, "predicating the process of détente on favorable developments in Soviet domestic as well as foreign policies."²¹³

²⁰⁰ Carnesale and Haass, Superpower Arms Control, p.112. On US concerns about SALT I and Soviet MIRVing see "Briefing on SALT I Compliance", Hearing before the Committee on Foreign Relations, United States Senate, 96th Congress, First Session, September 25, 1979, p.13, 28, 32.

²¹⁰ On the asymmetries between the US and Soviet forces and the problem this presented for establishing a 'currency' for arms control see, Berkowitz, *Calculated Risks*, p.58.

^{&#}x27;currency' for arms control see, Berkowitz, Calculated Risks, p.58.

211 Based on simplified calculations, some analysts claimed the new Soviet missile accuracies would enable them to destroy almost all US land-based missiles. Matthew Bunn and Kosta Tsipis, "The Uncertainties of a Preemptive Nuclear Attack", Scientific American, Vol.249, No.5, November 1983, p.32. This prompted the NIE revisions. Only in 1986 was it revealed that the 'revised' NIE had been exaggerated by more than one third. Stockholm International Peace Research Institute, World Armaments and Disarmament: SIPRI Yearbook 1986 (Oxford: Oxford University Press, 1986), p.51.

²¹² Carnesale and Haass, Superpower Arms Control, p.109. The first Congressional critique of SALT II appeared on January 3 1979. In it, a House Armed Services Subcommittee declared that the treaty could have "adverse effects on the U.S.-U.S.S.R. strategic balance and that rather than solving the causes of the arms race it might cause new arms races." "Chronologies of Major Developments in Selected Areas of Foreign Affairs: January – November 1979", p.1.

Carnesale and Haass, Superpower Arms Control, p.130. In 1978, "a prominent congressional point of view on this question [of linkage between SALT II and Soviet assertiveness in the Third World] was that while U.S. participation in SALT should not be explicitly conditioned on Soviet accommodation in both its domestic and foreign policies, the Soviets must understand that gross Soviet misbehavior in this regard could be expected to prejudice the prospects for a completed SALT II agreement gaining congressional approval. The effect, then, of this congressional perspective was to serve notice that to some extent the Soviet Union must moderate expansionist or repressive tendencies, in order to increase the chances of

Compounding Carter's SALT II difficulties, in March 1979 the US lost access to telemetry stations in Iran. At about the same time the Soviets expanded concealment measures, which included missile telemetry encryption.²¹⁴ This thrust the issue of verification of Soviet arms control compliance to the top of the political agenda. Former astronaut and influential Senator John Glenn indicated that he could not support the treaty until satisfied that the Iranian capabilities could be recouped.²¹⁵ Verification remained a focal point on the Hill not only for the remainder of the SALT II negotiations²¹⁶, but throughout the 1980s. For example, in 1985 Congress passed legislation requiring the White House to report annually on Soviet non-compliance with its nuclear arms control obligations.²¹⁷ This was, in large part, a consequence of repeated executive branch allegations of Soviet cheating on arms control agreements.²¹⁸

Finally, in August 1979 Senate Foreign Relations Committee chairman, and erstwhile SALT II supporter, Frank Church announced the 'discovery' of a Soviet combat brigade in Cuba, and insisted that SALT II should not be approved until the brigade was removed. On September 4 Church postponed SALT II hearings and the next day announced to reporters that there would be "no likelihood whatever" of

congressional approval of the prospective SALT agreements." "Strategic Arms Limitation Talks (SALT): Overview", in "Congress and Foreign Policy – 1978", p.49.

214 On Congressional concern over this issue see, for example, comments of Representative Dan Quayle in

On Congressional concern over this issue see, for example, comments of Representative Dan Quayle in Hearings and Markup before the Committee on Foreign Affairs and Its Subcommittee on International Security and Scientific Affairs, House of Representatives, 96th Congress, First Session on H.R. 2774, March 6 1979, p.13.

²¹⁵ Carnesale and Haass, Superpower Arms Control, p.125. In its report on SALT II, the Senate Foreign Relations Committee expressed concern as to when the denial of telemetric information actually impeded verification. In the Committee's resolution recommending SALT II ratification, an understanding (proposed by Senator Glenn) was passed stating that in future agreements, all telemetric information should be transmitted in an unencrypted and accessible form. Gloria Duffy, Compliance and the Future of Arms Control (Cambridge, MA: Ballinger, 1988), p.80, 233 footnote 29.

²¹⁶ On the conflicting testimony being provided to Congressional committees considering SALT II see John Prados, *The Soviet Estimate*, p.269-282.

²¹⁷ Duffy, Compliance and the Future of Arms Control, p.193. The importance of Congressional concerns regarding verification was underscored by the head of the US delegation to the Nuclear and Space Talks in Geneva, Max Kampelman, in 1987. In attempting to convince his Soviet counterpart to agree to eliminate intermediate nuclear forces from Europe, Kampelman emphasized that a big concern for Senators in the ratification debate would be verification and that it would be far easier to verify an agreement that removed all missiles than one that allowed missiles to remain. Talbott, *The Master of the Game*, p.339.

The Reagan Administration's charges, while based on an objective assessment of Soviet cheating, were also politically motivated. Somewhat coloured interpretations of Soviet compliance have also been in evidence in Congress. For example, in 1988 Senator Steven Symms introduced five amendments that would have delayed implementation of the INF Treaty until the President certified that the Soviets were complying with five previous arms control agreements. As the Administration had already charged Moscow with violating these agreements, Symms was more concerned with garnering support from his right-wing constituency. Blechman, *The Politics of National Security*, p.71.

Senate approval of SALT II while the troops remained.²¹⁹ In fact, it was later revealed that President Kennedy had agreed to the stationing of the brigade in 1963, but this did not stop Secretary of State Vance promising that military activity in the region would be increased.²²⁰ Despite the resolution of the Soviet Brigade (non) issue, the fact that this occurred during the SALT II ratification hearings only provided more ammunition for treaty critics.

With Congressional opinion turning against the treaty, Carter was forced to lobby the Senate for support with the rather lame argument that SALT II would prevent the USSR from "widening any advantage they may achieve in the early 1980s' that might then be used to undermine American leadership and influence in the world."

As a result, the Carter Administration reasoned that it could obtain the required votes for SALT II only by strengthening US nuclear forces and by conducting a more assertive Soviet policy.²²² After the B-1 and E-RW cancellations, MX was increasingly seen as the price to be paid for SALT II.²²³ Yet, in what was a recurring nightmare for the Carter team, this compromise satisfied no-one. Critics of the Administration, and arms control in general, saw MX as a good start but demanded more, while the decision threatened to alienate Carter's delicate support base. For example, soon after the MX decision was announced, liberal Democratic Senators McGovern, Hatfield and Proxmire expressed reservations about SALT II if MX was the price.²²⁴ Senator Daniel Patrick Moynihan summed up the general perception of SALT II succinctly: "Herein

²¹⁰ "Chronologies of Major Developments in Selected Areas of Foreign Affairs: January – November 1979", p.15. This belligerent attitude can in part be explained by the fact that Church was facing a tough reelection battle against a hard-line right-winger and was vulnerable on the Cuba issue: he had spoken favourably of Castro and had even been photographed with the Cuban leader in Havana in 1977. Smith, Morality, Reason and Power, p.214-6; Newhouse, War and Peace in the Nuclear Age, p.330-1.

²²⁰ Smith, Morality, Reason and Power, p.215-6.

Sanders, *Peddlers of Crisis*, p.237. For a succinct summary of the pros and cons of SALT II see Thomas Wolfe, *The SALT Experience* (Cambridge, MA: Ballinger, 1979), p.236-9.

²²² Smith, Morality, Reason and Power, p.211.

The argument ran as follows: "In response to a military buildup by the Soviet Union, unprecedented in time of peace by any nation, the United States and its allies have found it necessary to strengthen and modernize their conventional and nuclear forces. Whether or not a strategic arms limitation treaty (SALT) or a comprehensive test ban treaty (CTBT) become realities, modernization will be required for survivability and other reasons. The Administration has presented plans to modernize United States NATO nuclear forces and to rely heavily upon new strategic systems such as the Trident, Missile X, and various types of cruise missiles. The programs will require that substantial resources be provided to the Department of Energy over the next several years." Department of Energy National Security and Military Applications of Nuclear Authorization Act of 1980, House of Representatives, 96th Congress. First Session, May 15 1979, p.9.

²²⁴ Blacker and Duffy (eds), *International Arms Control*, p.270. See also "Chronologies of Major Developments in Selected Areas of Foreign Affairs: January – November 1979", p.2-3.

resides the final irony of the SALT process. Not only has it failed to prevent the Soviets from developing a first-strike capability; it now leads the United States to do so."225

The forces amassed against SALT II were imposing. It has been estimated that treaty critics outspent those in favour on the order of fifteen-to-one. 226 Committee on the Present Danger executive committee members testified before the Senate on seventeen separate occasions.²²⁷ The CPD and other groups were able to "nudge senators . . . away from their previous uncritical support into positions that, if not hostile, conditioned their support upon concomitant 'improvements' in the U.S. military posture."228 Sam Nunn had reservations about the treaty and he, Henry Jackson and John Tower demanded a four to five per cent increase in the defence budget in return for supporting SALT II.²²⁹ Nunn's support, given the reality that Henry Jackson could not be appeased, was considered critical. According to Barry Blechman: "While no final agreement was reached, the administration fully intended to fulfil the demand . . . **230

The precarious position of the treaty was reflected in the Senate Committee votes. The Foreign Relations Committee voted 9-6 in favour but included a list of critical observations of the Soviet Union and stated the need for the US to repair its defences.²³¹ The Armed Services Committee voted 10 in favour with 7 abstentions and included a report stating that the treaty was not in US national security interests.²³² However, the Soviet invasion of Afghanistan saved SALT II the ultimate test by prompting Carter to withdraw the treaty from Senate consideration.

Congressional involvement was not limited to the ratification debate. Delegations visited the talks in Geneva, although they had little substantive impact on negotiations.²³³ The Soviets were very aware of the Congressional presence. "If the

²²⁵ Quoted in Sanders, Peddlers of Crisis, p.259.

²²⁶ Ibid.,p.265.

²²⁷ Ibid., p.260.

²²⁸ Barry Blechman, "The New Congressional Role in Arms Control", in Thomas Mann (ed), A Question of Balance: The President, the Congress and Foreign Policy (Washington, D.C.: Brookings, 1990), p.115-6.

²²⁹ The Senators were supported by Joint Chiefs Chairman General David Jones. "Chronologies of Major Developments in Selected Areas of Foreign Affairs: January - November 1979", p.14.

²³⁰ Blechman, The Politics of National Security, p.69.

²³¹ The views of the individual senators from the Foreign Relations Committee, as well as the vote, on SALT II can be found in "The SALT II Treaty", Hearings before the Committee on Foreign Relations, United States Senate, 96th Congress, First Session on Ex. Y, 96-1, Part 6, Markup, November 9, 1979, p.514-45. ²³² Smith, *Morality, Reason and Power*, p.213.

²³³ One exception was the issue of an "agreed data base" on the Soviet arsenal that the US could crossreference for 'verifiability'. Senator Charles Mathias told Soviet chief negotiator Vladimir Semyonov that

visiting senators and representatives could be advisers on SALT, then the Soviet negotiators could be lobbyists of Congress." However, it seems the enduring memory of Congress for the Soviets was that Senator Jackson and other 'enemies of détente' had "become unseen participants at the conference table." ²³⁵

SALT II was illustrative of Congress at its most divisive. Decisions taken by the Carter team, as well as events beyond US control, shifted the debate beyond the merits of the treaty to the most appropriate response to Moscow's perceived challenge; all of which involved more defence spending. Ronald Reagan's Republican challenge in 1980 was the embodiment of this sharp turn to the right in American politics; indeed, the most vocal critics of Carter and SALT II assumed high-level positions in the Reagan Administration.

Windows of Vulnerability and Windows of Opportunity

Despite the recollections of senior Reagan advisers that, upon entering office, the US "faced the need to replace and modernize our triad of strategic forces, the neglect of all of which during the previous decade had seriously eroded our deterrent capability"²³⁷, the MX ICBM was one of many weapons systems initiated during the 'decade of neglect'. The MX decision-in-principle could be traced back as far as the missile vulnerability studies conducted by the Air Force in the 1960s²³⁸, and the MX program was institutionalised with the establishment of the U.S. Air Force MX Office at Norton Air Force Base in June 1973.²³⁹ It was not until the Carter Administration that full-scale production of MX was authorized and even at this point Congressional interest in the new ICBM was largely confined to the Armed Services Committees,

there was "no way we could vote for this treaty without a data base." Shortly afterwards, Semyonov volunteered a flood of information on Soviet heavy bombers, ICBM silos, submarine missile launch tubes, air-launched cruise missiles and air-to-surface ballistic missiles. Strobe Talbott, *Endgame: The Inside Story of SALT II* (New York: Harper and Row, 1979), p.96-7.

214 *Ibid.*, p.95.

²³⁵ Flanagan, "The Domestic Politics of SALT II", in Spanier and Nogee (eds), Congress, the Presidency and American Foreign Policy, p.53.

²³⁶ Carnesale and Haass, Superpower Arms Control, p.121.

²³⁷ Caspar Weinberger, Fighting For Peace (New York: Warner Books, 1990), p.50. See also Robert McFarlane, Special Trust (New York: Cadell and Davies, 1994), p.216-18. For the flavour of the argument at the time see, for example, "Text of President Reagan's Speech before the National Press Club on November 18, 1981", reprinted in "Review of Administration Initiatives on Strategic, Theater, and Conventional Arms Control", Briefing of the Subcommittee on International Security and Scientific Affairs of the Committee on Foreign Relations, House of Representatives, 97th Congress, First Session, November 20, 1981, p.25-9.

J. Edwards, Superweapon (New York: W.W. Norton, 1982), p.59.

²³⁰ Hampson, *Unguided Missiles*, p.116.

where it enjoyed widespread support.²⁴⁰ This changed, however, in late 1979 when Carter announced the 'deceptive' basing mode, Multiple Protective Shelters (MPS), for the new missile.²⁴¹ The announcement, that 200 MX missiles were to be shuttled between 4,600 shelters in a 'shell game' designed to confuse Soviet war-planners, effectively provided a focal point for members of Congress critical of MX for quite diverse reasons.

Described as the "public works project of the 1980s"²⁴², MX and its basing mode were criticized for being ineffective and potentially more destabilizing than the problem they were designed to overcome²⁴³, that they were prohibitively expensive, that they would have an extremely adverse environmental impact, that they would turn south-west United States into a "gigantic sponge for Soviet nuclear warheads"²⁴⁴ and that the US was trying to develop a first strike capability.²⁴⁵

This was the weapon system and proposed basing mode that Reagan inherited. While the new administration decided to scrap MPS in October 1981, a decision in no

²⁴⁰ *Ibid.*, p.126. The House Armed Services Committee remained committed to MX into the 1980s and declared in1982 that it had "for a number of years warned of the dangers inherent in the extended delay in modernizing the various elements of U.S. deterrent forces . . ." "Department of Defense Authorization Act, 1983", Report Submitted By Mr Price from the Armed Services Committee together with Individual, Additional and Dissenting Views, House of Representatives, 97th Congress, Second Session, April 13 1982, p.20. These views were shared in the Senate. See "Modernization of the U.S. Strategic Deterrent", Hearings before the Committee on Armed Services, United States Senate, 97th Congress, First Session, October 5, November 5, 1981.

On MPS see "Status of the MX Missile System", Hearing before the Committee on Armed Services, House of Representatives, 96th Congress, Second Session, May 1 1980. On the search for a 'deceptive' basing mode to overcome perceived missile vulnerability in the late 1970s, see, for example, David Morrison, "ICBM Vulnerability", The Bulletin of the Atomic Scientists, Vol. 35, No. 9, November 1984, p.22-9; Jeffrey Lenorovitz, "MX Basing Mode Concepts Analyzed", Aviation Week and Space Technology, Vol. 107, November 1977, p.62-7; Desmond Ball, "The MX Basing Decision", Survival, Vol. XXII, No. 2, March/April 1980, p.58-64; and Herbert Scoville, MX: Prescription for Disaster (Cambridge, MA: The MIT Press, 1981).

²⁴² Christopher Paine, "MX: The Public Works Project of the 1980s", *The Bulletin of the Atomic Scientists*, Vol. 36, No. 2, February 1980, p.12-16.

²⁴³ Critics charged that MX, with 10 warheads and much greater accuracy than previous US systems, presented an extremely tempting target for Soviet war planners to strike first in a crisis. Carter's withdrawal of SALT II from Senate consideration in January 1980 also undermined MX MPS because the whole 4,600 shelter concept relied upon the USSR limiting its ICBM warheads to SALT II ceilings.

²⁴⁴ Stephen Meyer, "MAPS for the MX Missile", *The Bulletin of the Atomic Scientists*, Vol. 35, No. 6, June 1979, p.29.

Former Secretary of Defense Harold Brown testified that the rationale for MX was "to give the United States more of a quick, hard target destruction capability, both as a deterrent to an attack and as an incentive to the Soviets to reconsider the value of their advantage in ICBM warheads. . . Related to that was the possible use of MX in arms control negotiations." "The MX Missile and the Strategic Defense Initiative – Their Implications on Arms Control Negotiations", Hearings before the Defense Policy Panel of the Committee on Armed Services, House of Representatives, 99th Congress, First Session, February 27 1985, p.45.

small measure influenced by Congress²⁴⁶, the ICBM vulnerability problem remained an article of faith, and new ways were dreamed up to solve the basing problem. The various basing schemes proffered were just as chimeric as MPS, most members of Congress not liking any of the alternatives.²⁴⁷ As a consequence, the missile itself came under increasing scrutiny. In an attempt to bolster the image of the embattled weapon, Regan renamed MX 'Peacekeeper' but this had little effect on Congress.

The interim solution was to place one hundred MX missiles in existing silos until a new basing mode could be found. Congress had already rejected this solution in 1976 and was less than impressed at revisiting the issue. As a result, the 1982 Defense Appropriations Bill contained an amendment prohibiting the use of more than 5% of MX R&D funds for the development of super-hardened silos. It also directed the administration to select a permanent basing mode by July 1 1983.²⁴⁸

With Congress turning against silo deployment, Reagan endeavoured to silence the opposition by announcing a new basing mode in late 1982.²⁴⁹ The choice, Closely Spaced Basing or 'Dense Pack', encountered immediate and widespread opposition.²⁵⁰ Congress promptly cut \$988 million for MX production pending a review of Dense Pack.²⁵¹

Realising that new missile was in trouble, deputy National Security Adviser Bud McFarlane discussed the predicament with Senators Sam Nunn and William Cohen.

²⁴⁶ Lauren Holland and Robert Hoover, *The MX Decision* (Boulder, Co: Westview Press, 1985), p.174-80. Planned MX deployment was in the desert of Nevada and Utah. Amongst the coalition protesting MPS were the Mormons; both of the Senators from Utah were Republican and Mormon. In addition, Nevada Senator Paul Laxalt, Reagan's only close friend in Congress, was opposed to MPS. Lou Cannon, *President Reagan: The Role of a Lifetime* (New York: Simon and Schuster, 1991), p.165.

On the search for a basing mode during the early Reagan years, see, for example, Hampson, *Unguided Missiles*; Edwards, *Superweapon*; Holland and Hoover, *The MX Decision*; and Christopher Paine, "MX: Too Dense for Congress", *The Bulletin of the Atomic Scientists*, Vol. 39, No. 2, February 1983, p.4-6.

Holland and Hoover, *The MX Decision*, p.182.
 The Administration had been directed to do so by Congress, and basing and deployment funding had been withheld to ensure this happened. "Department of Defense Authorization Act, 1983", *Conference Report*, House of Representatives, 97th Congress, Second Session, August 16 1982, p.3.

See "The MX Missile and Associated Basing Decision", Hearing before the Committee on Armed Services, United States Senate, 97th Congress, Second Session, December 8, 1982. Dense Pack rested on a highly speculative theory: by locating missiles as closely together as possible, attacking Soviet warheads would destroy each other (fratricide) rather than their targets. It was acknowledged that several MX missiles would be destroyed by the first Soviet warhead to arrive.

Senator William Cohen and National Security Adviser William Clark were strong advocates of a commission of outside experts to review MX. Both realized that any basing scheme presented to Congress by Caspar Weinberger was doomed to fail, given the Defense Secretary's low standing on Capitol Hill. Cannon, *President Reagan*, p.324.

Cohen suggested naming a panel of outside experts to conduct the MX basing review. 252 The administration concurred and a commission was formed.

The President's Commission on Strategic Forces, chaired by former National Security Adviser Brent Scoweroft, declared that MX was important for arms control negotiations and that too much money had already been spent to scrap the system. ²⁵³ It also refuted the thesis that potential ICBM vulnerability threatened US retaliatory capability. ²⁵⁴ As a consequence, it recommended that one hundred MX missiles be placed in Minuteman silos and the development of a small, single-warhead ICBM, later known as Midgetman. ²⁵⁵

The Scowcroft Commission's report, released on April 6 1983, appeared to have the desired effect with the House and Senate funding MX flight-testing and silo-basing a little over a month later. MX was given an added boost on the morning of September 1 with the downing of a South Korean civilian 747 by a Soviet SU-15. Reagan urged Congress to "ponder long and hard the Soviets' aggression" when considering MX funding. The desired response was again forthcoming, with Congress approving \$2.1 billion for the purchase of eleven missiles, and for R&D on Midgetman. 258

The MX debate came to a head in 1985 with Congressional votes on the purchase of the first twenty-one missiles. Under a 1984 compromise, each House voted twice to release the funds. The Senate voted 55-41 in favour then split 48-48, the deadlock being broken by Vice-President Bush. The House voted 218-212 in favour then 197-199 against. The impasse was broken by a joint resolution appropriating MX funding. However, later in the year MX silo deployment was limited to fifty missiles, further deployments contingent on a more survivable basing mode. ²⁶¹

The MX controversy was illustrative of Congress at its worst. Incapable of either wholeheartedly endorsing or rejecting the program, it contributed to a most unsatisfactory compromise. The silo deployment decision antagonized liberals

²⁵² Ibid.

²⁵³ "The Scowcroft Commission Report", April 6 1983 (excerpts), reprinted in Porro et al (eds), The Nuclear Age Reader, p.407.

²⁵⁴ Ibid., p.405.

²⁵⁵ On the Scowcroft Commission findings and MX see, "MX Missile Basing System and Related Issues", Hearings before the Committee on Armed Services, United States Senate, 98th Congress, First Session, April 18, 20, 21, 22, 26, May 3, 1983.

²⁵⁶ On this event see Richard Johnson, *Shootdown: The Verdict on KAL 007* (London: Chatto and Windus, 1986).

²⁵⁷ Newhouse, War and Peace in the Nuclear Age, p.367.

²⁵⁸ Hampson, *Unguided Missiles*, p.143.

²⁵⁹ *lbid.*, p.145.

²⁶⁰ SIPRI Yearbook 1986, p.39.

²⁶¹ Ibid.

opposed to MX on strategic, economic and moral grounds, as well as many defence hawks, who charged that the missile vulnerability problem MX was designed to remedy had not only gone unfulfilled, it was probably worse. MX showed the difficulty of completely cutting a major defence program, particularly a program with a history. MX generated momentum that was difficult to stop and developed very strong vested interests among contractors, the armed services and their allies in Congress. MX also demonstrated how reluctant Congress was to lay itself open to the charge of endangering US security.

While MX was contentious, the Strategic Defense Initiative (SDI), or Star Wars, was the most controversial defence program during Reagan's two terms. Missile defences had generated intense, often circular, debate since the mid-1960s, but Reagan's March 23 1983 announcement of the Strategic Defense Initiative marked a watershed in the controversy. The President's vision of intercepting and destroying nuclear weapons before they reached the United States, thus rendering them 'impotent and obsolete', seemed to offer a way out of the nuclear arms race. Critics, however, charged that SDI was a ruinously expensive, technologically unachievable experiment that would take the arms race to a more dangerous level. Interestingly, Barry Biechman has argued that the SDI speech, coming on the eve of the of the House of Representatives vote on the nuclear freeze (see below) resolution, "can be understood politically as just another means of seeking to capture the antinuclear vote."

SDI forced Congressmen to take sides and often these choices were borne of earlier disputes. According to Janne Nolan, SDI 'brought out the worst tendencies in Congress: its high political profile and amorphous objectives were easy targets for florid rhetoric and political opportunism." Yet, like most defence issues, supporting the Administration's position was a great deal easier than challenging it. Members of Congress sceptical of Reagan's vision were put in an almost impossible position. While they "understood the announcement to be a political tour de force without any sound empirical groundings", they were forced to explain to their constituents "why

²⁶² Edward Teller and his Lawrence Livermore national laboratory protégé Lowell Wood began briefing congressional leaders in early 1981 about the progress in strategic defence. Erik Pratt, Selling Strategic Defense: Interests, Ideologies, and the Arms Race (Boulder, CO: Lynne Reinner Publishers, 1990), p.95.

²⁶³ See, for example, Robert Jastrow, *How To Make Nuclear Weapons Obsolete* (London: Sidgwick and Jackson, 1985).

²⁶⁴ On the SDI controversy see, for example, Franklin Long, Donald Hafner and Jeffrey Boutwell (eds), *Weapons In Space* (New York: W. W. Norton and Co., 1986); and Kenneth Luongo and W. Thomas Wander (eds), *The Search for Security in Space* (Ithaca: Cornell University Press, 1989).

²⁶⁵ Blechman, The Politics of National Security, p.88.

²⁰⁰ Nolan, Guardians of the Arsenal, p.210-11.

they opposed a program to protect American civilians and accepted a world in which vulnerability to nuclear attack [was] somehow a better foundation for security." ²⁶⁷

The executive wasted no time in shoring up support on the Hill. Over three quarters of the prime contracts awarded in 1984 went to the states and congressional districts of the House and Senate members of the Armed Services Committees and Defense Appropriations Subcommittees.²⁶⁸ Senator Bennett Johnston was right on the mark when he lamented:

When you have this kind of money to spread around, you can make little grants. . . 1 am very much afraid that what is going to happen with SDI for the scientific community, and later the Senate, is what happened on the B-I bomber. I sat in the Senate . . . and saw Senator after Senator vote the interests of his State. That is what I am afraid, in part, is going to happen with SDI, because it involves so many dollars. 269

While the Congressional debates reflected the conflicting emotions that the program evoked, SDI was given an unexpected boost mid-way through 1985 when the Soviets resumed the Intermediate-Range Nuclear Forces (INF) and START talks that they had walked out of in late 1983. According to Senator Larry Pressler: "It was widely believed that Soviet apprehension about the SDI had been a major factor in the renewed desire to negotiate. Many senators felt a responsibility not to undercut U.S. negotiators by voting to cut funding for programs that could be used as 'bargaining chips' in Geneva." Not surprisingly, this was a belief that the Administration encouraged. ²⁷¹

Collectively, however, Congress was less willing to provide the money to allow for any early deployment of SDI components. It was also extremely reluctant to

²⁶⁷ *Ibid.*, p.17.

²⁶⁸ *Ibid.*, p.200-1.

²⁶⁹ Senator Larry Pressler, Star Wars: The Strategic Defense Initiative Debates in Congress (New York: Praeger, 1986), p.79.

²⁷⁰ Ibid., p.71. For example, Senator Barry Goldwater declared: "Perhaps the best indication that the improvements in our Defense posture are real, is the fact the Soviets have returned to the negotiating table. Soviet efforts to intimidate and fragment the West have failed and we are finally dealing from a position of strength... Now is not the time to be talking about major defense reductions or the unilateral cancellation of strategic programs." "Department of Defense Authorization for Appropriations for Fiscal Year 1986", Hearings before the Committee on Armed Services, United States Senate, 99th Congress, First Session on S. 674, February 4 1985, p.8.

^{27t} "National Security: Message from the President of the United States", *House Document 99-230*, 99th Congress, Second Session, June 3 1986, p.1.

allow the Reagan Administration to take actions that would violate the ABM Treaty. The FY 1985 Defense Appropriations Bill included a moratorium on anti-satellite weapons testing which was extended into FY 1986 and the FY 1987 Defense Authorisation Bill. The FY 1988 and 1989 Defense Authorisation Bills also barred any SDI tests that would violate the ABM Treaty. In short, if Congress did not have the votes to stop basic research on SDI, the votes were available to slow its deployment by denying any realistic testing of its early components. Larry Pressler concurred, observing that the Senate Armed Services Committee had the votes to defeat any amendment that could cut SDI funding or after the program significantly. That President Reagan had seized control of the issue was beyond refute . . . [However the] defeat of the Wallop amendment [which earmarked \$800 million for the deployment of a missile defence within 5-7 years] also demonstrated that many senators who approve[d] research may have second thoughts about actual deployment.

By providing money for research but not pushing for early deployment, Congress ensured that SDI would remain just as controversial during George Bush's tenure.²⁷⁶ So would adherence to the ABM Treaty. In January 1988 Senator Nunn proposed a 'modest amendment' to the ABM Treaty in order to facilitate bilateral deployment of an Accidental Launch Protection System (ALPS). While unpopular at the time of its announcement, ALPS began to attract support as the Cold War ended.²⁷⁷

It is simplistic to argue that Congress simply rubber stamped the Reagan Administration's defence program. Senate Foreign Relations Committee Chairman Charles Percy made explicit his belief that the new Administration "had not been

²⁷⁵ Pressler, Star Wars, p.83.

Les Aspin summed up the dilemma for many Congressmen torn between the ABMT and SDI: "The problem , , , is how do we make sure we don't destroy the system we have? We have an ABM system. It is better than nothing, It is not terrific. , . If we could have a defensive system , , , that would be better . , , but in order to find technologically whether we can build that better system, the danger is that we destroy the system that we have now." "The MX Missile and The Strategic Defense Initiative – Their Implications on Arms Control Negotiations", p.12-13.

DoD terminated the anti-satellite program in 1988. Blechman, The Politics of National Security, p.96.
 Ralph Carter, "Budgeting for Defense", in Paul Peterson (ed), The President, The Congress, and the Making of Foreign Policy (Norman: University of Oklahoma Press, 1994), p.170.

²⁷⁶ See, for example, Hearings on National Defense Authorization Act for Fiscal Year 1991- H.R. 4739 and Oversight of Previously Authorized Programs before the Committee on Armed Services, House of Representatives, 101st Congress, Second Session, Research, Development, Testing and Evaluation, "The Strategic Defense Initiative", April 4, 1990.

Strategic Defense Initiative", April 4, 1990.

277 David Goldfischer, The Best Defense: Policy Alternatives for U.S. Nuclear Security from the 1950s to the 1980s (Ithaca: Cornell University Press, 1993), p.251-2.

granted a mandate to jettison the arms control process^{3,278} and House Foreign Affairs Committee Chairman Clement Zablocki also referred to the unease amongst NATO allies generated by the administration's exclusive emphasis on strategic force build up. ²⁷⁹ However, while the defence build-up had garnered overwhelming congressional endorsement in 1981, by 1983 it was under assault. ²⁸⁰ As Barry Blechman has observed, just as congressional pressure forced Carter to increase defence spending in the late 1970s, it also forced Reagan to reverse the increases in defence spending of the early 1980s. ²⁸¹ This was driven largely by the sky-rocketing federal deficit²⁸², a spate of defence contract blow-outs and procurement scandals²⁸³, as well as the combative style of Casper Weinberger, which had driven legislators to scrutinise defence budget

This statement was made at the confirmation hearing of Eugene Rostow, director-elect of the Arms Control and Disarmament Agency (ACDA), Robert Scheer, With Enough Shovels: Reagan, Bush and Nuclear War (New York: Vintage Books, 1983), p.88. The Admin. tration's determination to 'underbudget' ACDA (to the tune of almost \$5 million for FY1983), relate to the Congressionally desired funding level, was viewed with great concern, "U.S. Arms Control and assarmament Agency 1981 Annual Report", Joint Committee Print, 97th Congress, Second Session, October 15 1982, p.iv.

²⁷⁰ "Overview of Nuclear Arms Control and Defense Strategy in NATO", Hearing before the Subcommittee on International Security and Scientific Affairs and on Europe and the Middle East of the Committee on Foreign Affairs, House of Representatives, 97th Congress, Second Session, February 23, 1982, p.1.

²⁸⁰ I. M. Destler, "Congress", in Nye (ed), *The Making of America's Soviet Policy*, p.53. Congress struck in October 1985 with the passage of the Gramm-Rudman-Hollings (GRH) bill, revised in 1987. GRH established maximum levels for the deficit and planned to balance the budget by 1991. Across-the-board spending cuts were designed to ensure annual deficit targets were met. While fulfilling GRH's objectives proved 'elusive and overly optimistic', and was superceded by the 1990 Budget Enforcement Act, it did have the effect of putting the executive 'on notice' that Congress was not willing to countenance huge deficits or the level of defence spending reached during Reagan's first term. Davidson, *The Postreform Congress*, p.263-66.

²⁸¹ Blechman, The Politics of National Security, p.27.

According to William Niskanen, "The administration and the congressional supply-siders were sometimes ambivalent about whether it was important to reduce the deficit, but the record clearly indicates that the increased deficit was an unintended result of the failure to reduce the growth of total spending," William Niskanen Reaganomics (New York: Oxford University Press, 1988), p.106.

On defence contracting blow outs see "Weapons Acquisition Policy and Procedures: Curbing Cost Growth", Report of the Special Panel on Defense Procurement Procedures of the Committee on Armed Services, House of Representatives, 97th Congress, First Session, February 12, 1982; and "Defense Procurement Policies and Procedures: Cost Management and Control", Hearings before the Special Panel on Defense Procurement Procedures of the Committee on Armed Services, House of Representatives, 97th Congress, First Session, July 23, 28, 30, September 10, 18, 19, 21, 24, 25, 26, 27, October 7, 15, 20, 22, 27 and 28 1981. On procurement scandals involving spare parts see "Examination of Armed Services Policies and Procedures in the Procurement of Spare and Repair Parts, and the Pricing Thereof of These Items", Hearings before the Investigations Subcommittee of the Committee on Armed Services, House of Representatives, 98th Congress, Second Session, April 19, 20, May 25, June 9, July 13, and October 6, 1983; and James Coates and Michael Kilian, Heavy Losses: The Dangerous Decline of American Defense (New York: Penguin, 1985), p.159-61.

requests in even greater detail.²⁸⁴ It also grew out of a genuinely grassroots movement dedicated to halting the arms race.

The 'nuclear freeze' movement was born in late 1979 as SALT II was expiring. It was predicated on the belief that even if ratified, SALT II would have been ineffective in slowing the arms race.²⁸⁵ Members of Congress picked up on this groundswell and began the tortuous process of building a Congressional constituency supportive of calling a halt to the nuclear arms race. 286 The freeze debate illustrates both the strengths and weaknesses of Congress in attempting to impose a radical proposal onto a very reluctant executive. Experienced members realised that too radical a proposal would be unable to attract enough Congressional support and would also be rejected by the Administration.²⁸⁷ James Lindsay's research in this area is quite instructive.

Lindsay has shown that the number of hawks in Congress during the 1980s heavily outweighed the number of doves.²⁸⁸ This, according to Lindsay, meant that nearly every defence program began with a near majority, thus doves were forced to enlist a great deal of moderate support. However, some moderates tended to defer to the President on defence matters. Motivations ranged from an inadequate grasp of the issues and the promise of favourable consideration on another issue to fear of being labelled 'weak on defence' and the fear of undermining the US position in arms control negotiations. In addition, doves had few carrots to offer or sticks to wield and were generally reliant on the quality of their arguments.²⁸⁹ Doves also encountered

²⁸⁴ Blechman, The Politics of National Security, p.27, 26. For example, in 1977 there had been 6

amendments to the defence budget. By 1985 this had ballooned to 108, *Ibid.*, p.40.

285 Paul Cole and William Taylor, Jr. (eds), *The Nuclear Freeze Debate* (Boulder, CO: Westview Press, 1983), p.30. According to President Reagan, "SALT II and I codified a very major arms buildup including a quadrupling of Soviet strategic weapons (warheads and bombs) since SALT I was signed in 1972 and near doubling of Soviet ballistic missile warheads from about 5,000 to more than 9,000 since SALT II was signed in 1979," "United States and Soviet Dismantlement and Strategic Force Projections: Communication from the President of the United States", House Document 99-253, 99th Congress, Second Session, August 5 1986, p.1.

²⁸⁶ There was also Congressional interest in approving SALT II in the early 1980s. See "Calling for a Mutual and Verifiable Freeze on and Reduction in Nuclear Weapons and for Approval of the SALT II Agreement", Committee on Foreign Affairs, Report Submitted by Mr Zablocki Together with Minority and Supplemental Views, House of Representatives, 97th Congress, Second Session, July 19 1982, While not willing to formally approve SALT II, the Reagan Administration came to "acknowledge the utility of some aspects of the SALT II Treaty without regard to their rhetoric about it." Testimony of General Brent Scoweroft in "The MX Missile and the Strategic Defense Initiative - Their Implications on Arms Control Negotiations", p.52.

²⁸⁷ "The grass-roots activists wanted a freeze, and they wanted it now. Most of the Congressmen, however, were more circumspect." Cole and Taylor (eds), The Nuclear Freeze Debate, p.43.

²⁸⁸ See James Lindsay, Congress and Nuclear Weapons (Baltimore: Johns Hopkins University Press, 1991), p.117, ²⁸⁹ *lbid.*, p.118.

difficulties due to 'legislative reciprocity'. This describes a situation where a member of Congress will vote for a weapon or proposal he or she may not otherwise vote in favour of in return for an executive pledge to modify another policy position.²⁹⁰ These observations go a long way to explaining the fate of the freeze resolution, and many other weapons systems mentioned previously, in Congress.

At the grassroots level the freeze movement was an effort to stop the arms race. However, in Congress, Representative Clement Zablocki admitted that no element of the Reagan defense program would be stopped by the freeze. The partnership between concerned members of the public and Congress was galvanized by the inflammatory rhetoric of Reagan and many of his advisers and the insistence of moderate conservatives (such as Senators Nunn and Cohen) that the Administration make more 'realistic' arms control proposals. After some intense politicking, Senators Kennedy and Hatfield announced, in March 1982, that seventeen Senators and one hundred and twenty two Representatives had agreed to sponsor a freeze resolution. Senators Jackson and Warner responded by eliciting support for a reworded freeze amendment that, by calling for a freeze at sharply reduced levels, effectively killed the Kennedy-Hatfield proposal. The freeze resolution was defeated on August 5 1982 in the House by the narrowest of margins, 204-202.

In isolation, the freeze movement illustrated how conservative Congress was as an institution. However, it also demonstrated why Congressional concerns, even if not translated into legislation, could indirectly influence policy. The popularity of the freeze movement put the Administration on notice that arms control could not simply be used as window dressing. It was not by coincidence that on May 9 1982 President Reagan unveiled his START proposal at Eureka College in Illinois.²⁹⁵ The freeze

²⁹⁰ Ibid.

²⁹¹ Cole and Taylor, Jr. (eds), *The Nuclear Freeze Debate*, p.43.

Among the more memorable examples were Deputy Under Secretary of Defense T. K. Jones' estimation that digging a hole and covering it with a couple of doors and three feet of dirt would be all that was required to survive a nuclear attack; Cap Weinberger's calls for the US to be able to 'successfully' wage a 'protracted' nuclear war; and Al Haig's talk of firing a 'nuclear warning shot' in Europe. Scheer, With Enough Shovels, p.18; Robert Art, "Between Assured Destruction and Nuclear Victory: The Case for the 'Mad-Plus' Posture', in Russell Hardin et al, Nuclear Deterrence: Ethics and Strategy (Chicago: University of Chicago Press, 1985), p.131; Kaku and Axelrod, To Win A Nuclear War, p.261.

²⁹³ I. M. Destler, "Congress", in Nye (ed), The Making of America's Soviet Policy, p.53.

²⁹⁴ Glynn, Closing Pandora's Box, p.321.

Talbott, Deadly Gambits, p.263, Arms control per se did not run completely counter to the Administration's views on nuclear policy. While unilateral rearmament was required in order to negotiate, arms control featuring deep reductions was considered in US interests as well as in the interests of a stable US-Soviet nuclear balance. Strobe Talbott, The Russians and Reagan (New York: Vintage Books, 1984), p.51-2.

movement, combined with Congressional pressure to abide by SALT II limits, indicated a Congressional concern with arms control that the Administration could not afford to ignore. This concern ran deep socially. According to Thomas Risse-Kappen, the American peace movement, the 'freeze campaign' and pressure from European allies combined to revive the arms control process. "Then, empowered by social movement and allied pressure, the expert community reentered the policy-making process, particularly in Congress." 296

The arms control imperative of the mid-1980s contributed to a process that culminated in the signing of START 1 on July 31, 1991. This is not to say that Congress was intimately involved in the negotiating process, despite appearances to the contrary. For example, committees were briefed on the status of negotiations²⁹⁷ and in 1985 the Senate Arms Control Observer Group was established in response to the political salience of arms control issues.²⁹⁸ Members of the Group sat in on delegation meetings and met separately with Soviet negotiators.²⁹⁹ While the Observer Group built a core of expertise³⁰⁰, it was largely a tool for the executive to give Congress a visible presence in the arms control process and avert potential political conflicts than a genuine effort to surrender any influence to the legislative branch. As Barry Blechman has observed: "Given the disinclination of either the Carter or Reagan administration to actually heed congressional views, the real decisions on arms negotiations continued to be made solely by the executive branch."

²⁹⁶ Thomas Risse-Kappen, "Ideas Do Not Float Freely: Transnational Coalitions, Domestic Structures, and the End of the Cold War", in Lebow and Risse-Kappen (eds), *International Relations Theory and the End of the Cold War* (New York: Columbia University Press, 1995), p.203.

of the Cold War (New York: Columbia University Press, 1995), p.203.
²⁹⁷ See, for example, "Review of Arms Control and Disarmament Activities", Hearings before the Special Panel on Arms Control and Disarmament of the Procurement and Military Nuclear Systems Subcommittee of the Committee on Armed Services, House of Representatives, 99th Congress, First Session, September 10, 12, 18, 20, October 31, November 20, December 12 1985.

²⁹⁸ Blechman, The Politics of National Security, p.76.

Blechman, "The New Congressional Role in Arms Control", in Mann (ed), A Question of Balance, p.122.

p.122.

300 See, for example, "Report of the Senate Arms Control Observer Group Delegation to the Opening of the Arms Control Negotiations with the Soviet Union in Geneva, Switzerland", Senate, 99th Congress, First Session, March 9-12 1985.

³⁰¹ Blechman, The Politics of National Security, p.76.

The Emergence of Gridlock: the Bush Administration versus a Democratic Congress

The Democratic resurgence, which culminated in the election of Bill Clinton in 1992, was clearly gaining momentum by the end of Reagan's second term. Four Republicans lost seats in the 1988 election and a further nine in the 1990 mid-terms. This elicited a conviction that the election had not granted the Administration a policy mandate. The Democratic Congress first flexed its political muscle at the beginning of 1989 when the Senate Armed Services Committee Democrats lined up against their Republican colleagues to reject John Tower's nomination for Secretary of Defense. 304

In retrospect, the emerging disconnect between the Bush Administration and Capitol Hill was quite apparent. Raymond Moore has observed that Bush assembled "one of the strongest foreign policy teams ever fielded in Washington: a group that cast a heavy shadow over the president's less impressive domestic advisors." Similarly, Richard Melanson has described Bush as the "quintessential foreign policy president, and he just did not care a great deal about domestic policy." This perception would prove a liability in the 1992 election. Indeed, it led to problems as early as 1990. According to John Isaacs, before 1990, military budgets had been decided largely by high-level 'summits' between Administration officials and key Congressmen. Democrats, as a result of 1989 skirmishes over capital gains tax and

Michael Foley, "The President and Congress" in Dilys Hill and Phil Williams (eds), *The Bush Presidency: Triumphs and Adversities* (New York: St Martins Press, 1994), p.45, 59. Bush entered office with a Democratic majority in the House of 85 seats and in the Senate of 10 seats.

According to Barbara Sinclair, Congressional Democrats "felt they had nothing to fear from Bush." This combined quite potently with an increasing ideological homogeneity among their ranks. Sinclair, "Governing Unheroically (and Sometimes Unappetizingly): Bush and the 101st Congress", in Colin Campbell and Bert Rockman (eds), *The Bush Presidency: First Appraisals* (Chatham, NJ: Chatham House Publishers, 1991), p.157-8.

[&]quot;The Committee's major concerns focused on Senator Tower's standards of personal conduct, discretion, and judgement. These concerns included: (1) excessive use of alcohol; (2) the provision of consulting services to defense contractors on the probable outcomes of ongoing, confidential, arms control negotiations shortly after serving as an arms control negotiator, which created the appearance of using public office for private gain; and (3) a number of incidents of indiscreet behavior toward women." "Consideration of the Honorable John G. Tower to be Secretary of Defense", Report together with Minority, Supplemental and Additional Views, Committee on Armed Services, 101st Congress, First Session, February 28, 1989, p.9. See also Bob Woodward, The Commanders (New York: Simon and Schuster, 1991), p.56-9.

³⁶⁵ Raymond Moore, "Foreign Policy" in Hill and Williams (eds), *The Bush Presidency*, p.164.

Richard Melanson, "George Bush's Search For A Post-Cold War Grand Strategy", in Kenneth Thompson (ed), *The Bush Presidency: Ten Intimate Perspectives of George Bush, Part Two* (Lanham: Miller Center of Public Affairs, University of Virginia, 1998), p.152.

The perception of Bush as adept at steering the ship of state through the Cold War transition period but ill-suited for the post-war period seems quite similar to the electoral fate of Winston Churchill after the Second World War.

other matters, began "to enjoy the novelty of a genuine argument over the appropriate level of military spending in a transformed international environment.**308

Congressional impact was immediately felt in weapons procurement. While authorizing \$4.3 billion for the B-2 bomber, Congress also insisted on a report assessing the implications of buying less than the 132 planned aircraft. 309 As pressure continued to build, the air force was compelled to lift the veil of secreey surrounding the aircraft's price-tag.310 This revealed that the 'stealth' was eighteen months behind schedule and way over budget, resulting in two hawkish Republicans (John Kasich and John Rowland) joining forces with a dove (Ron Dellums) in an attempt to kill the program. It also led to other liberals and conservatives forming coalitions on both sides of the debate.311

Similar coalitions were forming over the MX and Midgetman programs, although in this case Congressmen were split three ways: supporting the Administration's decision to proceed with both systems; cutting MX; or cutting Midgetman.³¹²

The Pentagon's 'most survivable strategic weapon in Congress' also came under scrutiny in Bush's first year. 313 The procurement rate and funding for the Trident II SLBM were cut in 1989.314 Trident II had prospered since the 1970s, being seen as a well-managed program, and was compared favourably to the B-2.315 It also benefited from the unwillingness of Congressional liberals to oppose too many defence

³⁰⁸ John Isaacs, "This time, Congress speaks up", The Bulletin of the Atomic Scientists, Vol.46, No.4, May 1990, p.6.

³⁰⁰ Steve Garber and Phil Williams, "Defense Policy" in Hill and Williams (eds), The Bush Presidency,

p.190.
310 "National Defense Authorization Act for Fiscal Years 1990 and 1991", Report to Accompany S. 1352
10 "National Defense Authorization Act for Fiscal Years 1990 and 1991", Report to Accompany S. 1352 together with Additional Views, Committee on Armed Services, Senate, 101st Congress, First Session, July 19, 1989, p.67-9; and "B-2 Bomber Program and B-2 Contract Management", Ilearing before the Committee on Armed Services, Senate, 101st Congress, Second Session, October 11, 1990.

John Isaacs, "B-2 or not B-2?", The Bulletin of the Atomic Scientists, Vol.45, No.7, September 1989,

p.3.
312 See John Isaacs, "One MXed-up debate", *The Bulletin of the Atomic Scientists*, Vol.45, No.7, September 1989, p.4.

Michael Ross, "Trident II misfires in Congress", The Bulletin of the Atomic Scientists, Vol.45, No.10, December 1989, p.11.

¹¹⁴ This decision was flagged by the House Armed Services Committee in July 1989. See "National Defense Authorization Act for Fiscal Years 1990-1991", Report of the Committee on Armed Services, House of Representatives on H.R. 2461 together with Additional and Dissenting Views, 101st Congress, First Session, July 1, 1989, p.7.

This, despite its status as "the most expensive weapons system in U.S. history." Ross, "Trident II misfires in Congress", p.11.

programs at once and the lack of any organized opposition from arms controllers or grassroots peace groups.³¹⁶

Les Aspin, chairman of the House Armed Services Committee, championed the post-Cold War military cuts. Aspin struck a 'grand bargain' in 1990 with his colleagues, offering them their most valued program in return for supporting the entire package of cuts.³¹⁷ These cuts included termination of the B-2 program at fifteen aircraft, the elimination of funds for the rail-garrison MX and deep reductions in SDI funding.³¹⁸

The disconnect between the steadily prevailing view in Congress and the Administration's reluctance to cut into defence programs as deeply came to a head in mid-May 1991 when Defense Secretary Dick Cheney "engineered a pointless test of strength in the House of Representatives — and tost." Cheney attempted to rally Republicans around a defence budget, drafted in early 1990, increasing money for the B-2 and SDI. However, more than two thirds of the House, including thirty-seven Republicans, concluded that the Defense Secretary's vision did not reflect then-current international realities or the lessons of the Gulf War and supported Aspin's 1990 'grand bargain'. 320

It was with the Administration and Congress at loggerheads over the defence budget that the August coup occurred in the Soviet Union. As will be shown, this required both branches to adjust to a rapidly changing international environment.

³¹⁶ Ibid., p.11-12.

For example, Pennsylvania and Texas members received a commitment to production of the V-22 Osprey that produced jobs in those states; Republican John Rowland was persuaded by committee approval of Electric Boat's eighteenth Trident strategic nuclear submarine; and Republican Herbert Brown was assured that his district's Newport News shipbuilding facility would share in the Seawolf attack submarine contracts. John Isaacs, "House in from the cold", *The Bulletin of the Atomic Scientists*, Vol.46, No.8, October 1990, p.4.

³¹⁸ Ibid.

No.6, July/August 1991, p.3.

³²⁰ Ibid.

Common Themes in Congressional Behaviour

It has been the purpose of this chapter to detail the role of Congress in the development of US nuclear weapons policy since 1945. To briefly recapitulate: Congressional influence on nuclear policy in the early post-Second World War period was limited by secrecy and the dominant view that the President required a bipartisan foreign policy to counter the communist menace. During the 1950s and most of the 1960s, Congress essentially approved everything that the executive branch and the military wanted, in some cases the Congressional inclination was to demand more. In the late 1960s, as Victnam became an albatross around the White House's neck, Congress became more assertive. In terms of this chapter, missile defences were the issue. This entry into the nuclear debate, fuelled by Vietnam and Watergate, led to a rapid expansion of Congressional staffs and a deeper interest in nuclear strategy broadly defined. More Congressmen were less willing to take the Administration at its word. However, this also coincided with the failure of détente and a shift to the right in American politics. Jimmy Carter's initial attempts at slowing the arms race had pushed many members of Congress, including Democrats, even further right and he left office in 1980 having laid the basis — both in terms of weapons systems and a refined nuclear weapons employment policy — for the massive nuclear and conventional weapons build-up that the Reagan Administration eagerly inherited and Congress just as eagerly funded. Only when the budget deficit ballooned did Congress begin to limit Reagan's defence build-up, but by the time this action was felt, Gorbachev had sent his arms control negotiators back to the negotiating table and they were offering the US all that it had been holding out for.

Throughout this forty-six year period, at least six recurrent themes can be identified. First was the Congressional ability to determine the amount of money available for specific programs. Clearly control of the budget was the most favoured method of influencing policy. Whether the funding was over and above the requests made by the administration, as was the case in the 1950s and early '60s, or involved cuts, as occurred more frequently in the 1970s and '80s, the 'power of the purse' represented Congress's most effective weapon for promoting the programs it favoured and shelving those it did not. Manipulating funding levels also gave Congress the power to set boundaries, albeit broad, for US nuclear force structure and arms control posture.

Second was the Congressional oversight function. Concerned members of Congress found it useful to insist on periodic reports from the White House, the Joint



Chiefs or the responsible department in order to ensure the programs they had funded were progressing in the manner in which they had originally been endorsed. One-time reports and Arms Control Impact Statements evolved into extremely useful tools for facilitating Congressional oversight of nuclear programs.

Third was the Congressional concern that the US be able to verify that the Soviet Union was, or was not, abiding by its arms control treaty obligations. Not surprisingly, given the potential ramifications of large-scale cheating on arms control agreements, verification was politically salient in Congress, particularly during the 1970s and 1980s when treaties such as SALT, ABM and INF were negotiated. Ensuring effective Soviet compliance was a concern for Republicans and Democrats alike. However, the temptation to politicise an issue that could not be proven conclusively was overwhelming at times. This politicisation of issues for reasons sometimes quite unrelated to the subject at hand was the fourth recurrent theme.

Fifth was the pork-barrel aspect of Congressional politics. The allocation of contracts played a significant role in garnering support for various nuclear programs in Congress. While SDI was one of the most blatant examples, Les Aspin's 1990 'grand bargain' also demonstrated how relatively subtle pork-barreling can achieve equally impressive results.

Sixth was the lack of time and interest in nuclear issues amongst large sections of Congress and this was quite pervasive. Level of understanding of nuclear matters by members was directly proportional to the amount of interest in the subject matter. This had a number of consequences, including a significant 'dumbing down' of the issues (making pork-barrel politics an often crucial determinant of whether a program survived or perished) and the growth of a small group of highly knowledgeable Congressmen with the ability to guide the debate and influence the votes of their colleagues. Men such as Arthur Vandenberg, Stuart Symington, Richard Russell, Henry Jackson, Clement Zablocki, Les Aspin and Sam Nunn exercised enormous influence over nuclear debates in Congress because of their expertise and the respect that this generated.

While CTR was unique in many ways, the themes identified above transcended the Cold War's end and can be clearly identified in the development of Congressional behaviour discussed in Chapter 4.

Chapter 2

Nuclear Devolution in the (Former) Soviet Union

Aim and Structure

This chapter seeks to explain the events in the Soviet Union that gave rise to nuclear leakage fears in the US. The chapter begins by discussing the August 1991 coup in Moscow and its significance for nuclear command and control. Then, in the context of the political and economic disintegration of the USSR, it examines what the Soviet nuclear assets were and how they might 'leak' beyond its increasingly permeable borders. By doing this, the stage is set for the discussion of the US response to these fears, in the form of CTR, that follows.

The Coup

On August 18 1991 Mikhail Gorbachev was placed under house arrest by the "State Committee for the State of Emergency in the USSR" and its members, eight hard-line communists, launched an unsuccessful coup. Less than a week later reports began to surface in US newspapers that the coup leaders had seized the brief case containing the Soviet nuclear command codes (known in the US as the 'football' and in the USSR as the *chemodanchik* or 'little suitcase'²) during their short-lived attempt to halt the reform process that Gorbachev initiated. Subsequently Gennadii Pavlov, a Soviet nuclear scientist, claimed that Gorbachev loyalists had removed the contents from the brief case before the "Emergency Committee" obtained it and that they had also severed the links between the coup teaders and all nuclear launch control centres. According to Bruce Blair, although Russian civilian leaders had the right to decide if and when to use nuclear weapons, the military held the un-block and launch codes. This was the same as in the US where the President does not carry any codes that are

John Miller, Mikhail Gorbachev and the End of Soviet Power (New York: St Martins Press, 1993), p.178

² Michael Beschloss and Strobe Talbott, At The Highest Levels: The Inside Story of the End of the Cold War (Great Britain: Little, Brown and Company, 1993), p.225.

Patrick E. Tyler, "Troubling Question: Whose Finger Was on Nuclear Trigger?", The New York Times, August 24 1991, p.9; Vera Tolz and Melanie Newton (eds), The USSR in 1991: A Record of Events (Boulder: Westview Press, Radio Free Europe / Radio Liberty, 1993), p.554 - 555.

⁴ Tolz and Newton, *The USSR in 1991*, p.650 - 651.

"included in orders that go down the chain of command".⁵ In addition, Blair stated that the Commanders-in-Chief of the strategic rocket forces, navy and air force secretly agreed to disobey any nuclear orders issued by the coup leaders.⁶

It is interesting to note that this move was considered by some to be of symbolic importance. Campbell *et al* argued: "Gorbachev's football is probably neither necessary nor sufficient to initiate Soviet nuclear attack." Ultra-nationalist politician Vladimir Zhirinovsky went even further in 1996, claiming that the suitease was a fraud. "They call it a nuclear suitease" Zhirinovsky contended, but "there are no wires, no computer program, just underpants, a washeloth, soap, and a toothbrush."

Of greater concern were the facts that Minister of Defence Marshal Yazov was an "Emergency Committee" member and the chief of the General Staff, General Mikhail Moiseyev, was implicated in the coup. Combined with the President's 'football', these three men were responsible for transmitting the *permission* code for the use of nuclear weapons and, according to Bruce Blair, the General Staff were responsible for generating the *direct command* which enabled nuclear forces to fire. Certainly General Yurii Maksimov, commander of the Strategic Rocket Forces (SRF), considered the events of sufficient gravity to warn against the disintegration of the USSR and the possible dismemberment of the SRF.

Thus observers have disagreed in their assessments of the significance of the nuclear command and control stresses, which became apparent during the August coup. The importance of these events, for the purpose of this thesis, was that key officials in the United States were deeply disturbed by proceedings. The coup and its

⁵ Testimony of Dr Bruce Blair, Senior Fellow, Brookings Institution, "US Policy on Ukrainian Security", *Hearing before the Subcommittee on European Affairs of the Committee on Foreign Relations*, United States Senate, 103^{td} Congress, 1st Session, June 24 1993, p.36.

[&]quot;Bruce Blair, The Logic Of Accidental Nuclear War (Washington, D.C.: The Brookings Institution, 1993), p.65.

⁷ Kurt Campbell, Ashton Carter, Steven Miller and Charles Zraket, Soviet Nuclear Fission: Control of the Nuclear Arsenal in a Disintegrating Soviet Union (CSIA Studies in International Security, Cambridge: Center for Science and International Affairs, Harvard University, 1991), p.11.

⁸ "In brief: nuclear underwear", *The Bulletin of the Atomic Scientists*, Vol.52, No.6, November/December 1996, p.7. On January 25 1995, in response to a scientific rocket launched off the coast of Norway which was briefly mistaken for a Trident submarine-launched ballistic missile, the Russian nuclear suitcase was activated "for the first time in history." Senator Bob Kerrey, "Toward A New Nuclear Policy: Reducing The Threat To American Lives", Prepared Text – Speech to the Council on Foreign Relations, November 17 1998 http://www.foreignrelations.org/public/pubs/kerrey.html Accessed 16/02/99.

[&]quot;Blair, The Logic of Accidental Nuclear War, p.72; Bruce Blair, "Russian Control of Nuclear Weapons", in George Quester (ed), The Nuclear Challenge in Russia and the New States of Eurasia (New York: M.E. Sharpe, 1995), p.62-63.

¹⁰ John Lepingwell, "Ukraine, Russia, and the Control of Nuclear Weapons", RFE/RL Research Report, Vol. 2, No. 8, 19 February 1993, p.4-5, footnote 2.

immediate aftermath proved to be the catalyst that stung the US Congress and the Bush Administration into action.

This is not to suggest that possible nuclear devolution in the Soviet Union had not ever been considered. As early as 1971 Adam Ulam observed, in relation to Chinese hopes for severe internal conflicts within the Soviet Union, that "Mao and his colleagues appear unmindful of how dangerous to the whole world could be internal anarchy in a country with a full nuclear arsenal." In 1986 Jon Connell astutely remarked that at the time, "Russia's thousands of nuclear weapons [were] at least under the centralized control of a regime which, however unpleasant, is notably cautious and chary of the risks of war. A break-up of the Russian empire could make things decidedly worse for the West." Importantly for future events, a group at Harvard University had been actively researching the likelihood and potential implications of the possibility of a break down in command and control since mid-1990 and a US government interagency group had been studying the security of the Soviet nuclear stockpile since early 1991.

It is also now clear that President Bush, Secretary of State Baker and National Security Adviser Brent Scowcroft were concerned, as early as mid-1989, that the break-up of the Soviet Union could result in its nuclear weapons being left under "uncertain control". The degree of concern was evidenced by Bush's June 1991 'Chicken Kiev Speech', imploring the soon-to-be independent Ukrainian audience to be "good Soviet citizens" and to "obey the central authority in Moscow. However, only in late 1991 did the Administration and Congress begin to put policies in place to deal with the problem.

¹¹ Adam Ulam, The Rivals: America and Russia since World War II (New York: Penguin Books, 1971), p.393.

p.393. ¹² Jon Connell, *The New Maginot Line* (London: Secker and Warburg, 1986), p.7. The most prescient study from academia was contained in Leonard Spector's 1987 book, *Going Nuclear* (Cambridge, MA: Ballinger, 1987), p.15-63.

Interview, 'Harvard University, Cambridge, MA., 26 March 1998. Ivo Daalder and Terry Terriff, "Nuclear Arms Control: Finishing the Cold War Agenda", Arms Control, Vol. 14, No. 1, April 1993, p.23.
 Beschloss and Talbott, At The Highest Levels, p.102, 109.

¹⁵ William Safire labelled the speech 'Chicken Kiev', Richard Melanson, "George Bush's Search For A Post-Cold War Grand Strategy", in Kenneth Thompson (ed), *The Bush Presidency: Ten Intimate Perspectives of George Bush, Part Two* (Lanham: University of Virginia, 1998), p.157.

The Soviet Nuclear Legacy

In 1991, the Soviet nuclear arsenal consisted of an estimated 9,537 strategic warheads and 15,000 - 30,000 tactical nuclear warheads, as well as an estimated stockpile in excess of 1,000 tons of highly enriched uranium (HEU) and in excess of 100 tons of plutonium from dismantled nuclear weapons, naval reactors, research reactors and other fuel cycles. 16 It was difficult to be more precise with regard to fissile material stores because, as Russian Minister of Atomic Energy Viktor Mikhailov conceded, "Nobody knows the exact capacities for the production of these [fissile] materials [or] the exact quantity of the produced materials themselves due to technological losses in production." Such uncertainty, it was feared, could lead to the sale, diversion or theft of nuclear weapons, materials or expertise to any country or group with the money and connections. This was collectively referred to as 'nuclear leakage'. The uncertainty about Moscow's ability to safeguard its nuclear weapons which, as discussed below, were far easier to secure than 'loose' nuclear material was made painfully clear by then-Secretary of Defence Richard Cheney in July 1992 when testifying before the Senate Armed Services Committee. In response to a question from Robert Smith (R-N.H.) concerning a 1991 Soviet violation of START I telemetry encryption provisions and the appearance of INF-banned SS-23s in East Germany, Bulgaria and Czechoslovakia after the withdrawal of Soviet troops¹⁸, Cheney responded: "... I am not surprised, given the state of that [Russian] society... . that they do not have absolute, total perfect control in terms of how all of these complicated provisions are being implemented, which is not to suggest that they do not control all their nuclear weapons."19

¹⁶ Robert Norris and William Arkin, "Where The Weapons Are", *The Bulletin of the Atomic Scientists*, November 1991, p.48-9; Robert Norris, "C.I.S. (Soviet) Strategic Nuclear Forces, End Of 1991", *The Bulletin of the Atomic Scientists*, March 1992, p.49; Graham Allison, Owen Coté, Richard Falkenrath and Steven Miller, *Avoiding Nuclear Anarchy: Containing the Threat of Loose Russian Nuclear Weapons and Fissile Material* (Cambridge, MA: MIT Press, 1996), p.4; Oleg Bukharin, "Nuclear Safeguards and Security in the Former Soviet Union", *Survival*, Winter 1994-95, p.55, 59; Campbell et al, *Soviet Nuclear Fission*, p.29.

¹⁷ Quoted in Global Organized Crime Project, *The Nuclear Black Market*, CSIS Task Force Report (Washington, D.C.: Center For Strategic And International Studies, 1996), p.20.

¹⁸ In March 1990, after the fall of East Germany, its successor government revealed that it possessed 24 SS-23s. *The Proliferation Primer*, A Majority Report of the Subcommittee on International Security, Proliferation, and Federal Services, Committee on Governmental Affairs, United States Senate, January 1998, p.58.

¹⁹ "Military Implications of START I and START II", Hearings before the Committee on Armed Services, United States Senate, 102nd Congress, 2nd Session, July 28, 1992, p.50-51.

The Challenges

Political Disintegration and Nuclear Control

The failed coup sounded the death-knell for communism in the USSR as well as the Soviet state itself. Independence movements asserted their claims with greater forcefulness, supported by large sections of their populations. For example, on December 1 1991 the official result of the Ukrainian independence referendum indicated that over 90% of voters approved. Then on December 8 Russian President Yeltsin, Belorussian Supreme Soviet Chairman Shushkevich and Ukrainian President Kravchuk announced the formation of the Commonwealth of Independent States (CIS). ²⁰ The USSR as a political entity had ceased to exist. ²¹

As the Soviet Union began to fracture into individual republics, decision-makers in the US and the former USSR were presented with an unprecedented set of inter-related problems. Four of these republics, Russia, Ukraine, Kazakhstan and Belarus, had strategic nuclear weapons as well as various parts of the Soviet nuclear infrastructure and early warning system stationed on their soil and Soviet tactical nuclear weapons were "deployed in practically all Union Republics." Virtually overnight, authority over the Soviet nuclear arsenal devolved from a highly centralised command to a number of emerging autonomous entities whose legal claim to and practical desire for the nuclear weapons, materials and infrastructure on their soil was uncertain at best. Initially, the safety of tactical nuclear weapons was the primary concern. According to Senator Richard Lugar (R-Ind.), "many people from Russia, Belarus and Ukraine came to members of this [Foreign Relations] committee and senators outside of it last October and November pointing out that tactical nuclear weapons... could be appropriated... could disappear from the inventory..."

²⁰ Tolz and Newton, The USSR in 1991, p.862,880

²¹ Although officially the USSR ceased to exist on January 1 1992, the formation of the CIS and the subsequent independence declarations of the other 'former' Soviet republics signalled the demise of the USSR for all practical purposes.

Statement of Sergei Akhromeyev, chief of the Soviet General Staff, quoted in Robert Norris, "The Soviet Nuclear Archipelago", *Arms Control Today*, January / February 1992, p.24. A third class of land-based nuclear weapons — intermediate or theatre — were slated for elimination by the INF Treaty of December 1987. This process was completed on May 6 1991. The International Institute for Strategic Studies (IISS), *Strategic Survey: 1991-1992* (London: Brassey's, 1992), p.247.

²³ "U.S. Plans and Programs Regarding Dismantling of Nuclear Weapons in the Former Soviet Union", *Hearing before the Committee on Foreign Relations*, United States Senate, 102nd Congress, 2nd Session, July 27, 1992, p.17. On September 8 1997 former Security Council Secretary Alexsandr Lebed alleged that 84 'nuclear suitcase bombs' (miniature devices purportedly produced in the 1970s) were missing; a claim

The dangers of uncertain nuclear control went beyond the creation of new republics from the defunct Soviet Union, they also included political upheaval within republics. This was suggested in a US exercise conducted in the spring of 1992 codenamed Project 908.24 Designed as a test of the national command authority, it assumed, somewhat prophetically given the seizure of the Russian "White House" (parliament building) by Vice-President Rutskoi, Parliamentary Speaker Khasbulatov and other members of parliament in September and October 1993, that Rutskoi toppled Boris Yeltsin in a coup.²⁵ During the realignment of nuclear control, a commander of a division of strategic missiles, acting under ambiguous authority, launched ten ICBMs at the US. The US responded by launching a larger counter-strike to destroy the remainder of the Russian division. This succeeded in destroying many, but not all, of the reserve forces, which were promptly launched at the US. By the end of the exercise, several hundred high-yield nuclear warheads had been "detonated" on the US and Russia.

During the following years this sort of scenario appeared to take on ominous proportions with the rise of Russian ultra-nationalist politician Vladimir Zhirinovsky.²⁶ Zhirinovsky, whose behaviour at times amused, mystified and deeply offended both his allies and enemies, did not hesitate to threaten the 'nuclear card'.27 While Zhirinovsky's star began to wane after the 1993 parliamentary elections, the fact that 27% of the strategic rocket forces, 40% of the air force and an astonishing 93% of the teachers and students at the Russian Military Academy voted for a party promising to

Russian defence officials vigorously denied. Floriana Fossato, "Defense Officials Deny Lebed's Nuclear

Suitcase Claims", RFE/RL Newsline, Vol. 1, No. 129, Part 1, 1 October 1997.

24 Unless otherwise footnoted, all information on Project 908 is taken from Bruce Blair, Global Zero Alert for Nuclear Forces, Brookings Occasional Papers (Washington, D.C.: The Brookings Institution, 1995), p.22-3. Official defence guidance at the time also focused on the threat of 'renegade' and 'regional outlaws' threatening US interests with nuclear weapons, as evidenced by Defense Secretary Cheney's "Defense Strategy for the 1990s" document, Melanson, "George Bush's Search For A Post-Cold War Grand Strategy", in Thompson (ed), The Bush Presidency, p.162.

²⁵ Robert Tucker, "Post-Soviet Leadership and Change", in Timothy Colton and Robert Tucker (eds), Patterns in Post-Soviet Leadership (Boulder, CO: Westview Press, 1995), p.21-2.

²⁶ Zhirinovsky received 8% of the popular vote in the 1991 presidential election to run third behind Yeltsin and former Prime Minister Nikolai Ryzhkov. In December 1993 Zhirinovsky's Liberal Democratic Party (LDPR) attracted approximately one quarter of the votes cast in the Russian parliamentary elections. For an incisive analysis of the LDPR and 1993 elections see Peter Lentini and Troy McGrath, "The Rise of the Liberal Democratic Party and the 1993 Elections", The Harriman Institute Forum, Vol. 7, No. 6, February

²⁷ Among his more notorious pronouncements were a threat to remind the Japanese of their experience fifty years before at Hiroshima and Nagasaki if they continued to make demands on the Kurile Islands and the alleged possession of a variant on Herman Kahn's Doomsday Machine, made famous in Dr Strangelove, to be used if America interfered in Russia's foreign policy. The examples are taken from Elena Klepikova and Vladimir Solovyov, Zhirinovsky: The Paradoxes of Russian Fascism (London: Viking, 1995), p.113, 124-5.

"end military-to-civilian conversion and, more importantly, put Russian arms back on international markets", meant that Zhirinovsky's bluster could not be simply brushed aside as the rantings of one on the lunatic fringe.²⁸ One could only hope that the Zhirinovsky experience would serve as a cautionary tale for the dangers of irresponsible nuclear command and control as Zhirinovsky's popularity derived from his attraction as a populist politician who offered simple and immediate solutions to a population disillusioned by a fledgling democracy that often appeared to have fostered little more than rampant crime, inflation, unemployment and Russia's dramatic decline as a global or even European power.²⁹

Economic Incentives for Leakage

The economic crisis engulfing the territories of the former Soviet Union led to fears that nuclear materials and even nuclear weapons might be sold for hard currency to bolster cash-strapped economics. Indeed it was precisely this possibility that led to accusations, which ultimately proved groundless, that Kazakhstan had sold nuclear warheads to fran³⁰ and that Ukraine had sold nuclear weapons to the PLO.³¹ Similarly, rampant crime raised the spectre of nuclear terrorism or nuclear theft.³² In testimony before the Armed Services Committee, Dr Lawrence Gershwin, National Intelligence Officer for Strategic Programs stated that

there is enough incentive perhaps for military officers, military personnel involved in the guarding of these weapons, if tempted by some combination of black market, Mafia, or foreign groups to try to acquire

²⁸ The voting percentages are taken from *Ibid.*, p.182-3. The defence conversion and arms sales quote is taken from Peter Lentini, "Electoral Associations in the 1993 Elections to the Russian State Duma", *The Journal of Communist Studies and Transition Politics*, Vol. 10, No. 4, December 1994, p.27.

²⁹ Zhirinovsky's personal style has also caused dissension in the LDPR ranks. In early 1994 three leading deputies, including numbers two and three on the party list, deserted the LDPR, "largely over disputes with party leader Vladimir Zhirinovsky." Peter Lentini, "Conclusion", in Lentini (ed), *Elections and Political Order in Russia* (Budapest: Central European University Press, 1995), p.249.

See Testimony of Major General William Burns, Special Envoy on the Safety, Security and Dismantlement of Nuclear Weapons, in *Ibid.*, p.27. See also Herbert Abrams and Daniel Pollak, "Security Issues in the Handling and Disposition of Fissionable Material", *Contemporary Security* Policy, Vol.15, No.3, December 1994, p.9.

³¹ Mitchell Reiss, Bridled Ambition (Washington, D.C.: Woodrow Wilson Center Press, 1995), p.105.

³² Gregory Loutchansky, Georgian organized crime figure and one-time business partner of Hillary Clinton's two younger brothers, has been linked with nuclear smuggling, "Corruption in Russia", *Hearings before the Committee on Foreign Relations*, United States Senate, 106th Congress, 1st Session, September 30 1999, p.3.

these weapons, that the temptation may arise to essentially help, to get into some sort of conspiracy to steal them.³³

While not targeting nuclear weapons *per se*, one group demonstrated that it grasped the significance of nuclear terrorism when, in November 1994, Lithuanian authorities were forced to shut down the Ignalina nuclear power plant in response to a threat by local organized crime figures.³⁴ In the case of one lieutenant with the Special Troops of the Soviet General Staff based in the former East Germany, the promise of asylum was all that was required to stimulate a sale.³⁵ In 1991 the lieutenant offered William Arkin, of the organization *Greenpeace*, one of the warheads from the Scud missiles his detachment was protecting in return for asylum. Arkin, the lieutenant and a number of intermediaries spent six months planning the operation. However, a little more than a month before the deal was to take place, the lieutenant was apparently withdrawn along with the warheads by the Soviet Defence Ministry. Reflecting a growing awareness in Washington at the time, Graham Allison, Owen Coté, Richard Falkenrath and Steven Miller acknowledged: "One of the few benign results of that [Soviet communist] system was the unquestioned control of weapons-usable nuclear materials and nuclear weapons." ³⁶

The reality of the economic crisis in the former Soviet Union, combined with a desire to prevent nuclear proliferation, provided the basis for cooperation between the nuclear republics and the US. To take only a few examples, at the personal level, "inspectors from the Russian Ministry of Defense found a battery of nuclear-armed SS-25 mobile missiles completely deserted — all the operators and guards having left to search for food." In late 1996 communication to strategic rocket forces units were disrupted several times when thieves mined copper and other metals from communications cables. At the governmental level, it certainly did not escape the

³³ Testimony of Lawrence Gershwin, "Current Developments in the Former Soviet Union", *Hearings before the Committee on Armed Services*, United States Senate, 103rd Congress, 1st Session, February 3, 17, 24; March 3 1993, p.23-24.

³⁴ William Potter, "Before the Deluge? Assessing the Threat of Nuclear Leakage From the Post-Soviet States", Arms Control Today, Vol.25, No.8, October 1995, p.14.

¹⁵ Information on this aborted deal is taken from William Burrows and Robert Windrem, Critical Mass: The Dangerous Race For Superweapons In A Fragmenting World (New York: Simon and Schuster, 1994), pp.246-251.

³⁶ Allison et al, Avoiding Nuclear Anarchy, p.2

M Allison et al, Avoiding Nuclear Anarchy, p.8.

³⁸ Opening Statement of Senator Thad Cochran in "Proliferation: Russian Case Studies", *Hearing before the Subcommittee on International Security, Proliferation, and Federal Services of the Committee on Governmental Affairs*, United States Senate, 105th Congress, 1st Session, June 5 1997, p.2.

attention of the Pentagon and the CIA that the weapons systems that formed the front-line of the Soviet armed forces, such as the Su-27 'Flanker', were offered on the international market.³⁹ Of even greater concern was a claim made by Senator Thurmond that Russia was interested in selling SS-20 missiles to South Africa for satellite launches, which would constitute a breach of its Missile Technology Control Regime commitments and a violation of the terms of the INF Treaty. However General Burns, head of the US Safe and Secure Dismantlement Delegation, testified that to his knowledge all SS-20s had been destroyed.⁴⁰ According to one US official, the CIA drew up a shopping list of Soviet weaponry and made a number of purchases, including fighters and ballistic missiles. This official also alleged that an SS-18 ICBM was on the 'hit list'.⁴¹

International Demand for Nuclear Material

The demand for advanced military technology and weapons of mass destruction, particularly in 'proliferation risk' states, was extant. Iraq's massive covert program to develop nuclear weapons was probably the most publicised example. Similarly, Iran reportedly sent nuclear 'buying teams' into the former Soviet Union. According to one report, by 1994 "Iraq, Iran, India, and Pakistan, among others, had set up trade offices in Moscow to solicit Russian research laboratories to work on their nuclear programs. The threat of nuclear-related technology becoming available was exacerbated by what William Potter described as a "Going Out of Business Sale" instituted by the former Soviet Union's state sector. Indeed, according to Senator Cranston (D-Calif.), the Russian government announced that its "special nuclear materials [were] up for sale. Undoubtedly these trends were reinforced by a belief in Russia that plutonium was a valuable and marketable commodity. and the realisation

³⁹ See Jim Mann, "China buys latest arms from Russia", *The Age*, July 14 1992.

⁴⁶ Question of Senator Thurmond and response by General Burns, "Current Developments in the Former Soviet Union", p.133.

⁴¹ "CIA is shopping for old Soviet weapons: official", *The Age*, November 17, 1992. Unfortunately the author has been unable to obtain any information on the success or failure of this enterprise.

⁴² Allison et al, Avoiding Nuclear Anarchy, p.47.
⁴³ Amanda Bichsel, "How the GOP Learned to Love the Bomb", The Washington Monthly, October 1995, p.29.

p.29.
William Potter, "Exports and Experts: Proliferation Risks From the New Commonwealth", *Arms Control Today*, Volume 22, No. 1, January/February 1992, p.32.

⁴⁵ Prepared Statement of Senator Cranston, "U.S. Plans and Programs Regarding Dismantling of Nuclear Weapons in the Former Soviet Union", p.21.

⁴⁶ According to Senator John Glenn (D-Ohio), "The Russians have stated that they want to move to a plutonium economy, with a new reprocessing plant and new breeder reactors", Statement of Senator Glenn,

by the nuclear industry that, with the dramatic scaling back of the former Soviet nuclear arsenal, nuclear power for consumption at home (generating electricity) and abroad (by way of technology exports) had become its primary rationale for existence.⁴⁷

The Difficulties of "Nuclear Accounting"

The safety and security of fissile material — plutonium, highly enriched uranium and initiator and booster materials such as tritium and deuterium — presented a distinct although related, problem to nuclear weapons safety and security. While nuclear warheads were relatively large and easy to count, thus easy to monitor, authorities in the former Soviet Union were not even sure how much fissile material they possessed, let alone how to institute a reliable inventory. According to Allison *et al.*, the highly enriched uranium the United States secretly purchased from Kazakhstan during November 1994, in a secret operation known as Project Sapphire, comprised 104 per cent of the declared inventory. In an apparent paradox, potential 'leakage' was exacerbated by the Soviet control system designed to prevent terrorist attacks and keep US spies from acquiring nuclear secrets. This may have kept outsiders out, but the possibility of insiders conspiring to steal nuclear materials for profit or political purposes was barely even considered, let alone planned for.

This problem of safeguarding large amounts of fissile material was compounded by the dismantlement of tactical nuclear warheads returned to Russia from other areas of the former Soviet Union and Eastern Europe, warhead dismantlement resulting from adherence to the INF Treaty⁵⁰ and the peculiar Soviet

[&]quot;Disposing of Plutonium in Russia", Hearing before the Committee on Governmental Affairs, United States Senate, 103rd Congress, 1st Session, March 9, 1993, p.2.

According to Dr David Mussington, "Fissile material from the retired nuclear warheads is likely to end the need for both uranium enrichment facilities and plutonium production infrastructure." Graham Allison, Ashton Carter, Steven Miller and Philip Zelikow (eds), Cooperative Denuclearization: From Pledges to Deeds, CSIA Studies in International Security No.2 (Cambridge: Center for Science and International Affairs, Harvard University, 1993), p.179.

⁴⁸ Allison et al, Avoiding Nuclear Anarchy, p.38. A similar purchase, known as Auburn Endeavor, was completed in Georgia in 1998.

⁴⁹ Jessica Eve Stern, "Cooperative Activities to Improve Fissile Material Protection, Control, and Accounting", in John Shields and William Potter (eds), *Dismantling the Cold War: U.S. and NIS Perspectives on the Nunn-Lugar Cooperative Threat Reduction Program*, CSIA Studies in International Security (Cambridge, MA: The MIT Press, 1997), p.312.

⁵⁰ The INF Treaty required the elimination of missiles, missile launchers, support structures and support equipment, rather than warheads. The effect was to add to the store of fissile material.

practice of stockpiling obsolete weapons rather than recycling the warheads for use in newer weapons as is the practice in the US.⁵¹

The dispersal of 'loose' fissile material — fissile material other than that in warheads — across virtually all republics of the former Soviet Union constituted the greatest threat to nuclear leakage. The explosive growth in crime, lax security practices at storage facilities — one site likened to "a babushka with a note pad" — and increasingly porous borders combined to make the illegal transport of the small amounts of fissile material needed to manufacture a crude weapon more likely. In addition, the absence of any reliable form of inventory threatened to make nuclear smuggling extremely difficult to detect. The attraction to would-be proliferators was that it allowed bomb-makers to "... leap-frog over the most precarious and expensive part of a weapons-procurement project ... [as well as increased] the probability of 'nuclear extortion'. In a specific programme secret. The also increased the possibility of 'nuclear extortion'.

Consolidating and securing the former Soviet nuclear industry (nuclear weapons, nuclear materials, nuclear infrastructure and nuclear scientists) in Russia in order to stop the sale or theft of these materials became the centrepiece of the nuclear threat reduction process. The urgency of this task was placed in stark relief in January 1990 when Muslim fundamentalists stormed a military base containing a nuclear weapons storage site in Baku, Azerbaijan. In this case, Soviet Army guards

⁵¹ Peter Feaver, "Does Moscow Know Where Its Nukes Are?", Los Angeles Times, December 22, 1990, p. 87

p.B7.

52 "Intelligence Briefing on Smuggling of Nuclear Material and the Role of International Crime Organizations, and on the Proliferation of Cruise and Ballistic Missiles", *Hearing before the Committee on Armed Services*, United States Senate, 104th Congress, 1st Session, January 31, 1995, p.4.

Armed Services, United States Senate, 104th Congress, 1st Session, January 31, 1995, p.4.

Son nuclear trafficking see Global Organized Crime Project, The Nuclear Black Market, Chapter 2; Oleg Bukharin and William Potter, "Potatoes were guarded better", The Bulletin of the Atomic Scientists, May/June 1995, p.46-50; Kirill Belyaninov, "Nuclear nonsense, black-market bombs, and fissile flim-flam", The Bulletin of the Atomic Scientists, March/April 1904, p.44-50; Rensselaer Lee III, "Post-Soviet Nuclear Trafficking: Myths, Half-Truths, and the Reality", Current History, Vol.94, No.594, October 1995, p.343-348; William Potter, with Eve Cohen and Edward Kayukov, Nuclear Profiles of the Soviet Successor States, Monograph No.1 (California: Monterey Institute of International Studies, Program for Nonproliferation Studies, May 1993), pp. 111-154.

⁵⁴ Bukharin, "Nuclear Safeguards and Security in the Former Soviet Union", p.53.

⁵⁵ According to a Center for Strategic and International Studies report, there were over 100 cases of nuclear extortion recorded by the US over the last 20 years, although only one involved radioactive material. Global Orga. ed Crime Project, *The Nuclear Black Market*, p.16.

It should not be taken for granted that once secured in Russia, nuclear weapons and materials would be safe. On the human reliability factor see Scott Sagan, *The Limits of Safety: Organizations, Accidents, and Nuclear Weapons* (New Jersey: Princeton University Press, 1993), p.189, 223; and Herbert Abrams, "Human Reliability and Safety in the Handling of Nuclear Weapons", *Science & Global Security*, Vol. 2, 1991, p.325-49.

repelled the attack.⁵⁷ Weapons storage sites were consolidated from over 600 throughout the former Soviet Union in 1989 to approximately 100 in Russia.⁵⁸ This is not to say that Russia constituted a 'safe haven' in toto. 59 Maintaining nuclear weapons deployed in Russia in situ could lead to exactly the same danger their withdrawal from other parts of the former Soviet Union was designed to avoid, given the unrest in areas such as Checheno-Ingushetia and North Ossetia. 60 Of particular concern was the conflict in Chechnya and the fact that the Dudayev regime "indicated that nuclear power plants [were] possible sites for terrorist operations" and claimed that it had acquired nuclear weapons.⁶¹ The Chechen leadership went one step further on Thanksgiving in 1995 when they planted a radioactive canister in a Moscow park, although they also told Russian authorities where to find it.⁶² According to William Potter, Russian officials took seriously the possibility of attacks by Chechen commandos on Russian nuclear power installations.⁶³ Bureaucratic in-fighting amongst the Ministry of Defence, the Ministry of Atomic Energy, the Ministry of the Interior, Intelligence and police organizations as well as the state nuclear regulatory agency Gosatomnadzor (GAN) also served to exacerbate these problems.⁶⁴

The Human Factor

A high priority was placed on efforts to re-direct the energies of nuclear weapons experts into such areas as defence conversion and environmental clean-up operations, in order to prevent a nuclear 'brain-drain'. This was because former Soviet nuclear experts, once considered privileged professionals, became increasingly redundant given the dramatic cut backs in the nuclear weapons industry and the

⁵⁷ Norris and Arkin, "Where The Weapons Are", p.48; William Broad, "Guarding the Bomb: A Perfect Record But Can It Last?", *The New York Times*, January 29, 1991, p.C1.

⁵⁸ Statement of Dr Gordon Oehler, Director, Nonproliferation Center, ClA, in "Intelligence Briefing on Smuggling of Nuclear Material and the Role of International Crime Organizations, and on the Proliferation of Cruise and Ballistic Missiles", p.4.

⁵⁹ Nor is it to say that the US was always a model of security itself. See, for example, "3 U.S. nuclear labs often lax in security", *The Washington Times*, November 1 1997, p.A2; and the collection of articles dealing with the "Cox Report" in *Arms Control Today*, Vol. 29, No. 3, April/May 1999, p.17-37.

⁶⁰ Allison et al, Cooperative Denuclearization, p.98.

Testimony of Admiral William Studeman, USN, Acting Director of Central Intelligence, in "Worldwide Threat to the United States", *Hearing before the Committee on Armed Services*, United States Senate, 104th Congress, 1st Session, January 17, 1995, p.31, 36.

⁶² Interview, Washington, D.C., March 10 1998; Harold Elletson, *The General Against the Kremlin, Alexander Lebed: Power and Illusion* (London: Little Brown and Co., 1998), p.246.

[&]quot;Potter, "Before the Deluge?", p.14.

¹¹ Blair, Global Zero Alert For Nuclear Forces, p.35.

apparent inability of central governments to pay wages. In desperation, an employee at the Severodvinsk submarine facility, who had not been paid, threatened to blow up a building containing two nuclear reactors. In one of the most extreme cases, in October 1996, Vladimir Nechai, head of the Chelyabinsk Nuclear Research Institute, shot himself after complaining about his inability to get projects financed, pay his workers or ensure the safety of his plant. In such a mental state, it may well have been fortunate that suicide was *all* he did. Similarly, John Lepingwell observed:

Twice during 1994 there were cases of personnel at nuclear bases engaging in shooting sprees which, while they did not directly threaten nuclear weapons, indicate the mental and physical stresses building at these sites.⁶⁷

The confluence of these pressures — lack of work, lack of pay and the promise of an abundance of both in other countries — increased the incentives for nuclear experts to pursue careers in countries willing to pay handsomely for their services, despite Minister of Atomic Power Mikhailov's assurances that patriotism would prevent their emigration.⁶⁸

Among the more publicised 'brain-drain' examples were a German Federal Intelligence Service Report, in early 1992, that several countries, including Algeria, India, Iran, Libya and Israel, were either currently employing or had concluded contracts with former Soviet nuclear specialists; the arrest, in a possible sting operation, of more than 50 Russian scientists at Moscow's Sheremetyevo airport bound for North Korea where they had been offered astronomical salaries during December 1992; a March 1993 interview on French television with two active Russian nuclear physicists who claimed that they saw nothing wrong with aiding the efforts of countries like Iraq and Libya to "get the bomb"; and the circulation in the Middle East of an advertising leaflet from a Hong Kong-based industrial company offering the

⁶⁸ Testimony of William Potter in "Proliferation: Russian Case Studies", p.20.

⁶⁶ Grigory Yavlinsky, "Russia's Phony Capitalism", Foreign Affairs, Vol. 77, No. 3, May/June 1998, p.75; and Jeffrey Kluger, "The Last Countdown?", Time, No.49, Dec.2 1996, p.70.

⁶⁷ John Lepingwell, "START II and the Politics of Arms Control in Russia", *International Security*, Vol. 20, No. 2, Fall 1995, p.67.

Vitalii Goldanskii, "Russia's 'Red-Brown' Hawks", *The Bulletin of the Atomic* Scientists, Volume 49, No. 5, June 1993, p.25. On the brain-drain threat and international responses see Statement of Robert Gallucci, "Regional Threats And Defense Options For The 1990s", *Hearings Before The Defense Policy Panel And The Department Of Energy Defense Nuclear Facilities Panel Of The Committee On Armed Services* House Of Representatives, 102nd Congress, 2nd Session, 26 March 1992, p.326-28. See also Potter, "Exports and Experts", p.34.

services of hundreds of former Soviet experts in the fields of rocket, missile and nuclear weapons, willing to work for reasonable pay.⁶⁹ There were also unsubstantiated reports that as many as 3,000 Russian experts were working on nuclear and missile projects in China and that many more were working on-line and via e-mail for approximately five times their Russian earnings.⁷⁰ Finally it is worth noting that the Aum Shinrikyo sect, responsible for the sarin gas attack in Tokyo's subway in March 1995, was studying uranium enrichment and laser technology and had at least one follower on the staff of the Kurchatov Nuclear Physics Institute.⁷¹

In their desperation to secure reasonable wages, some employees were prepared to go to dangerous lengths. For example, in 1992 a programmer at the Ignalina nuclear plant in Lithuania reported finding a virus in the computer that ran the safety systems. Investigators later concluded that he had placed the virus in the computer to receive a pay bonus for improving safety.⁷²

In addition, a number of weapons designers joined 'private companies' which offered employment in Russia. One such company, the International CHETEK Corporation, established by the Ministry of Atomic Power and Industry (MAPI) and the All-Union Research Institute of Experimental Physics nuclear weapon design centre, proposed to conduct 'peaceful nuclear explosions' to dispose of nuclear and toxic waste. Ostensibly, nuclear know-how would remain within the company but the possibility that sensitive nuclear information could be sold, made these companies an added proliferation risk.

[™]OTA-ISS-605, p.67.

71 Global Organized Crime Project, The Nuclear Black Market, p.16.

⁷³ Potter, "Exports and Experts", p.33.

⁶⁰ Office of Technology Assessment, *Proliferation and the Former Soviet Union*, OTA-ISS-605 (Washington, D.C.: U.S. Government Printing Office, September 1994), p. 32-3, 63; and Glenn Schweitzer, *Moscow DMZ* (New York: M.E. Sharpe, 1996), p.35.

Scott Sagan, "The Perils of Proliferation: Organization Theory, Deterrence Theory, and the Spread of Nuclear Weapons", *International Security*, Vol. 18, No. 4, Spring 1994, p.101.

Summation

The threat of nuclear leakage from the former Soviet Union was both multi-faceted and urgent. While the threat of a massive superpower nuclear exchange receded significantly, the chance of an accidental or unauthorized nuclear launch, or a nuclear detonation by a rogue nuclear nation or terrorist group increased. The implications for US national security policy were clear: assure central authority over strategic and tactical nuclear weapons and prevent the leakage of nuclear weapons, nuclear materials and nuclear expertise. However, as chapter 4 explains, the Bush Administration proved decidedly reluctant to take the initiative and address the problem. Into this under-developed policy setting stepped a number of influential Senators. The nuclear threat reduction program that they legislated was pioneering and exemplified an innovative and timely approach to a problem without precedent. This unique situation was summed up succinctly by Senator Joseph Biden (D-Det.) in September 1991:

When Soviet coup plotters seized Mikhail Gorbachev's briefcase containing codes for the command of Soviet rocket forces, the nuclear age passed abruptly into a new phase. For 40 years, American strategists concentrated on countering the offensive Soviet threat. Now our priority must be the orderly reduction of the Soviet nuclear arsenal.⁷⁴

It is the aim of chapter 4 to discuss why Congress was afforded the opportunity to respond to the nuclear leakage threat and how it addressed that problem. Before this can be attempted, however, it is necessary to understand exactly how the nuclear threat reduction program worked and this is the focus of chapter 3.

Opening Statement of Joseph Biden in "Command and Control of Soviet Nuclear Weapons: Dangers and Opportunities Arising From The August Revolutic", Hearing before the Subcommittee on European Affairs of the Committee on Foreign Relations. United States Senate, 102nd Congress, 1st Session, September 24, 1991, p.1.

Chapter 3

CTR in Practice — August 1991 to December 1996

Aim and Structure

This chapter describes the CTR program as it has operated in Russia, Ukraine, Belarus and Kazakhstan. The purpose of the chapter is to illustrate what CTR did and did not achieve in the target countries. This will provide a template for the analysis of Congressional influence on the program that follows in Chapter 4. It details chronologically the specific Nunn-Lugar projects that have developed in each country from the program's beginning, in 1991, to the denuclearisation of the final non-Russian republic at the end of 1996. The case study parameters limit this discussion to the period between August of 1991 and December of 1996, although in some instances information beyond 1996 will be provided in the interests of clarity and depth of argument.

Strategic Context: Bilateral Arms Control After the August Coup

As previously noted, the attempted coup by Soviet hardliners was not the first indication that the security of the nuclear weapons, materials and infrastructure located in the then-Soviet Union could be threatened by its political and economic disintegration, but it provided the catalyst for the United States to take action to reduce the possible threat of 'loose nukes'. Yet Nunn-Lugar did not take effect immediately after the August coup. For reasons described in the following chapter, nuclear dismantlement assistance did not become a reality until the end of 1991. During this interval, George Bush and Mikhail Gorbachev (effectively succeeded by Boris Yeltsin after the dissolution of the USSR) engaged in a series of nuclear arms control and disarmament initiatives which, while technically unconditional, were intended to induce the other side to respond in kind. As illustrated below, this proved to be an extremely effective way of securing significant nuclear reductions at a time when the

¹ For example, as late as 1989 approximately 3,780 former Soviet tactical nuclear weapons were deployed outside the USSR. However, these were withdrawn by August 1991. Graham Allison et al (eds), Cooperative Denuclearization: From Pledges to Deeds, CSIA Studies in International Security No. 2 (Cambridge, MA: Center for Science and International Affairs, Harvard University, 1993) p.88-89.

euphoria surrounding the end of the Cold War made such bold proposals politically palatable.

On September 27 1991 President Bush announced that he would unilaterally eliminate all ground-launched theatre nuclear weapons (although the US would retain an air-delivered nuclear capability in Europe), withdraw all tactical nuclear weapons from surface ships, attack submarines and land-based naval aircraft, stand down all US strategic bombers from alert posture, stand down all ICBMs scheduled for deactivation under START I and accelerate their elimination once START was ratified, terminate the development of mobile MX and Midgetman programs and cancel the proposed replacement for the short-range attack missile. Although these measures were undertaken unconditionally, they were combined with three proposals. The first sought agreement on the elimination of all MIRVed ICBMs. The second called on the Soviet leadership to join the US in amending the 1972 ABM Treaty to allow for the deployment of a system to protect against "limited ballistic missile strikes". The third invited the Soviet government to enter discussions with the US on "cooperation with regard to the safe storage, transportation, dismantling and destruction of nuclear warheads, the physical security and safety of nuclear weapons, and the nuclear command and control arrangements."3

The September 27 announcement elicited the desired response. On October 5 Mikhail Gorbachev announced that he would reciprocate and even up the ante. Gorbachev pledged to eliminate all nuclear artillery munitions, warheads for ground-based tactical nuclear weapons and nuclear mines, remove all nuclear warheads from SAMs and place them in central storage, withdraw all tactical nuclear weapons from surface ships and multipurpose submarines, place all naval tactical nuclear weapons (including naval land-based aircraft) in central storage, reduce accountable strategic

² Information on the September 1991 initiative is taken from Pat Towell, "Bush's Plan To Cut Weapons May Spur Deeper Cuts" in Congressional Quarterly, Current American Government, Spring 1992, p.87-90.

Statement of Richard B. Cheney, Secretary of Defense, "Military Implications of START I and START II". Hearings before the Committee on Armed Services, United States Senate, One Hundred Second Congress, Second Session, July 28 1992, p.5. Although this third proposal was novel in both scope and in the fact that the US offered it, the concept was not unprecedented. In January 1986 Gorbachev outlined a process that was designed to free "the world of nuclear weapons within the next 15 years, before the end of the century." This process was to be implemented in three stages. The first two stages would involve the partial disarmament of all the nuclear weapon states. The third would eliminate all remaining arms and special procedures for the "destruction of warheads and the dismantling, conversion, or destruction of delivery vehicles would be elaborated." The US response was polite but non-committal, reflecting a (well-founded) belief that the proposal was unrealistic and largely for propaganda purposes. Michael MccGwire, Perestroika and Soviet National Security (Washington, D.C.: Brookings, 1991), p.194-5.

⁴ All information on the Gorbachev Initiative is taken from Statement of Cheney, in "Military Implications of START I and START II", p.5-6.

nuclear warheads to 5,000 (rather than the 6,000 under START), remove 503 ICBMS (including 137 with MIRVs) from alert status, cancel the development of the small mobile ICBM, not increase the number of MIRVed mobile ICBMs, not modernise the rail-mobile SS-24 ICBM, discontinue out-of-garrison deployments of rail-mobile ICBMs, remove heavy bombers from alert status, cancel the development of the modified nuclear short-range missile for heavy bombers and complete the decommissioning of three ballistic missile submarines and decommission three more. The Gorbachev initiative also contained three proposals. The first sought agreement on a 50% cut in the US and Soviet nuclear arsenals after START. The second indicated a readiness to discuss ballistic missile defences including the "possibility of creating joint systems to avert nuclear missile strikes with ground- and space-based elements." The third expressed a willingness to enter discussions "on the development of technologies to store and transport nuclear warheads, on methods of using nuclear explosive devices and on ways to increase nuclear safety."

The response to Gorbachev's announcement was swift. In early October a team led by Under Secretary of State Reginald Bartholomew visited Moscow to discuss nuclear safety and security issues.⁵ The discussion groups became known as the Safe and Secure Dismantlement (SSD) talks. The US SSD delegation was charged with responsibility for negotiating agreements on specific assistance with the republics. This was followed by a visit to Washington by delegates, both civilian and military, from each of the four Soviet republics with strategic nuclear weapons to discuss implementing the September and October initiatives. The meetings, which were held in November, included US briefings on American organisations, procedures and systems for the safety and security of nuclear weapons as well as how nuclear weapons could be quickly disabled and dismantled. The initial response from Moscow to this overture was 'not enthusiastic'.⁶

However, after Secretary of State James Baker conducted intensive talks with key political figures in the republics, a more constructive dialogue emerged. This was in large part facilitated by Congress's passing of the Soviet Nuclear Threat Reduction Act of December 1991 which, together with the Dire Emergency Supplemental

⁵ Steven Miller, "Western diplomacy and the Soviet nuclear legacy", *Survival*, Vol. 34, No. 3, Autumn 1992, p.9-10.

Report to the Senate Committee on Foreign Relations on Efforts to Facilitate the Safe and Secure Dismantlement of Former Soviet Nuclear Weapons by Major General William F. Burns, U.S. Army (Ret.), Head of U.S. SSD Delegation, February 9 1993 in "Disposing of Plutonium in Russia", Hearing before the Committee on Governmental Affairs, United States Senate, One Hundred Third Congress, 1st Session, March 9 1993, p.39. (hereafter cited as Report to the Senate Committee on Foreign Relations by Burns)

Appropriations Act of 1992, allowed for the transfer between accounts of \$400 million in FY92 Department of Defense appropriations to fund the dismantlement assistance the US was offering. With the creation of the CIS on December 8 1991, US efforts to provide nuclear dismantlement and security assistance became more urgent.

Thirteen days after the dissolution of the Soviet Union, in a meeting at Alma-Ata, eight former Soviet republics agreed to join the Commonwealth of Independent States. The most important result of this meeting, for the purposes of this thesis, was the Agreement on Joint Measures Regarding Nuclear Weapons signed by the four republics with strategic nuclear weapons. While it showed that all four states were concerned about the nuclear weapons on their soil, it also revealed the limits of cooperation between them. Belarus, Kazakhstan and Ukraine pledged to return all nonstrategic nuclear weapons to Russia by July 1992 and both Belarus and Ukraine pledged to sign the NPT as Non-Nuclear Weapon States. Conspicuous by its absence was Kazakhstan. In addition, all four states made commitments not to transfer nuclear weapons or other explosive devices and technologies and not assist other countries in acquiring such devices or technologies.7 These agreements were buttressed at a meeting in Minsk on December 30 where it was agreed that a decision to use nuclear weapons would be "made by the president of the Russian Federation in agreement with the heads of the Republic of Belarus, the Republic of Kazakhstan, and Ukraine, and in consultation with the heads of the other member states of the Commonwealth."8

While these pledges were encouraging, from the US perspective tangible measures were what mattered and negotiating efforts were stepped up. In a follow-on to his September initiative, Bush announced that the US would cancel the Midgetman program, halt further production of the W-88 warhead (for the Trident D-5 SLBM) as well as new purchases of advanced cruise missiles, limit the B-2 to twenty aircraft and proposed that in return for the elimination of all Russian MIRVed ICBMs, the US would eliminate all 50 MX ICBMs, download all 500 Minuteman III ICBMs to single RVs, reduce the number of warheads on Tridents by approximately one third below

⁷ Terry Terriff and Ivo Daalder, "Nuclear Arms Control: Finishing the Cold War Agenda", Arms Control, Vol. 14, No. 1, April 1993, p.8.

Reproduced in Dunbar Lockwood, "Commonwealth Agrees on Unified Nuclear Command", Arms Control Today, Volume 22, Number 1, January/February 1992, p.39, According to Bruce Blair, Ukraine wanted a physical veto over the launch of nuclear weapons on its territory and a device to achieve this was promised to senior Ukrainian officials in late 1991 by Marshal Shaposhnikov, the Commander of CIS Armed Forces. "Well, we know that it never materialized." Testimony of Bruce Blair, "U.S. Policy On Ukrainian Security", p.39.

START and recrient a substantial number of heavy bombers to primarily conventional missions.⁹

In response Yeltsin announced that Russia would terminate production of the Bear H and Blackjack heavy bombers as well as existing types of long-range air- and sealaunched cruise missiles, limit heavy bomber exercises to no more than thirty aircraft, halve the number of ballistic missile submarines on patrol and take all weapons slated for elimination under START off operational readiness. Yeltsin also made two proposals: the first to reduce strategic nuclear weapons to 2,000 - 2,500 each, and the second to develop a 'global protection system' against ballistic missile attack using US and Russian technology. These initiatives were augmented by a meeting at Camp David, at which time it was agreed that the US and Russia would no longer consider each other adversaries.¹⁰

It was within this buoyant post-Cold War atmosphere that the nuclear threat reduction program began to take shape, but before turning to the development of the program, it is necessary to describe the interests of the key players in the nuclear weapons on their territory.

Country Contexts: Political Proclivities and Operational Realities

The vital interests of the US and the four 'nuclear republics' of the former Soviet Union are important to clarify because they provide a fundamental clue to understanding why certain negotiating strategies proved successful for the US and why others did not and why specific carrots and sticks were more effective than alternatives. The relatively clear-cut interests of the United States and Russia, as the only two countries to be both NPT-designated nuclear weapon states and physically capable of maintaining a nuclear arsenal for any extended period of time, are discussed first. This is followed by an analysis of the possible motivations of the non-Russian states, as well as the practical ability of these countries to fashion a nuclear deterrent.

The objectives of US policy have been described as follows:

- 1. Reducing the nuclear threat.
- 2. Facilitating and accelerating the implementation of arms control agreements.
- 3. Preventing the proliferation of weapons of mass destruction.

⁹ Statement of Richard B. Cheney, "Military Implications of START I and START II", p.7.

¹⁰ Ibid.

- 4. Facilitating political and economic transformations.
- 5. Enhancing regional stability. 11

In a message to the UN Secretary-General on January 27 1992 Boris Yeltsin outlined Russia's strategy towards nuclear proliferation in the FSU: "We stand for adopting effective measures to consolidate the non-proliferation regime for nuclear weapons and other weapons of mass destruction as well as means of their delivery." Russian objectives in large part coincided with US objectives. For example, the overriding Russian priority was to centralise the nuclear weapons, materials and infrastructure of the former Soviet Union in Russia in order to avoid the emergence of new and potentially hostile nuclear powers on its borders. This would also alleviate problems associated with unauthorised and accidental launch as well as 'nuclear leakage'. Hence Russia's primary interests, as the nuclear successor state to the defunct USSR, were to withdraw all tactical and strategic nuclear weapons from all other newly independent states, secure all fissile material and nuclear infrastructure and ensure that all nuclear weapons reductions were carried out reciprocally by all parties to the relevant arms control treaties. ¹³

The security interests of Belarus, Kazakhstan and Ukraine were more difficult to ascertain, particularly given conflicting public statements by senior officials. Of the three, Belarus probably had the least room to manoeuvre, and possibly the least incentive to retain nuclear weapons given the legacy of the Chernobyl accident. Senior officials in Belarus also acknowledged that in the event of a conflict between Russia and NATO, a 'nuclear' Belarus would be a "high-priority target." In an interview with William Potter, Belarussian President Stanislav Shushkevich argued that Belarus was beset by three syndromes: World War Two, Afghanistan and Chernobyl. Retaining nuclear weapons would only prolong recovery from these afflictions. 15

¹¹ Assistant to the Secretary of Defense, 1996 Cooperative Threat Reduction Program i 'on (unclassified), (Washington, D.C.: Department of Defense, 1996), 1-2.

¹² Quoted in Alexander Kalyadin and Elina Kirichenko, "Nonproliferation After The New York Conference", *International Affairs (Moscow)*, No. 7, 1995, p.32.

¹³ This did not prevent new deployments of SS-25s to Belarus in the fall of 1991 and Blackjack heavy hombers to Ukraine. According to William Potter, these "apparently counterintuitive deployments may have been the result of bureaucratic inertia and the paralysis of the decision-making process. They may also be due to efforts by the CIS military commar 4 to maintain its authority throughout the former Soviet Union." William Potter, "The Politics of Nuclear Renunciation: The Cases of Belarus, Kazakhstan, and Ukraine", The Henry L. Stimson Center Occasional Paper, No. 22, April 1995, p.11.

¹⁴ Mitchell Reiss, *Bridled Ambition: Why Countries Constrain Their Nuclear Capabilities*, (Washington, D.C.: Woodrow Wilson Center Press, 1995), p.135.

⁴⁵ Potter, "The Politics of Nuclear Renunciation", p.32. Vyachaslan Paznyak remarked that the Belarusian government "had little doubt that retaining nuclear weapons would provide Belarus as a newly independent

Belarus's economy was highly dependent on Russia, especially in such necessities as energy 16, and its geo-strategic proximity to Moscow dictated that it maintain, at the least, cordial relations with its neighbour. However, given its "cultural and ethnic closeness to Russia, and a relatively low level of Belarussian nationalism and anti-Russian sentiment..." this was not necessarily inconsistent with Belarussian interests. 17 In addition, Belarus had nothing like the economic resources, infrastructure or technical expertise necessary to maintain the 81 SS-25 ICBMs 18 located on its territory, let alone develop a reliable second-strike capability. 19

Kazakhstan was in a position analogous to Belarus. An estimated 496 nuclear tests²⁰ had taken place on its territory injecting a certain amount of anti-nuclear feeling into the debate.²¹ It also suffered from a weak economy desperately in need of foreign (Russian and G7) assistance, and was largely dependent on Russian oil and gas supplies, which virtually ruled out taking possession or even maintaining for any length of time the 104 SS-18 ICBMs and 370 Air-Launched Cruise Missiles located on its territory.²² Geo-strategically Kazakhstan's "location and ethnic composition demanded that it not aggravate Russia, which offered the only possible counter to any future threats from its other nuclear-armed neighbor, China."²³ Another consideration from the Kazakh perspective was the danger that any deterioration in Russian-Kazakh

state with far less security than getting rid of them." Paznyak, "Belarusian Denuclearization Policy and the Control of Nuclear Weapons", in George Quester (ed), The Nuclear Challenge in Russia and the New States of Eurasia (New York: M.E. Sharpe, 1995), p.165.

¹⁶ According to Mitchell Reiss, "Russia absorbed nearly 70 percent of Belarussian exports and supplied 90 percent of his energy." *Ibid.* p.136.

percent of its energy." Ibid., p.136.

17 Manus Midlarsky et al (eds), From Rivalry To Cooperation: Russian and American Perspectives on the Post-Cold war Era, (New York: HarperCollins, 1994), p.151.

¹⁸ Carnegue Endowment for International Peace and The Monterey Institute of International Studies, Nuclear Successor States of the Soviet Union: Nuclear Weapon and Sensitive Export Status Report, No. 1, May 1994, p.4.

As early as August 1990, a group within the Belarusian Foreign Ministry concluded that Belarus could not independently maintain the nuclear weapons on its territory. Potter, "The Politics of Nuclear Renunciation", p.32. For a discussion of the problems concerning 'emerging nuclear nations' see Peter Feaver, "Command and Control in Emerging Nuclear Nations", International Security, Vol. 17, No.3, Winter 1992/93, p.160-187.

²⁰ Robert Norris and William Arkin, "NRDC Nuclear Notebook: Known Nuclear Tests Worldwide, 1945-1994", The Bulletin of the Atomic Scientists, May / June 1995, p.70.

Ironically, the issue of nuclear tests initially provided President Nazarbayev with a legalistic justification for nuclear retention. For example, in March 1992 he claimed that because tests had been conducted on its territory before January 1 1967, Kazakhstan was entitled to be considered a nuclear weapon state. Potter, "The Politics of Nuclear Renunciation", p.16.

²² Nuclear Successor States of the Soviet Union, May 1994, p.5.

Reiss, Bridled Ambition, p.149. According to Murat Laumulin, Kazakhstan was viewed by Russia as vital to Russian security so was unlikely to be accorded much latitude in its foreign policy. Laumulin, "Kazakhstan's Nuclear Policy and the Control of Nuclear Weapons", in Quester (ed), The Nuclear Challenge in Russia and the New States of Eurasia, p.197-8.

relations could cause a schism in Kazakh society, which was divided roughly equally between Russian and Kazakh ethnic groups.²⁴

Ukraine was in the strongest position of the three non-Russian republies. In addition to 46 SS-24 ICBMs, 130 SS-19 ICBMs, an estimated 564 Long-Range Air-Launched Cruise Missiles, an indeterminate number of gravity bombs²⁵ and 2,605 tactical nuclear weapons²⁶, Ukraine also inherited two design laboratories, of which one developed guidance systems for ICBMs and both developed enabling codes for nuclear warheads²⁷ as well as two missile-building plants, one for the SS-18 which had been disassembled and one still active SS-24 plant.²⁸

Historically Ukraine occupied a position "in a kind of no man's land between Russia, Poland and Turkey", and relations with Russia have been characterised by a certain degree of antipathy. Nowhere was this more evident than the often hostile debate between Russia and Ukraine over the future of the Black Sea fleet. Given this relationship, the Ukrainian perspective on the nuclear issue may be seen from one of two fundamentally opposed viewpoints. On one hand some observers said Ukraine had legitimate security concerns, which could only be addressed through the maintenance of a nuclear capability as a deterrent to Russian aggression. On the other, many commentators believed Ukrainian security concerns would only be exacerbated by the possession of nuclear weapons. In any case, Russia had already shown that it was willing and able to accelerate nuclear weapons withdrawal schedules without the assistance (or even knowledge) of its supposed partners. According to Walter

²⁴ Potter, "The Politics of Nuclear Renunciation", p.38. Kazakhstan was "the only Soviet republic in which the titular nationality was a minority population." Martha Brill Olcott, "Kazakhstan: pushing for Eurasia", in Ian Bremmer and Ray Taras (eds), *New States, New Politics: Building the Post-Soviet Nations* (New York: Cambridge University Press, 1997), p.547.

²⁵ Nuclear Successor States of the Soviet Union, May 1994, p.10-11; Martin DeWing, The Ukrainian Nuclear Arsenal: Problems of Command, Control, and Maintenance, Working Paper No.3, Program for Nonproliferation Studies, Monterey Institute of International Studies, October 1993, p.3.

²⁶ Taras Kuzio, "Nuclear Weapons And Military Policy In Independent Ukraine", *The Harriman Institute Forum*, Volume 6, Number 9, May 1993, p.8.

²⁷ William Potter, with Eve Cohen and Edward Kayukov, *Nuclear Profiles of the Soviet Successor States*, Monograph No.1, Program for Nonproliferation Studies, Monterey Institute of International Studies, May 1993, p.84.

²⁸ Testimony of Dr Bruce Blair, "U.S. Policy On Ukrainian Security", Hearing before the Subcommittee on European Affairs of the Committee On Foreign Relations, United States Senate, One Hundred Third Congress, First Session, June 24, 1993, p.38.

²⁹ Geoffrey Hosking, A History of the Soviet Union (London: Fontana, 1985), p.93.

[&]quot;Ukraine cannot defend itself against a nuclear-armed Russia with conventional weapons, and no state, including the United States, is going to extend to it a meaningful security guarantee." John Mearsheimer, "The Case for a Ukrainian Nuclear Deterrent", Foreign Affairs, Volume 72, No. 3, Summer 1993, p.50-51.

As discussed in Chapter 2, the tactical nuclear weapons withdrawals from Ukraine, Belarus and Kazakhstan had been completed, ahead of schedule, by May 1992.

Slocombe, the retention of nuclear weapons was "a way of guaranteeing that Ukraine would have the one thing [a hostite relationship] which is most important for it to avoid provoking for itself from the point of view of its relations with Russia, its biggest neighbor." Slocombe's rumination was corroborated by an article carried in *The Boston Globe*. This story, quoting a report in the Soviet daily *Nezavisimaya Gazeta*, charged that Yeltsin had discussed the idea of a "preventive nuclear strike" against Ukraine in mid-October 1991 but was advised by the military that it was not technically feasible. Ominously, Steven Miller asserted that Russian planning focused on only two scenarios: "a non-nuclear Ukraine or war."

Ukraine's economy³⁵ could feasibly have maintained a small nuclear arsenal and it appeared that the devices meant to protect the weapons from unauthorised or accidental use would not have proven an insurmountable challenge to a 'determined proliferator'.³⁶ However, the inherited arsenal was described as a "wasting asset" and the operational problems Ukraine faced in maintaining the ICBMs were immense.³⁷ These included programming new target sets for the missile computers, the fact that the silo configuration for both the SS-24s and SS-19s "apparently precludes rotating the missile azimuth to the extent necessary to fire at Russia", the fact that the SS-24 could not be fired at a short enough range to threaten Moscow and the service life of the SS-19, which ended in 1998.³⁸ If these obstacles could have been overcome, or if Ukraine chose to rely on air-delivered weapons, it possessed much, although not all, of the technical expertise and infrastructure necessary to develop and maintain a nuclear arsenal which could have been the third biggest in the world. The questions for

³² Testimony of Walter Slocombe, "U.S. Policy on Ukrainian Security", p.26.

³³ Paul Quinn-Judge, "Yeltsin weighed nuclear strike on Ukraine, Soviet report says", *The Boston Globe*, October 25, 1991, p.8.

³⁴ Steven Miller, "Russia and Nuclear Weapons" in Quester (ed), *The Nuclear Challenge in Russia and the New States of Eurasia*, p.99, footnote 26.

Being dependent on nuclear power to generate electricity, Ukraine was susceptible to Russian economic coercion. For example, a Russian-imposed nuclear fuel cut-off, combined with reduced or completely discontinued Russian oil and gas deliveries, would have seriously endangered Ukraine's energy supply. John Lepingwell, "Ukraine, Russia, and the Control of Nuclear Weapons", *RFE/RL Research Report*, Vol. 2, No. 8, 19 February 1993, p.9.

According to Campbell et al, "Even relatively advanced PALs would not prevent, but only delay, abuse of a nuclear weapon seized by terrorists or political factions." Kurt Campbell et al, Soviet Nuclear Fission: Control of the Nuclear Arsenal in a Disintegrating Soviet Union CSIA Studies in International Security No.1 (Cambridge, MA: Center for Science and International Affairs, Harvard University, 1991), p.35.

¹⁷ See William Kincade, "Nuclear Weapons in Ukraine: Hollow Threat, Wasting Asset", *Arms Control Today*, July / August 1993, p.13-18. See also Testimony of Dr Bruce Blair, "U.S. Policy on Ukrainian Security", p.39-41.

³⁸ Bruce Blair, "Russian Control of Nuclear Weapons", in Quester (ed), The Nuclear Challenge in Russia and the New States of Eurasia, p.66.

Ukraine were whether nuclear weapons were an effective guarantor of its security³⁹, and if indeed Russia would allow it to retain the weapons. This was to be debated, often quite publicly, by the Ukrainian Rada.⁴⁰

The greatest value of nuclear weapons to the three republics was to lie in their potential for extracting concessions, both security and economic, from Russia and the US. This implied giving up the rights to long-term possession but bargaining on the price of the return of the nuclear weapons, both strategic and tactical, as well as the fissile materials located on their territory. As will be shown below, all three states did arrive at this conclusion although it did not happen immediately and the terms of agreement differed appreciably.

Russia

Forging Nunn-Lugar

In January 1992, US SSD experts (headed by Under Secretary of State Bartholomew) visited Moscow and began talks on possible areas where Nunn-Lugar funds could be of assistance. Bartholomew continued on to Kiev, Minsk and Alma-Ata alone. A breakthrough was achieved when Russian officials cited the most important impediments to dismantlement: the lack of long-term storage facilities, and the need for additional transportation assets and specialised containers for the transportation of nuclear weapons, components and materials.⁴¹

This information provided the US with guidelines that would enable it to design specific assistance packages. In February Secretary of State Baker presented seven papers to Russian Foreign Minister Kozyrev, each describing an area where US assistance could enhance safe and secure dismantlement. These areas were as follows:

- 1) transport and storage containers for fissile material
- 2) 'supercontainers' and armoured blankets for transport protection
- 3) safe, secure railcars

³⁹ According to Sherman Garnett, the Ukrainian military leadership, whose overriding priority was the establishment of a national military force, viewed nuclear weapons as "an unwanted competitor for extremely scarce defense resources." Garnett, "The Sources and Conduct of Ukrainian Nuclear Policy", in *Ibid.*, p.142.

⁴⁰ See Kuzio, "Nuclear Weapons And Military Policy In Independent Ukraine", p.8-13.

⁴¹ Report to the Senate Committee on Foreign Relations by Burns, p.40.

- 4) storage facilities
- 5) accident response equipment and training
- 6) development of a state system of accounting and control
- 7) ultimate disposition of highly enriched uranium and plutonium.⁴²

These papers provided the basis for the next round of talks as well as some initial technical discussions.

It was at this time that an important fissile material protection, control and accounting (MPC&A) program was initiated.⁴³ Known as the lab-to-lab program, it commenced in February 1992 when the directors of the Los Alamos and Lawrence Livermore National laboratories met with their counterparts from Arzamas-16 and Chelyabinsk-70 laboratories. 44 In June the first of a series of US-funded collaborative projects began. These projects were to include research into lasers and optics, metallurgy and high-explosive driven pulsed power generators, and received the blessing of the cash-strapped Russian government. In April 1994 Undersecretary of Energy Charles Curtis directed US labs to expand the scope of the lab-to-lab program to include "joint work on nuclear material protection, control and accounting." As a direct result, in June 1994, contracts were signed to develop a Russian MPC&A system at Arzamas-16 and a model physical protection system at the Kurchatov Institute (led by the Sandia National Laboratory). Funding for the projects was provided by the Department of Energy. FY 1994 funding totalled \$2 million dollars, however this was increased to \$15 million for FY 1995 given the initial success of the program.45

Specifically, the program at the Kurchatov Institute focused on security upgrades at one building (presumably a sensitive facility in terms of proliferation dangers), and then to be extended throughout the Institute. The upgrades were completed in December 1994 and put in place by February 1995. These included conducting a

⁴² lbid., p.40-41.

⁴³ Initially a creation of the Los Alamos National laboratory, the Department of Energy took over management of the lab-to-lab program in 1994.

Information on the lab-to-lab program is taken from Graham Allison, et al, Avoiding Nuclear Anarchy: Containing the Threat of Loose Russian Nuclear Weapons and Fissile Material, CSIA Studies in International Security No.12 (Massachusetts: The MIT Press, 1996), p.83-88. According to Katherine Johnson, the National Security Council authorisation for invitations to Russian directors were delayed for a year, "owing primarily to preoccupation with the Gulf War." John Shields and William Potter (eds). Dismantling the Cold War: U.S. and NIS Perspectives on the Nunn-Lugar Cooperative Threat Reduction Program, CSIA Studies in International Security (Massachusetts: The MIT Press, 1997), p.240.

⁴⁵ The FY94 funds were reprogrammed. However the FY95 \$15 million was provided to the DoE from the Nunn-Lugar budget. *Ibid.*, p.84.

physical inventory of the fissile material, installing a new fence with intrusion sensors, remote cameras, interior alarms and a central alarm station at a cost of \$1 million shared by Sandia, Kurchatov and Eleron, a MINATOM institute which manufactured nuclear safety equipment.⁴⁶

The program at Arzamas-16 began with training for Russian scientists at Los Alamos during August 1994 followed by the construction of an MPC&A system at Arzamas-16. The equipment from this system was moved to MINATOM headquarters by orders of Minister Mikhailov in May 1995 where it was shown to government officials and nuclear plant managers. As a result, similar equipment was purchased and installed at Obninsk and Chelyabinsk-70. The program expanded further to include Tomsk-7, the Mayak Production Association at Chelyabinsk-65, the Institute of Automatics and the Institute of Inorganic Materials. Plans were developed to involve Russian naval storage facilities, the plutonium production facility and reprocessing plant at Krasnoyarsk-26 and the Urals Electrochemical Integrated Enterprise, which produced HEU.⁴⁷ Similarly, there were discussions between US officials and representatives from the four Russian nuclear weapons assembly and disassembly facilities to improve MPC&A at these facilities also.⁴⁸

The Nunn-Lugar equivalent of the lab-to-lab program was referred to as the government-to-government program. While CTR funds were used to finance this project, the Department of Energy was responsible for implementation. Although Nunn-Lugar MPC&A negotiations began during mid-1992, it was only in September 1993 that an agreement was signed to develop a model MPC&A system at the Russian Electrostal fuel fabrication facility. Delays in providing assistance stemmed from Russian reluctance to grant US officials access to sensitive nuclear facilities and disputes between MINATOM and Gosatomnadzor (GAN), the supposed nuclear regulatory agency, as to GAN's statutory authority. However, despite these problems, the government-to-government program expanded to include thirteen separate projects as of early 1996 and had budgeted \$63.5 million, obligated \$59.2 million and spent \$3.8 million.⁴⁹

⁴⁶ Allison et al, Avoiding Nuclear Anarchy, p.84-5.

⁴⁷ Global Organized Crime Project, *The Nuclear Black Market: CSIS Task Force Report* (Washington, D.C.: Center for Strategic and International Studies, 1996), p.23

⁴⁸ The four facilities were Avangard, Penza-19, Sverdlovsk-45 and Zlatoust-36. General Accounting Office, Nuclear Nonproliferation: Status of U.S. Efforts to Improve Nuclear Material Controls in Newly Independent States, Report to Congressional Requesters, GAO/NSIAD/ RCED-96-89, March 1996, p.38.
⁴⁹ Ibid., p.28-31.

During March 1992 another SSD meeting was held in Moscow, by which time Major General William Burns⁵⁰ had come out of retirement to lead the US delegation.⁵¹ Further progress was made as Russian officials made a series of commitments to provide additional information to enable the Department of Defense (as Executive Agent of the program) to determine the "precise requirements in each area and to make final decisions on what assistance the US would provide."⁵²

On April 8 1992 Russia, Belarus and Ukraine were certified by the Secretary of State (as delegated by the President) as meeting the requirements for Nunn-Lugar assistance.⁵³ Notably, Kazakhstan was not certified at this time due to President Nursultan Nazarbayev's policy of remaining deliberately ambiguous on how, when and if his country would return its nuclear weapons to Russia.⁵⁴ However, Kazakhstan was certified on June 17, after it made an unambiguous commitment to non-nuclear status, adherence to the NPT as a Non-Nuclear Weapon State (NNWS) and the withdrawal of all strategic forces by the end of the START I reductions period.⁵⁵

Consequently that same month Russian SSD experts visited Albuquerque for a demonstration of US nuclear accident response equipment and in June US SSD experts visited the Russian-proposed fissile material storage facility site in Tomsk as well as a nuclear fuel fabrication plant outside Moscow.

Nuclear Renunciation", p.17-18.

⁵⁰ Burns was succeeded by James Goodby, former chief US representative to the Conference on Disarmament in Europe, in March 1993,

March 1992 also saw the establishment of a NATO Ad Hoc Group to discuss nuclear weapons security in the FSU. At this forum allies could exchange information about dismantlement programs and coordinate efforts informally. Although not a focus of this thesis, a number of countries contributed assistance to the nuclear leakage problem, albeit on a relatively small scale. They included British programs to supply special 'supercontainers' for transporting nuclear materials and improve material contre! and accounting at Chelyabinsk-65; a EURATOM program to improve former Soviet nuclear assaying and regulatory capabilities; EU, German, Swiss, Swedish, Canadian and Japanese contributions to the ISTC and STCU; assistance for export controls in the Baltic states by a number of Scandinavian countries; and the promise of Japanese assistance for plutonium storage in Russia. Allison et al, Avoiding Nuclear Anarchy, p.143.

Specifically Russian officials indicated that they required 45,000 fissile material transportation and storage containers, with an *immediate* requirement for 10,000. In addition to the seven areas of assistance agreed upon by Baker and Kozyrev in February, interest was shown in US assistance for Russian silo dismantlement, missile dismantlement and other aspects of START requirements. Testimony of Major General William Burns in "U.S. Plans and Programs Regarding Dismantling of Nuclear Weapons in the Former Soviet Union", *Hearing before the Committee on Foreign Relations*, United States Senate, One Hundred Second Congress, Second Session, July 27 1992, p.7-8.

See "Executive Branch Certifications" in "U.S. Plans and Programs Regarding Dismantling of Nuclear Weapons in the Former Soviet Union", p.34-45. On the politics of certification, see Chapter 4 of this thesis.

On Kazakhstan's early ambiguity see Reiss, *Bridled Ambition*, p.138-149; and Potter, "The Politics of

Report to the Senate Committee on Foreign Relations by Burns, p.48. See also "Certification of Commitments of Kazakhstan: Justification" in "U.S. Plans and Programs Regarding Dismantling of Nuclear Weapons in the Former Soviet Union", p.45-48.

It was at this time (May 6 1992) that CIS officials announced in Moscow that all tactical nuclear weapons had been removed from Ukraine⁵⁶, all tactical nuclear weapons having been removed from Kazakhstan and Belarus by January 31 and April 28 respectively.⁵⁷ This announcement proved deeply embarrassing to Ukrainian President Leonid Kravchuk who had previously insisted that the transportation process was to be completed by July 1. On May 7 he was forced to admit that he was unaware that transportation had been completed but had received confirmation overnight via cable from his Minister of Defence.⁵⁸ Ukraine was not the only one. It appears that officials in Belarus and Kazakhstan were similarly unaware of the accelerated pace of Russian tactical nuclear weapons withdrawals and resented such unilateral action.⁵⁹ While Russia's willingness, and ability, to accelerate the pace of withdrawal without consulting its supposed partners exhibited a keen interest in averting possible nuclear leakage, it also bred suspicion amongst the non-Russian states.⁶⁰ This was to lead to acrimonious disputes over compensation for the value of the fissile material recovered from these weapons in later months.⁶¹

The US certifications and the SSD meetings culminated, during May / June 1992, in the signing of four assistance agreements at the Moscow Bush-Yeltsin summit. The first was an SSD Umbrella Agreement between the US and Russia which provided the legal framework for the Nunn-Lugar assistance⁶² and enabled the other three agreements to be funded. These three consisted of agreements to supply surplus US Army "armoured blankets" to MINATOM for enhancing nuclear weapons

⁵⁶ This claim was disputed by Stanislav Lunev, a former colonel in Russia's Military Intelligence Agency, who stated that "... nobody knows where these [tactical] weapons went after the disintegration of the USSR. The Russian government doesn't know either, but still insists that there is nothing to worry about." Quoted in Shields and Potter (eds), Dismantling the Cold War, p.315.

⁵⁷ "Chronology of U.S.-Soviet-CIS Nuclear Relations", Arms Control Today, June 1994, p.32, 58 "Ukraine Chief Admits Arms-Transfer Error", The New York Times, May 8, 1992, p.A9.

⁵⁹ Reiss, Bridled Ambition, p.131-132, 143-144; Vyachaslau Paznyak, "Belarusian Denuclearization Policy and the Control of Nuclear Weapons", in Quester (ed), The Nuclear Challenge in Russia and the New States of Eurasia, p.158,

Unfortunately Ukrainian President Kravchuk probably contributed to this action by announcing, on March 12, that the withdrawal of tactical nuclear weapons had been temporarily suspended, because he could not be assured that the weapons were being destroyed and a concern that they may "fall into the wrong hands." This decision was reversed in early April. Douglas L. Clark, "Uproar Over Nuclear Weapons", RFE/RL Research Report, Vol. 1, No. 13, 27 March 1992, p.51.

⁶¹ See Potter, "The Politics of Nuclear Renunciation"; and Reiss, Bridled Ambition, p.89-150.

⁶² The Nunn-Lugar process is as follows:

Umbrella Agreements - Implementing Agreements - Requirements / Definitions - Contracting Process - Execution / Delivery. Assistant to the Secretary of Defense, 1996 Cooperative Threat Reduction Program Plan (unclassified), III-4.

protection during transport, accident response equipment and training⁶³ and the supply of an initial 10,000 fissile material containers for transportation and storage with a total of 100,000 containers to be delivered by 2001.⁶⁴ These agreements, signed on June 17 1992, coincided with the release, within the United States on May 22, of a document entitled *Forecast To Industry* by the DoE and the Defense Nuclear Agency. Its aim was to alert US industry to the programs Nunn-Lugar envisioned and to initiate the formal contracting process.⁶⁵

The summit also produced a US-Russian 'Joint Understanding' establishing a framework for START II.

During mid-July a US team visited the St Petersburg Design Bureau to discuss technical problems concerning the construction of a fissile material storage facility and this was reciprocated on August 3 when a Russian team visited the US Army Corps of Engineers in Omaha.⁶⁶ These technical discussions culminated in the storage facility agreement described below.

The armoured blankets, accident response equipment and fissile material containers agreements were complemented by an SSD meeting in Moscow during August at which time a further three agreements were negotiated. The first agreement signed committed the US to supply Russia with conversion kits for cargo and railcars destined to transport fissile materials.⁶⁷ The second agreement (initialled in Moscow and subsequently signed in Washington) guaranteed US financial and technical

⁶³ Accident response equipment and training consisted of communications equipment, protective clothing, high energy radiography equipment and systems used to stabilise and package damaged weapons and spare parts as well as initial training and possibly initial maintenance services. Report to the Senate Committee on Foreign Relations by Burns, p.42. Initial armoured blankets and related equipment deliveries were completed in July 1992, facilitating an increased rate of delivery in the next twelve months. General Accounting Office, Weapons of Mass Destruction: Reducing the Threat From the Former Soviet Union, Report to Congressional Requesters, GAO/NSIAD-95-7, October 1994, p.22.

The total of 100,000 containers was reached because two to five containers are required to hold components from a single warhead and Russia might have to store components from as many as 24,000 dismantled warheads by 2001. General Accounting Office, Weapons of Mass Destruction: Status of the Cooperative Threat Reduction Program, Report to Congressional Requesters, GAO/NSIAD-96-222, September 1996, p.7; and General Accounting Office, Weapons of Mass Destruction: Reducing the Threat From the Former Soviet Union: An Update, Report to Congressional Requesters, GAO/NSIAD-95-165, June 1995, p.20. Ten prototype containers were delivered in April 1993.

⁶⁵ Testimony of Dr John Birely, Acting Assistant to the Secretary of Defense, Atomic Energy, in "U.S. Plans and Programs Regarding Dismantling of Nuclear Weapons in the Former Soviet Union", p.12.

Testimony of Burns in *Ibid.*, p.6.

⁶⁷ Up to 100 cargo and 15 guard conversion kits were to be delivered at a cost of no more than \$20 million. American contractors would develop the kits by modifying a Russian railcar in the US then shipping that railcar back to Russia to be approved. Subsequent modifications could be completed in Russia. *Ibid.*, p.43. The installation of all 115 modification kits was completed in April 1996 and the spare parts were shipped in January 1997. Department of Defense, *Cooperative Threat Reduction Briefing Book*, "CTR Detailed Project Overviews—Security Enhancements for Railcars", 20.06.97.

assistance in the construction of a fissile material storage facility. Agreement on US assistance was reached on October 6. The Army Corps of Engineers was responsible for storage facility design assistance while DoE provided design expertise from the Albuquerque Operations Office for project oversight; the Los Alamos National Laboratory for control, accounting and safeguards; and the Sandia National Laboratory for physical security and materials handling. Mayak was the agreed location for the storage facility. In March 1996 MINATOM officials expressed interest in the construction of another storage facility at Tomsk. Interestingly Tomsk was chosen as the original site but opposition from the local community and the city council, reinforced by the explosion of a uranium waste tank on April 6 1993, forced it to be relocated. 68 However it appears that the Tomsk site has once again been selected in order to handle START II warhead reductions.⁶⁹ Initial furning was set at \$15 million, with a further \$75 million for equipment purchase provided in September 1993.70 The third agreement, initialled in Moscow, committed Russia to the sale of 500 metric tonnes of highly enriched uranium (HEU) from dismantled nuclear weapons to the US Enrichment Corporation. Once in the US the HEU would be blended down to low enriched uranium (LEU) to be sold by the DoE for use in civilian power plants. The US insisted that it would not sign the deal until the four 'nuclear Republics' could agree upon a "an equitable and appropriate sharing of the proceeds of the sale." For this reason, as well as a number of others largely to do with the American domestic uranium enrichment industry, the agreement was not signed until January 14 1994.⁷¹

Although no implementing agreements were signed, discussions continued on nuclear material protection, control and accounting (MPC&A) and agreement was reached on a bilateral work program including technical exchanges, seminars and site visits.⁷² The urgency of this project, from a proliferation perspective, can be inferred from statements from US officials, arguing that the former Soviet MPC&A system lagged twenty years behind the US system.⁷³

²³ GAO/NSIAD-95-7, p. 11.

⁶⁸ Office of Technology Assessment, "Opportunities to Aid Russian Dismantlement" in "Disposing of Plutonium in Russia", p.136; "Newsbrieß: Explosion at Russian Nuclear Plant", *Arms Control Today*, Vol. 23, No. 4, May 1993, p.27.

⁶⁹ GAO/NSIAD-96-222, p.10; Office of Technology Assessment, "Opportunities to Aid Russian Dismantlement", p.136; 1996 Cooperative Threat Reduction Program Plan (unclassified), IV-33 - 34.

Dunbar Lockwood, "The Nunn-Lugar Program: No Time To Pull The Plug", Arms Control Today, Vol. 25, No. 5, June 1995, p.12.

⁷¹ Burns Report to the Senate Committee on Foreign Relations, p.43. For a comprehensive discussion of the HEU deal until September 1995 see Richard Falkenrath, "The HEU Deal", in Allison, et al, Avoiding Nuclear Anarchy, Appendix C.

⁷² Burns Report to the Senate Committee on Foreign Relations, p.44.

In October the FY93 DoD Appropriations Act was passed, which included the "Former Soviet Union Demilitarization Act of 1992". This follow-on legislation to the "Soviet Nuclear Threat Reduction Act of 1991" authorised an additional \$400 million to "eliminate weapons of mass destruction and their infrastructure in the former Soviet Union" which, according to SSD head William Burns, reflected the expanded scope of SSD and was intended to accelerate the pace of warhead removal for elimination as well as ballistic missile / heavy bomber elimination under START. 76

The November 1992 SSD meeting in Moscow focused on refining the agreements reached during August. A US draft contract for the HEU purchase was circulated, as was a draft agreement on assistance for the Russian export control system. Discussions gave US experts a better sense of Russian plans and capacity for the storage of fissile material. Talks also resulted in US negotiators affirming an offer to expedite the elimination of strategic offensive arms slated for START reduction. In line with this, the most effective ways to assist Russia were reviewed with Russian officials making some specific requests.

However, on November 4 the Russian Supreme Soviet stipulated in its START I ratification resolution that it would not exchange the instruments of ratification until after Ukraine acceded to the NPT as a Non-Nuclear Weapon State. The Supreme Soviet remained true to its word and START I entered into force on December 5 1994 when Ukraine became a NNWS to the NPT. This did not stop the dismantlement in Russia of START-accountable weapons, predominantly older Russian systems and systems returned from Ukraine and Kazakhstan. The SS-25s returned from Belarus were redeployed in Russia.

Despite START I being ratified by the Supreme Soviet, the US-Russian agreement on the safe and secure dismantlement of nuclear weapons foundered, due to Russian parliamentary concerns about limited US liability for accidents. According to John Lepingwell, "the agreement appears to never have been formally ratified, although Yeltsin did pass a special decree enabling the assistance after the forcible dissolution of the Supreme Soviet in October 1993."

⁷⁴ Public Law 102-484—OCT. 23, 1992; Sec. 1401-1441.

⁷⁵ Ashton Carter, The Nuclear Roundtable with Ashton Carter, Assistant Secretary of Defense for International Security Policy, The Stimson Center, November 16 1995

http://www.stimson.org/pub/stimson/rd-table/carter.htm Accessed 05/2/97.

⁷⁶ Burns Report to the Senate Committee on Foreign Relations, p.44.

[&]quot; Nuclear Successor States of the Soviet Union, May 1996, p.5.

¹⁸ John Lepingwell, Is START Stalling?", in Quester (ed), The Nuclear Challenge in Russia and the New States of Eurasia, p.122, footnote 45.

SSD meetings in December, in Moscow, and January 1993, in Washington, achieved further progress on previous agreements. Minor revisions to the HEU disposition agreement were made and the key provisions of the HEU purchase contract were settled. In addition the DoE agreed to purchase 4.1 million pounds of LEU between the time of the December / January meetings and the implementation of the HEU contract to provide Russia with badly needed eash flow. 79 At the same time US Strategic Nuclear Delivery Vehicle (SNDV) experts visited Moscow additional information exchanges and to better define Russian needs in this area.80

Rejuvenating Nunn-Lugar

In comparison to the Republicans, the Clinton Administration made a number of important changes reflecting a higher priority accorded to CTR activities. These included making Nunn-Lugar funds for Fiscal Year 1994 and beyond a separate line item in the defence budget, rather than being funds reprogrammed from other, often jealously guarded, programs. Then there was Secretary of Defense Les Aspin's decision to appoint Graham Allison and Ashton Carter (the Nunn-Lugar 'czar') assistant secretaries. In addition, a concerted effort by sections of Congress and the executive branch to broaden the scope of the assistance program contrasted favourably with the Bush Administration. Finally, the White House established a Cooperative Threat Reduction Program Office.81

It should be noted, however, that not all of these innovations met with unanimous approval. According to Charles Flickner, since being appointed, Carter and his staff "neglected to establish close relations with other parts of the executive branch and the defense committees of Congress. As a result, quiet opposition from other elements of the defense establishment frequently delayed the [CTR] effort." 82

82 Flickner, "The Russian Aid Mess", The National Interest, Winter 1994/95, p.17. This assertion has been supported by interviews conducted by the author with Congressional aides and government officials in Washington, D.C. between March 5 and 10 1998.

⁷⁹ The first shipment of uranium from former Soviet warheads arrived in the US during the week of 17-24 June 1995. "News Briefs: First Shipment of Russian Uranium Arrives in U.S.", Arms Control Today, Vol. 25, No. 6, July/August 1995, p.27.

80 Burns Report to the Senate Committee on Foreign Relations, p.44-45.

More recently, on October 1 1998, Defense Secretary William Cohen announced the merger of the Defense Technology Security Agency, the Defense Special Weapons Agency and the On-Site Inspection Agency into the Defense Threat Reduction Agency (DTRA). Cooperative Threat Reduction is amongst DTRA's eight directorates. "News Briefs: Defense Threat Reduction Agency Created", Arms Control Today, Vol. 28, No. 7. October 1998, p.29.

Ashton Carter's appointment was important for the CTR program. According to Les Aspin, "We now have people who are running this program who like it, who are in favor of it, who want to make it happen. . . We're hopeful that a change of attitude here is going to produce a change of results." In many ways Carter's appointment was the embodiment of Roger Hilsman's vision of an "expediter with extraordinary powers [who] may often be the answer to a production problem or to getting a crash program on the road". 84

Carter was a true believer in the program, much like his bosses: Les Aspin and William Perry, who replaced Aspin in 1994. Carter and Perry determined to implement the program at ground level, rather than discuss and negotiate in a traditional arms control manner at the diplomatic level, which was seen as a barrier to progress. It was felt that making the program work was a DoD task because the Pentagon possessed the expertise, as well as the working relationship with the Russian military, who would be the recipients of CTR assistance. Carter and Perry also believed that other departments possessed the expertise to efficiently manage various programs so vested authority with these agencies —Energy, State, Commerce—to carry out specific projects. This played a large role in the "dramatic take-off" of CTR in 1994, often referred to for public relations purposes as the "Year of Implementation", as compared to 1993, which was seen as the "Year of Negotiations".

However, Carter's streamlining and appropriation of the program also attracted opposition. In part this was due to bureaucratic turf battles, but it also reflected Carter's personal style. DoD's control of the program was actively resisted by the White House. According to one close observer, this was, in part, a function of the office itself. Carter headed the International Security *Policy* office in DoD, but the Pentagon was driven by acquisitions. This apparent contradiction led to a disconnect.⁸⁷

⁸³ Quoted in Lockwood, "Dribbling Aid To Russia", p.42, Carter and Allison were two of the editors of Cooperative Denuclearization.

Hilsman, To Move A Nation, p.21. In regard to Clinton's May 1998 decision to appoint a national coordinator for security, infrastructure protection, and counterterrorism to combat 'catastrophic terrorism', Carter, John Deutch and Philip Zelikow observed that "one should not place faith in czars" of this type. Rather, power should reside in executive departments, rebuking the White House-driven 'direction from above' that Carter found such an impediment to making progress in CTR activities during his time at DoD. Carter, Deutch and Zelikow, "Catastrophic Terrorism", Foreign Affairs, Vol. 77, No. 6, November/December 1998, p.82-3; Interviews, March 25, 26 1998.

⁸⁵ Interview, March 26, 1998.

Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, Cooperative Threat Reduction, p.10.

⁸⁷ Interview, Washington, D.C., March 9 1998.

Rose Gottemoeller, Director for Russia, Ukraine, and Eurasia on the National Security Council staff with responsibility for denuclearization from January 1993 to December 1994, argued that a key reason for the success of the Clinton Administration's CTR policy during its first year was that,

the White House exercised full flexibility to use the Nunn-Lugar Program — together with other tools of diplomacy and inducements — to secure progress. Today, denuclearization would be more likely to fail, for Nunn-Lugar and other related assistance have dispersed and disappeared into the government departments responsible—for implementing the programs — the Departments of Defense, Energy, and State. . . Diplomacy, the marshaling of incentives, and strategic policy planning all reside in different government locations and are brought together on increasingly rare occasions. 88

The prescriptions offered by Carter and Gottemoeller for making Nunn-Lugar more effective were diametrically opposed. Gottemoeller's coordination was seen in the Defense Department as an impediment to actually "getting the job done". While DoD accepted the White House's role in providing a framework for Nunn-Lugar, implementation could only be effectively achieved by the various departments, which possessed the expertise (technical, programmatic and acquisition staff) to do so. Gottemoeller's description of Nunn-Lugar as being "Balkanized", after Deputy Secretary of Defense John Deutch organized for DoD to "divest itself of the less palatable—from the perspective of the defense budget hawks—aspects of the program" to the Departments of Energy, State and Commerce on the DoD as an attempt to micromanage the program which would effectively ensure that nothing happened, as had been the case during the Bush Administration and the first year of the Clinton Administration.

Despite these problems, the innovations introduced by the Democrats were complemented by the fact that towards the end of 1993 much of the time-consuming

⁸⁸ Rose Gottemoeller, "Presidential Priorities in Nuclear Policy", in Shields and Potter (eds), *Dismantling the Cold War*, p. 61.

⁸⁹ Interview, March 26, 1998.

⁹⁰ Gottemoeller, "Presidential Priorities in Nuclear Policy", p.69.

⁹¹ Interview, March 26, 1998.

preliminary negotiating was nearing completion, thus the rate of implementation would have increased appreciably anyway. However, even CTR supporters lamented a perceived lack of leadership by the Clinton Administration. At the highest levels of government, the Clinton team did not make CTR a real priority, considering it a small program among many others, and this contributed to the lack of understanding in Congress. For managers like Carter, this would also have been seen, in a sense, as a positive because the White House was not actively trying to reclaim the authority residing within the departments.

Equally important were the recipient countries themselves. The new (often disorganized) governments in Belarus, Kazakhstan and Ukraine, having had little if any experience in nuclear weapons and arms control issues⁹³ and engrossed in the process of state-building, were slow to develop a cadre of technical experts in the nuclear weapons area. In addition, government officials and parliamentarians had difficulty in understanding the differences between such US legal terminology as 'notify', 'appropriate' and 'obligate' when it came to providing assistance.⁹⁴ While Russia inherited the "basic institutions and personnel from the USSR that, in matters of arms control and national security, make it an old and experienced state"⁹⁵, the responsible departments were jealous of each other and greedy to get their hands on Nunn-Lugar funds.⁹⁶ However, over time the recipient governments developed the expertise to understand and effectively contribute to the smooth flowing of the CTR program.

⁹² Interview, Washington, D.C., March 13 1998.

This is not to say that nuclear issues had been ignored in these states. For example, in 1968 and 1990 both Belarus and Ukraine sought membership in the NPT, only to be opposed by Moscow. William Potter, "The Politics of Nuclear Renunciation: The Cases of Belarus, Kazakhstan, and Ukraine", The Henry L. Stimson Center Occasional Paper, No. 22, April 1995, p.12-13.

¹⁴ John Shields and William Potter, "Cooperative Assistance: Lessons Learned and Directions for the Future", in Shields and Potter (eds), *Dismantling the Cold War*, p.396.

Sherman Garnett, "The Sources and Conduct of Ukrainian Nuclear Policy: November 1992 to January 1994", in George Quester (ed), *The Nuclear Challenge in Russia and the New States of Eurasia* (M.E. Sharpe: Armonk, 1995), p.147, footnote 2.

hterview with a former senior Defense Department official, 26 March 1998.

Realizing Nunn-Lugar

While Nunn-Lugar negotiations were moving slowly but surely ahead under the new administration, a number of differences between the cooperation the US was willing to provide and the cooperation the Russians expected, remained. Chief among these was the issue of reciprocity. In testimony before the Senate Governmental Affairs Committee on March 9 1993, Joseph Kelley of the General Accounting Office argued that Russia's refusal to permit direct US involvement in its warhead dismantlement process appeared to "seriously constrain U.S. policy options" to help accelerate dismantlement. While it was argued that the Russians would have accepted such intrusive US involvement if the US agreed to similar measures at US dismantlement sites such as Pantex 98, officials were insistent that Russia "neither needs nor wants a direct U.S. role in its dismantlement operations." In practice this led to a compromise where US and Russian observers were effectively excluded from the actual dismantlement process.

Despite problems at the working level, the US announced four new Nunn-Lugar implementing agreements during the April 3-4 1993 Vancouver Summit. These were: \$130 million to dismantle delivery vehicles; \$10 million for control and accounting systems; \$6 million for housing for Russian military officers returning from abroad (under the Russian Office of Resettlement); and \$75 million for a plutonium storage site. According to GAO officials, Russian officials indicated that they would have to slow their planned rate of warhead dismantlement if a new fissile material storage facility was not built by 1997. US and Russian officials also negotiated agreements committing \$10 million to an Arctic Nuclear Waste Assessment study, signing the Implementing Agreement on April 6, as well as \$15 million for military-to-military contacts, signing the Implementing Agreement on September 8. 101

Another important achievement at Vancouver was the establishment of the U.S.-Russian Joint Commission on Economic and Technological Cooperation, more commonly known as the Gore-Chernomyrdin Commission. Meetings of this

Joseph Kelley, "Soviet Nuclear Weapons: U.S. Efforts to Help Former Soviet Republics Secure and Destroy Weapons", GAO/T-NSIAD-93-5, p.2, in "Disposing of Plutonium in Russia", p.31.

Dunbar Lockwood, "Clinton, Yeltsin Advance Arms Control at First Summit", Arms Control Today, Vol. 23, No. 4, May 1993, p.19.

101 Ibid., p.26; 1996 Cooperative Threat Reduction Program Plan (unclassified), Addendum II, A2-2.

Dunbar Lockwood, "GAO Study Outlines Obstacles To Soviet Warhead Dismantlement", Arms Control Today, Vol. 23, No. 3, April 1993, p.25.

commission, headed by Vice President Al Gore and Russian Prime Minister Viktor Chernomyrdin, focused largely on CTR-related problems and were useful in resolving difficulties in implementing agreements reached at the Presidential summit level. ¹⁰²

Although the signing of agreements was the first, and probably most timeconsuming (excluding the US contract tendering process) step in the release of Nunn-Lugar funds, recipient-country officials frequently complained of the chasm dividing US promises and the provision of assistance. ¹⁰³ This complaint appeared to be justified with the release, in late May 1993, of the Defence Department's quarterly status report to Congress. According to the report, of the \$800 million in Nunn-Lugar funds appropriated to FY 1993, only \$31.3 million had been obligated through signed contracts and less than that actually spent. In response President Clinton proposed that funds be placed in a separate account and that other restrictions be lifted to quicken response time and expand the scope of projects. 104 As mentioned above, legislation for FY 1994 (P.L. 103-160—Nov. 30, 1993) established Nunn-Lugar as an additional line item, rather than a reprogramming of existing DoD funds. In May 1994 the Cooperative Threat Reduction Program Office was established within the Office of the Assistant to the Secretary of Defense (Atomic Energy). According to the DoD, the office focused "the attention of a dedicated staff on effective and efficient implementation of CTR's objectives." This reflected the expanding scope of the Nunn-Lugar program as well as the perceptible shift from project negotiation to project implementation. 106 In addition, a number of Nunn-Lugar programs were expanded to include funding from other Departments, which managed to avoid stringent DoD accounting procedures. For example, the Departments of State and

¹⁰² Shields and Potter (eds), Dismantling the Cold War, p.78-79.

At an August 1995 conference on the CTR program, representatives from the recipient countries levelled a number of specific complaints about the Nunn-Lugar program. These included: the slow pace of implementation; the lack of information on current funding obligations and delivery schedules; the lack of US management flexibility and the imposition of US accounting rules, work plans and schedules; the use of US contractors; the high level of US bureaucracy consuming CTR resources; and the amount of "nuclear tourism" by US officials. See John Shields, "Conference Findings On The Nunn-Lugar Cooperative Threat Reduction Program: Donor And Recipient Country Perspectives", *The Nonproliferation Review*, Vol. 3, No. 1, Fall 1995, p.69.

Dunbar Lockwood, "U.S. Security Aid Moves Slowly To Former Soviet States", Arms Control Today, Vol. 23, No. 6, July/August 1993, p.26.

Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, Cooperative Threat Reduction (Arlington, VA: Cooperative Threat Reduction Program Office, Department of Defense, April 1995), p.11.

Ashton Carter, Assistant Secretary of Defense for International Security Policy, described 1993 as the "year of negotiations" and 1994 as the "year of implementation". See Jason Ellis, "Nunn-Lugar's Mid-Life Crisis", Survival, Vol. 39, No. 1, Spring 1997, p.94.

Commerce funded an export control program, State funded the science-centre projects and Energy funded the MPC&A program. 107

Finally, after more than a eighteen months of negotiations, the Agreement Between the Department of Defense of the United States of America and the Committee for Defense Industry of the Russian Federation Concerning Cooperation in the Elimination of Strategic Offensive Arms was signed on August 26 1993. This Implementing Agreement consisted of five specific projects. These were:

- SLBM/ICBM Missile Elimination to assist the elimination of SS-24, SS-25 and SS-N-20 Solid Fuel Motors and the remaining propellant as well as SS-18 missiles (all SS-18s were slated for elimination under START II).
- SLBM/ICBM Launcher Elimination to assist Russia dismantle an estimated 145 ICBM silos (50 SS-11/13, 20 SS-17, 65 SS-19 and 10 SS-24); an estimated 512 launch tubes from 36 ballistic missile submarines; and 36 rail-mobile SS-24 launchers.
- Heavy Bomber Elimination to assist Russia eliminate 77 heavy bombers by 2001. As of 1996 contracts were awarded and all equipment deliveries were completed.
- 4. Liquid Propellant Elimination to assist Russia to eliminate propellant from liquid-fuelled ICBMs and SLBMs. This was crucial, as launchers could not be removed for elimination before they were de-fuelled. 540 intermodal tanks and 100 flatbed railcars were shipped to seven storage locations in Russia by November 1995.
- 5. Emergency Response Support Equipment to assist Russia in the safe and secure dismantlement of ballistic missiles and propellants. The initial emergency response train was delivered to Perm in September 1995.

However, while officials quite justifiably considered this among the most important of the CTR agreements negotiated with Russia, the General Accounting Office reported in June 1995 that by July 1994 Russia had eliminated 400 launchers while dismantlement assistance deliveries from the US did not begin until September 1994. While this clearly raised the very important question of exactly how much assistance Russia needed to meet its arms control obligations and how much could be achieved

¹⁰⁷ See Ellis, "Nunn-Lugar's Mid-Life Crisis", p.105.

¹⁰⁸ All information is taken from 1996 Cooperative Threat Reduction Program Plan (unclassified), IV-26 -

^{32.} A sixth project relating to Chemical Weapons conversion falls beyond the scope of this thesis.

without such assistance, it appears that very few questions were asked by Administration officials and members of Congress. 109

The aforementioned dismantlement agreements were closely followed by the finalization of a fissile material control and accounting agreement on September 2 1993, the details of which had been under intense discussion since mid-1992. While US officials and members of Congress considered this critical to averting 'nuclear leakage' 110, progress in this area, which totalled just over \$89 million in obligations by the third quarter of 1996 111, was considered incommensurate with the danger. As late as March 1996 Sam Nunn argued:

The protection and control of nuclear materials, and to some extent even nuclear weapons, continues to be a challenge. Despite efforts by Russia, and joint projects with the U.S., GAO will release its report that explains how there is still not even an inventory for the hundreds of tons of nuclear materials that are spread out over more than 80 civilian facilities in the former Soviet Union. 112

In July 1994 a Russian delegation visited DoE's Hanford facility to discuss ways to strengthen the physical security of fissile materials at Russian civilian and military programs. According to *Arms Control Today*, the visit "was a turning point in MINATOM's attitude toward opening up its own facilities to U.S. delegations" and led to an increase in MPC&A funding to \$30 million in January 1995. 113

An important Nunn-Lugar program, particularly from the American perspective, was defence conversion. Intended to "demilitarize the industrial and

¹⁰⁹ GAO/NSIAD-95-165, p.13.

For example, Richard Lugar argued that the main reason for holding a 1995 Congressional hearing on loose nukes in the FSU was to discover if "we know where all of the nuclear weapons and weapons grade materials are located? Does the Russian government know exactly how much and what types of nuclear materials and components are now held at its nuclear installations? If not, how likely is it that an insider theft or diversion can be detected after it has occurred?" "Loose Nukes, Nuclear Smuggling, and the Fissile-Material Problem in Russia and the NIS", Hearings before the Subcommittee on European Affairs of the Committee on Foreign Relations, United States Senate, One Hundred Fourth Congress, First Session, August 22, 1995, p.4.

^{*** &}quot;Factfile: U.S. Security Assistance to the Former Soviet Union", Arms Control Today, Volume 26, No. 7, September 1996, p.25-6.

Sam Nunn, The Nuclear Roundtable Background Document, Senator Sam Nunn, Statement at the Beginning of the Senate Permanent Subcommittee on Investigations, Flearings on Global Proliferation of Weapons of Mass Destruction and Illicit Trafficking of Nuclear Materials, March 13 1996

http://www.stimson.org/pub/stimson/rd-table/3nunn.htm> Accessed 22/2/97.

Dunbar Lockwood, "The Nunn-Lugar Program: No Time To Pull the Plug", p.12.

scientific infrastructure which has supported weapons of mass destruction in the NIS"¹¹⁴, the program provided seed capital for joint ventures between US companies and former Soviet defence enterprises. A defense conversion committee was established at the April 1993 Vancouver summit under the umbrella of the Gore-Chernomyrdin Commission and headed by then Deputy Secretary of Defense William Perry and First Deputy Defense Minister Andrei Kokoshin. However, funding for defence conversion was inconsistent, at best, with \$40 million designated for FY 1993, \$40 million for FY 1994 under the newly created Demilitarization Enterprise Fund, \$60 million for FY 1995 and no funding at all for FY 1996.

According to William Perry, the Russian defence conversion process only got off the ground in 1994 with the investment of \$20 million in Nunn-Lugar funds to set up four partnerships, involving Rockwell, International American Products, Hearing Age International, Double Cola and four Russian defence-related industries, making air traffic control equipment, dental equipment, hearing aids and bottling soda. 117 However, the Nunn-Lugar defence conversion projects proved politically unpopular. 118 As an alternative, the Department of Defense set up the Defense Enterprise Fund in 1994, which functioned as a "quasi-official investment fund for military conversion projects." 119 It seems probable that the political unpopularity of these projects could be partially explained by the converting of some defence plants to produce prefabricated housing for demobilised Strategic Rocket Forces officers, a controversial issue within Congress. The difference between regular defence conversion projects and the Defense Enterprise Fund, according to William Perry, related to the Fund's role in stimulating private sector investment. As a result, two joint ventures, the first converting a nuclear submarine propulsion plant to a maker of earth-moving equipment and the second converting a MiG bomber and fighter systems plant into a maker of air conditioners for civilian aircraft, that received \$6 million in Nunn-Lugar investment, attracted \$24 million in private investment. 120

¹¹⁴ Cooperative Threat Reduction, April 1995, p.4

¹¹⁵ Shields and Potter (eds), Dismantling the Cold War, p.48.

¹¹⁶ Public Law 102-484—OCT.23, 1992; Public Law 103-160—NOV.30, 1993; Public Law 103-337—OCT.5, 1994; Public Law 104-106—FEB.10, 1996; Public Law 104-201—SEPT.23, 1996.

William Perry, "Defense By Other Means-Remarks to the U.S.-Russian Business Council", *Defense Issues*, Department of Defense, March 29, 1995, p.5.

Critics charged that defence conversion was not defence spending, that it was converting enterprises that had already closed and that it was providing jobs for Russian workers when there were far more urgent unemployment problems in the US. See Chapter 4.

Allison et al, Avoiding Nuclear Anarchy, p.92.

¹²⁰ Perry, "Defense By Other Means", p.5-6.

The Department of Energy, at the initiative of Senator Pete Domenici (R-N.M.), created the Industrial Partnering Program (IPP) in 1994. Renamed Initiatives for Proliferation Prevention for domestic reasons, the IPP complemented DoD defence conversion projects but did not mirror them. Its purpose was to match FSU weapons labs with private U.S. companies in the hope that the projects would become self-sustaining. In addition, the IPP targeted the nuclear weapons complex, in contrast to DoD, which applied "to the post-Soviet military-industrial complex broadly defined." IPP growth was impressive, from 34 partnership agreements in 1994 to over 200 in 1996 with an estimated 2,000 weapons scientists being employed for 'peaceful purposes'. I22

On March 3 1994 the International Science and Technology Centre (ISTC) in Moscow began operation and comparable Science and Technology Centre in Ukraine (STCU) began operation on July 16 under the guidance of the Department of State. ¹²³ The Science and Technology Centres' project was announced during Secretary of State Baker's February 1992 visit to the FSU by the Foreign Ministers of the US, Russia and Germany ¹²⁴ and the initial agreement on the establishment of the ISTC had been signed on June 19. ¹²⁵ However, negotiations stalled for months mainly due to disagreements in the recipient countries on such issues as tax exemptions for wages and intellectual property rights. ¹²⁶

The centres were established "to prevent the proliferation of weapons expertise and technology by providing employment on peaceful civilian research projects for scientists and engineers formerly involved with weapons of mass destruction." The

¹²¹ Allison et al, Avoiding Nuclear Anarchy, p.92.

Charles Curtis, The Nuclear Roundtable, Securing Fissile Material in the Former Soviet Union, Deputy Secretary of Energy Charles B. Curtis, February 28 1996 http://www.stimson.org/pub/stimson/rd-table/curtis.htm Accessed 10/4/97.

For a description of the ISTC's functions and its process of project selection see Statement of Robert Gallucci in "Regional Threats And Defense Options For The 1990s", Hearings before the Defense Policy Panel and the Department of Energy Defense Nuclear Facilities Panel of the Committee on Armed Services, House of Representatives, One Hundred Second Congress, Second Session, 26 March 1992, p.326-28.

¹²⁴ "Trip Report from a Congressional Delegation's Visit to Moscow, Russian Federation, Feb. 20-24 1992", p.4, in Hearings on National Defense Authorization Act for Fiscal Year 1993—H.R. 5006 and Oversight of Previously Authorized Programs before the Committee on Armed Services, House of Representatives, One Hundred Second Congress, Second Session, Department of Energy Defense Nuclear Facilities Panel Hearings on Department of Energy Defense Programs, March 18, 30, 31, April 1, 6, 28 and 30, 1992, p.481.

^{125 1996} Cooperative Threat Reduction Program Plan (unclassified), Addendum II, A2-1.

¹²⁶ Ellis, "Nunn-Lugar's Mid-Life Crisis", p.92.

Department of Defense, "US Assists Russia With Weapons Dismantlement And Weapons Security", News Release No. 163-95 — Office of Assistant Secretary of Defense (Public Affairs), April 3, 1995, p.2.

ISTC was funded by a number of contributors including Nunn-Lugar, Germany, Russia, Japan, Switzerland and the European Community. The STCU received contributions from Nunn-Lugar, Canada and Sweden. The success of these ventures was impressive to November 1996 with 280 projects, employing more than 15,400 scientists, engineers and technicians, being sponsored at the ISTC and more than 900 Ukrainian scientists and engineers employed at the STCU as of June 1996. While there was talk of developing independent Science and Technology Centres in Belarus and Kazakhstan, nothing had been formalised as of the end of 1996.

Although technically beyond the parameters of this case study, it is important to note that in September 1998, US Secretary of Energy Bill Richardson and Russian Minister of Atomic Energy Yevgeny Adamov signed the 'Nuclear Cities Initiative'. In contrast to the IPP and ISTC, the 'Nuclear Cities Initiative' focused on Russia's ten 'closed nuclear cities' but, like the IPP and ISTC, was intended to provide peaceful employment for displaced weapons scientists and technicians. ¹³²

The ISTC, IPP and 'Nuclear Cities Initiative' were innovative responses to the brain drain problem. However, Dr Andrei Zhalko-Titarenko, Acting Director General of the Ukrainian National Space Agency provided a sobering footnote to this success story. He explained:

the team that developed the SS-18 [ICBM] have now developed . . . the first Ukrainian trolleybus. . . However, in the long term, this way is dangerous in that it is hard to expect that an expert rocket scientist, who all his life aimed to develop space crafts, and is now forced to design,

¹²⁸ Edward Dowdy, "Technology centers for Russian scientists", *The Bulletin of the Atomic Scientists*, October 1992, p.46.

¹²⁹ Of these, "more than 60 percent are WMD or missile specialists, and many of the rest are from the defense industry." Shields and Potter (eds), Dismantling the Cold War, p.278-9.

¹³⁰ ISTC membership extends to Kazakhstan, Belarus, Armenia and Georgia and both Belarus and Kazakhstan have branch offices. U.S. Congress, Office of Technology Assessment, *Proliferation and the Former Soviet Union*, OTA-ISS-605, (Washington, D.C.: US Government Printing Office, September 1994), p.7.

These include Russia's so-called 'plutonium cities' of Ozersk (formerly Chelyabinsk-65), Seversk (formerly Tomsk-7) and Zheleznogorsk (formerly Krasnoyarsk-26). Oleg Bukharin, "The Future of Russia's Plutonium Cities", *International Security*, Vol. 21, No. 4, Spring 1997, p.126.

¹³² "News Briefs: U.S., Russia Sign 'Nuclear Cities' Agreement", Arms Control Today, Vol. 28, No. 7, October 1998, p.29.

for instance, kitchen machinery for a much lower salary, will reject the offer to return to rocketry abroad. 133

This resentment (mild in Titarenko's case) based on 'self-respect' has been similarly extended to the Russian state. Vladimir Gusev, chairman of the Duma's Committee for Industry, Transport, and Power Engineering, said that the Nuclear Cities Initiative was 'humiliating' and claimed that "a real power must maintain its dignity." ¹³⁴

From December 14 to 16 1994 the Gore-Chernomyrdin Commission discussed nuclear weapons issues in Moscow but there was little progress on such issues as the HEU purchase agreement and the verification procedures for the shut down of three Russian dual-purpose nuclear reactors producing plutonium for weapons as well as electric power and heat. However, discussions did result, on January 20 1995, in the Nunn-Lugar MPC&A agreement being expanded to include dual-purpose facilities and increased funding from \$10 million to \$30 million. Russia also claimed that it had almost exhausted its financial and technical capacity to implement its Trilateral Statement (see below) commitment to transport strategic warheads from Ukraine, dismantle the warheads and blend down the HEU to nuclear fuel for use in Ukraine. According to *Arms Control Today*, as of December 15 1994, Russia had dismantled 333 of the 360 warheads removed from Ukraine and had delivered 102 tons of nuclear fuel to Ukrainian power plants. ¹³⁵

The US also completed the removal of all warheads from missiles slated for retirement under START I during December. Although Russia lagged behind in warhead removal, given a different deactivation program, it had blown up more silos than the US. 136

In addition to being the 'Year of Implementation', 1994, according to Dr John Gibbons, was:

¹³³ Zhalko-Titarenko, "Ukrainian Approach to Conversion of Rocket-Building Technology and Non-Proliferation Problems", in American Institute of Aeronautics and Astronautics, *Theatre Missile Defense: Systems and Issues – 1994* (Washington, D.C.: AIAA, 1994), p.94.

Sections of the Russian media also displayed hostility towards this program. In March 1999 "a widely read Moscow daily accused Adamov of being a CIA agent for signing the Nuclear Cities Initiative." Igor Khripunov, "Minatom at the edge", "The Bulletin of the Atomic Scientists, Vol.55, No.3, May/June 1999, p.60.

p.60.

US.-Russian Talks on Nuclear Issues Find Progress Slow at Moscow Round",

Arms Control Today, Vol. 25, No. 1, January/February 1995, p.22.

¹³⁶ Dunbar Lockwood, "START I Enters Into Force, Clears Way for START II Approval", Arms Control Today, Vol. 25, No. 1, January/February 1995, p.26.

a breakthrough year, marking the first time that U.S. and Russian experts collaborated to secure directly weapons-usable nuclear material, and opening the door for much broader cooperation at wide variety of nuclear facilities in the former Soviet Union. Now, we are moving from protecting kilograms of material to protecting tons of material.¹³⁷

It seems likely that Gibbons had in mind a December 1994 US-Russian agreement concerning technical exchanges on warhead safety and security. This was buttressed, in 1995, with the formation of a CTR-sponsored Defense Nuclear Weapons Security Group designed to coordinate assistance and enhance nuclear weapons security during transportation and storage and to facilitate information sharing under the Cooperative Nuclear Weapons Security Program.¹³⁸

On January 7 1995 Russia signed an \$800 million contract with Iran to provide Tehran with two light-water reactors. Although this deal did not ultimately affect the provision of Nunn-Lugar assistance, it did serve to poison relations between the US and Russia, particularly in Congress. 1995 Congressional hearings reveal a fixation among Congressmen and women with the implications of the deal. US officials did their best to persuade Russia to abandon the deal but construction on the first reactor (which actually entailed rebuilding a damaged reactor) began in mid-1996. It should also be mentioned that it was not clear whether Russia or Iran were violating the NPT with the deal. While the damage to the bilateral relationship was only short-term and minimal, the deal was undoubtedly a cause of irritation and served to compound other more divisive issues such as NATO expansion and national missile defences.

From 22 to 23 of March 1995 representatives from DoD and the Russian Ministries of Defence and Atomic Energy met in Moscow to discuss the audit and

¹³⁷ Prepared Statement of Dr John Gibbons, Office of Science and Technology Policy, The White House, in "Loose Nukes, Nuclear Smuggling, and the Fissile-Material Problem in Russia and the NIS", p.92.

^{1.18} GAO/NSIAD/ RCED-96-89, p.17.

Jon Wolfsthal, "Iran, Russia Sign Nuclear Deal, Raising Proliferation Concerns", Arms Control Today, Vol. 25, No. 1, January/February 1995, p.21. In a meeting with Secretary of State Christopher on February 28 1993, Russian Foreign Minister Kozyrev proposed that the US facilitate Russian military sales to US clients in the Middle East, East Asia and the West to "decrease pressures on Moscow to resume arms sales to 'the wrong people'..." Lee Feinstein, "Russia Seeks U.S. Cooperation for Expanding Arms Sales", Arms Control Today, Vol. 23, No. 3, April 1993, p.24.

¹⁴⁰ See Chapter 4 for the Congressional reaction to the reactor deal between Russia and Iran.

¹⁴¹ Laurie Boulden, "CIA, DIA Provide New Details on CW, BW Programs in Iran and Russia", *Arms Control Today*, Vol. 26, No. 6, August 1996, p.32-3.

examination process, which resulted in agreement on a schedule for further audit meetings. According to a February 1997 General Accounting Office report, of the twelve audits conducted by the end of 1995, with "one exception, the audit teams found that the recipients were using the equipment for the purposes intended." A subsequent report found that, through 1996, DoD conducted sixteen further audits: "national technical means did not detect any diversions of CTR assistance." 143

On April 3 William Perry, while in Moscow, announced that the US and Russia had signed four agreements expanding existing Nunn-Lugar assistance programs. The first added \$20 million to the \$130 million dedicated to strategic offensive arms elimination. The second added \$10 million to the \$25 million earmarked for the ISTC. The third and fourth, in the area of 'chain of custody', provided up to \$17 million to reduce the possibility of accidents during the transport of nuclear weapons and \$3 million to enhance security at nuclear weapons storage facilities.¹⁴⁴

From May 9 to 10 Presidents Clinton and Yeltsin held a summit in Moscow. While much of the meeting focused on the proposed reactor deal with Iran, ABM treaty distinctions and European security (namely NATO expansion and the CFE reaty), a joint statement on "The Transparency and Irreversibility of the Process of Reducing Nuclear Weapons" was signed which obligated both parties not to manufacture nuclear warheads from fissile material extracted from dismantled weapons and "excess to national security requirements", as well as from newly produced plutonium or from "within civil nuclear programs." The restriction on newly produced and civil plutonium was directly linked to a June 1994 agreement to shut down Russia's three remaining reactors that had produced plutonium for weapons. Although not specifically mandated in US Nunn-Lugar assistance, limits on fissile material use contributed to the goal of reducing the danger of nuclear leakage and were viewed as very productive by officials and legislators. Although respectively.

¹⁴² GAO, Weapons of Mass Destruction: DOD Reporting on Cooperative Threat Reduction Assistance Has Improved, Report to Congressional Requesters, GAO/NSIAD-97-84, February 1997, p.3.

GAO, Cooperative Threat Reduction: Review of DOD's June 1997 Report on Assistance Provided, Report to Congressional Requesters, GAO/NSIAD-97-218, September 1997, p.5. GAO did qualify its conclusion by noting that more detailed information on auditing was classified so they would not comment further.

Dunbar Lockwood, "U.S. Signs New Agreements Expanding 'Nunn-Lugar' Support", Arms Control Today, Vol. 25, No. 4, May 1995, p.27, 30.

Dunbar Lockwood, "Presidents Place New Limits on Fissile Material Use", Arms Control Today, Vol. 25, No. 5, June 1995, p.21,

¹⁴⁰ See, in particular, the Markey Amendment described in Chapter 4.

March that the US had unilaterally withdrawn 200 tons of fissile material from its nuclear stockpile was made in the hope that Russia would reciprocate. 147

Discussions between Energy Secretary Hazel O'Leary and Minister of Atomic Energy Viktor Mikhailov during late January 1996 culminated in agreement on the expansion of DoE's MPC&A program, initiated in early 1995, to include six new Russian facilities. A joint statement on "Guiding Principles of Cooperation" for MPC&A, providing a broad mandate for the program, accompanied the agreement. Significantly, during a follow-on meeting in July, a draft agreement was approved by both sides which extended cooperation to "facilities engaged in the disassembly of nuclear weapons", a possibility not previously offered by Russia. Agreement was also reached on the second stage of an engineering feasibility study on how to convert the cores of the three reactors scheduled to be shut down by 2000.

US-Russian MPC&A negotiations were given a largely symbolic boost during the April 19-20 1996 Nuclear Summit in Moscow between leaders of the G-7 nations and Russia. Agreement was reached on enhancing efforts to strengthen MPC&A programs and effectively managing fissile material no longer required for military purposes. Significantly a "Programme for Preventing and Combating Illicit Trafficking in Nuclear Materials" was established which was designed to increase cooperation between the participating nations in areas such as national intelligence, customs and law enforcement.

William Potter, "Before the Deluge? Assessing the Threat Of Nuclear Leakage From the Post-Soviet States", Arms Control Today, Vol. 25, No. 8, October 1995, p.16.

As of May 1998, MINATOM became the lead agency in the dismantling of nuclear submarines, of which there were more than 150 in the Northern and Pacific Fleets. The cost of dismantling one submarine has been estimated at more than \$5 million. Khripunov, "Minatom at the edge", p.61.

Evan Medeiros, "Gore-Chernomyrdin Commission Expands Nuclear Security Cooperation", Arms Control Today, Vol. 26, No. 5, July 1996, p.25.

¹⁵⁰ Evan Medeiros, "U.S., Russia Enhance Nuclear Security Cooperation During Washington Talks", *Arms Control Today*, Vol. 26, No. 1, February 1996, p.23.

¹⁵¹ It has been argued that the chief purpose of the meeting was to boost Yeltsin's re-election chances. Craig Cerniello, "G-7, Russia Make Modest Progress During Nuclear Summit in Moscow", *Arms Control Today*, Vol. 26, No. 3, April 1996, p.19.

On enduring MPC&A problems in Russia see William Potter and Fred Wehling, "Sustainability: A Vital Component of Nuclear Material Security in Russia", *The Nonproliferation Review*, Vol. 7, No. 1, Spring 2000, p. 82-95; and Todd Perry, "Securing Russian Nuclear Materials: The Need for an Expanded US Response", *The Nonproliferation Review*, Vol. 6, No. 2, Winter 1999, p. 84-97.

¹⁵³ Ibid., p.19, 25. See also The Nuclear Black Market, p.31, footnote 13. Efforts at detecting the smuggling of nuclear weapons and radioactive materials into the US date back to the 1950s with the secret "Screwdriver Report" and the subsequent installation of detectors at airports and ship terminals. However, by the inventor's own admission, only one detection was made — "a hapless woman attempting to smuggle a hundred radium-dial watches in her corset." Gregg Herken, Counsels of War (New York: Oxford University Press, 1987), p.179.

While not focused specifically on Russia, the "Defense Against Weapons of Mass Destruction Act of 1996" legislation, or Nunn-Lugar II Act (sponsored by Senators Nunn, Lugar and Domenici) of June 27 1996 did impact on Russian CTR funding. Nunn-Lugar II provided DoD with \$150 million and DoE with \$85 million to respond to possible incidents involving weapons of mass destruction and interdict the flow of such weapons into the US. It also bolstered US MPC&A programs in Russia, encouraged the development of technologies to verify Russian dismantlement programs and to convert plutonium into forms that were less of a proliferation risk as well as set up a cooperative project to modify or replace Russian 'dual-use' reactors. 154

Finally, on October 17 1996 Defense Secretary William Perry appeared before a closed-door session of the Russian Duma to explain why ratification of START II was in the interests of both the US and Russia. While remarkable for the fact that it truly signalled how far both countries had come since the end of the Cold War, it also reflected a certain desperation in the face of mounting pressure within the lower house to defer, amend or reject that treaty. The reaction to Perry's speech was reportedly "hostile", with key members of the Duma voicing "serious concerns about the merits of the treaty as well as other security issues, particularly NATO enlargement." Although START II was recently ratified by the Duma, Russian reactions to Perry's presentation were illustrative of the suspicions that continue to surround the CTR program and US-Russian relations more broadly defined.

As of the end of 1996, Cooperative Threat Reduction assistance to Russia totalled \$750 million in agreed funding and \$575 million in actual obligations. 156

Ukraine

In April 1992 the US SSD team made its first visit to Kiev at which time Ukrainian officials identified three potential areas for assistance. These were an accounting system for nuclear materials, assistance in the destruction of strategic systems once the warheads had been removed and the re-training and provision of transitional social services (such as housing) for nuclear-trained military officers

¹⁵⁴ Craig Cerniello, "Senate Approves 'Nunn-Lugar II' To Counter Domestic WMD Threats", *Arms Control Today*, Vol. 26, No. 5, July 1996, p.28.

¹⁵⁵ Craig Cerniello, "Perry Urges Russian Lawmakers to Ratify START II, Move to START III", Arms Control Today, Vol. 26, No. 8, October 1996, p.27.

¹⁵⁶ Department of Defense, Cooperative Threat Reduction Briefing Book, "CTR Funding Status—Russia", 30.06.97.

whose services would no longer be required as the nuclear withdrawal proceeded. Ukrainian officials also indicated that they would welcome US emergency response equipment aid for nuclear accidents although no specific proposals were submitted. In response William Burns urged Ukraine to prepare detailed proposals so the US could evaluate the costs and potential time-frames. 158

However, just as negotiations got under way, the Ukrainian Ministry of Defence issued a decree subordinating all military units on its territory, including the Strategic Rocket Forces, to Ukrainian 'administrative control'. While the term 'administrative control' could be, and indeed was, seen as highly ambiguous, Ukraine was to insist that it only desired a negative veto over Russian nuclear launch decisions. This decree was followed, five days later by a call by Defence Minister Morozov for all personnel a the 43rd Strategic Rocket Forces Army command centre to pledge an oath of allegiance to Ukraine or resign. These very public calls for 'administrative control' over the nuclear weapons on its territory were to become quite common during 1992 and 1993 which, not surprisingly, coincided with dire warnings by Russian officials concerning the safety of nuclear weapons located in Ukraine 160, and often served to poison relations with Washington.

In June US SSD negotiators returned to Kiev and received specific proposals on the following:

1) dismantling silo-based missile systems (SS-24s and SS-19s) covered by START.

¹⁵⁷ This final request was to prove the source of a great deal of misunderstanding and friction between Ukrainian and US officials as well as between members of Congress and US negotiators.

More than once US officials were to complain that US assistance efforts were hampered by a lack of forward-planning, organisation and management in the CIS. See, for example, comments by Les Aspin in Dunbar Lockwood, "Dribbling Aid To Russia", *The Bulletin of the Atomic Scientists*, Volume 49, No. 6, July/August 1993, p.41 and Shields, "Conference Findings On The Nunn-Lugar Cooperative Threat Reduction Program", p.70.

¹⁵⁹ See Kuzio, "Nuclear Weapons and Military Policy In Independent Ukraine", p.10; and DeWing, The Ukrainian Nuclear Arsenal, p.18-19.

For example, on March 31 1993 Russian Defence Minister Grachev warned that, "In order to avoid a second Chernobyl the world community could take more effective measures to ensure Ukraine's non-nuclear status"; and on September 14 1993 Russian officials accused Ukraine of trying to store too many SS-19 warheads at a depot in Pervomaysk, causing temperature and radiation levels to rise. Dunbar Lockwood, "Russian Turmoil, Ukrainian Action Delay START 1 Implementation", *Arms Control Today*, Vol. 23, No. 4, May 1993, p.23 and Dunbar Lockwood, "Russia, Ukraine Dispute Deal Over Warhead Withdrawals", *Arms Control Today*, Vol. 23, No. 9, November 1993, p.24.

During a March 1992 visit to the FSU, Senators Nunn and Lugar noted that officials in Kiev "frequently hinted that Ukraine might assert a claim to the strategic nuclear missiles and warheads located on its soil." Sam Nunn and Richard Lugar, "The Nunn-Lugar Initiative: Cooperative Demilitarization of the Former Soviet Union" in Allan E. Goodman (ed), *The Diplomatic Record 1992-1993* (Boulder, Colorado: Westview Press, 1995) p.148.

- 2) emergency accident response equipment and training.
- 3) controlling nuclear materials produced by Ukrainian power plants.

Regarding an earlier request for social infrastructure assistance, Burns explained that it was not contemplated under existing Nunn-Lugar legislation but urged Ukrainian officials to provide a detailed statement of requirements so the US could assess it under other legislation. 162

This seemingly innocuous issue could conceivably have undermined Ukraine's pledges to become nuclear-free as well as the whole Nunn-Lugar program. The Nunn-Lugar legislation was very specific in its instruction that the program be limited to cooperation to "(1) destroy nuclear weapons, chemical weapons, and other weapons, (2) transport, store, disable, and safeguard weapons in connection with their destruction, and (3) establish verifiable safeguards against the proliferation of such weapons." However, by statute Russian, Belarussian and Ukrainian officers could not be demobilised until they were provided with housing and "[e]ach of these states has indicated that its housing shortage is a major obstacle to eliminating the missiles and silos, closing the missile bases and demobilizing the officers who are an integral part of the nuclear weapons infrastructure of the former Soviet Union." For this reason a compromise was agreed upon where a small percentage of Nunn-Lugar funds were dedicated to providing such "social welfare" necessities as pre-fabricated housing for demobilised officers. 163

In September Kravchuk made a specific request for \$174 million in Nunn-Lugar assistance to be used predominantly for strategic weapons dismantlement. The US response was to pledge \$175 million in Nunn-Lugar assistance, which could be provided once the necessary agreements were concluded.¹⁶⁴

SSD experts visited Kiev again in October to continue the dialogue but this time focused on formulating an umbrella agreement to enable US funds to be obligated. Specific Nunn-Lugar assistance packages that were discussed included a material control and accounting agreement, an export control agreement and a government-to-government communications link (GGCL) similar to the U.S.-Russian nuclear risk reduction centres and primarily for exchanging data and notifications required by START and INF. Emergency response equipment was also discussed but the US

¹⁶² Burns Report to the Senate Committee on Foreign Relations, p.45.

Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, Cooperative Threat Reduction, p.15.

Testimony of Ambassador Talbott in "U.S. Policy on Ukrainian Security", p.60.

insisted on a very specific interpretation of what this equipment would consist of. The equipment to be provided would only be useful in avoiding an accident. Ukraine would not receive equipment used to determine the internal damage to the weapon itself or to stabilise and package weapons involved in an accident: these were to be provided only to Russia as all nuclear weapons in the former Soviet Union were in the custody of the CIS under Marshal Shaposhnikov. ¹⁶⁵ This clearly represented a US attempt to frustrate the manoeuvrings, during 1992, of a number of highly placed Ukrainian officials designed to gain, at the least, administrative or 'negative' control over the nuclear weapons on its territory. ¹⁶⁶

According to Burns, the substantive issues concerning the aforementioned assistance packages were resolved at the technical working level and the Ukrainian comprehensive plan for ballistic missile dismantlement as well as the list of requirements for US assistance went well beyond the initial set provided in June. Hence the US agreed in principle to the requests and agreed to study new requests.

In January 1993 Burns and Ukrainian Deputy Foreign Minister Tarasyuk met in Washington to review the progress both countries had made since April and agreed to a US offer of expert meetings on ballistic missile dismantlement and the GGCL. This occurred from February 1-4 in Kiev where 'significant progress' was made. However if the US was to obligate any funds and Ukraine was to receive any assistance an umbrella agreement had to be signed first. It took until October of 1993 for this to be achieved and a further two months for the follow-on implementing agreements to be regotiated (see below).

The US position on the future of its relationship with Ukraine was made blatantly clear after a meeting between President Clinton and Foreign Minister Zlenko on March

Burns Report to the Senate Committee on Foreign Relations, p.46. While the US was right to provide only Russia with the necessary diagnostic equipment, it was acting under false pretences in believing that Shaposhnikov and the CIS retained custody of the FSU nuclear arsenal. According to Bruce Blair, Shaposhnikov was "cut out of the loop" of nuclear authority in September 1992, at which time nuclear command and control became "an all-Russian affair". See testimony of Blair in "U.S. Policy on Ukrainian Security", p.44.

Several Ukrainian officials made public statements expressing the view that returning nuclear weapons to Russia would upset a delicate regional military balance, implying that they should remain in Ukraine. On 5 April President Kravchuk signed a decree placing the strategic nuclear forces located in Ukraine under Ukrainian administrative control and established a Centre of Administrative Control of the Strategic Nuclear Forces in the Ministry of Defence which included the troops responsible for guarding the warheads. This was followed by the taking of the Ukrainian oath of loyalty by the vast majority of the strategic rocket forces and the restriction of admission to the strategic rocket forces to Ukrainian citizens in the fall of 1992. Kuzio, "Nuclear Weapons And Military Policy In Independent Ukraine", p.10; and DeWing, *The Ukrainian Nuclear Arsenal*, p.18. The dubious practical distinction between administrative and operational control of nuclear weapons was a matter of great concern for US officials.

¹⁶⁷ Burns Report to the Senate Committee on Foreign Relations, p.47.

25. During the meeting Zlenko had indicated Prime Minister Kuchma's interest in meeting either Clinton or Al Gore during an upcoming visit to Washington. This proposal was rejected in order to send Ukrainian officials a message about their reluctance to ratify START I and the NPT and at the end of the Clinton-Zlenko meeting the President stated that START I ratification was "a precondition to a long-term successful relationship" between Washington and Kiev. 168 It seems likely that this was why an umbrella agreement was not finalised during SSD talks in Kiev late in August and why, one month later Warren Christopher refused to provide Kiev security assurances in return for SS-19 and SS-24 deactivation. According to Mitchell Reiss, Christopher's stone-walling was precisely because Ukrainian ratification of START I, the Lisbon Protocol and the NPT were not forthcoming. 169

However if this was the case it cannot explain an offer by Les Aspin, on July 27 1993 to Morozov during a visit to Washington, to release a portion of the \$135 million earmarked for Ukrainian ICBM dismantlement (out of the \$175 million total) corresponding to the level of ICBM deactivation. By linking Ukrainian assistance to specific ICBM dismantlement, this offer conflicted with Nunn-Lugar legislative guidance relating to compliance "with all relevant arms control agreements" and seemed out of place if the policy was to assure the ratification of START I and the NPT before large-scale assistance was provided.

The Rada began what became a controversial and politically charged debate on START in June 1993. The treaty had, in fact, been submitted to the Ukrainian parliament in late December 1992 but was stalled because deputies claimed that they needed time to study it. At that time US Secretary of State Lawrence Eagleburger expressed US annoyance "with the delays that have taken place with regard to ratification of those two treaties [START I and the NPT]" and warned that "if the delay goes on much longer, it inevitably will have an impact on the bilateral relationship between the United States and Ukraine." However, after lengthy delays the treaty received serious attention in June.

The key issue for Ukrainian legislators was whether the retention of nuclear weapons, despite the international repercussions and the economic burden, would guarantee Ukraine's security. As mentioned above, arguments could be mustered to

169 Reiss, Bridled Ambition, p.152.

¹⁶⁸ Quoted in Lockwood, "Russian Turmoil, Ukrainian Action Delay START I Implementation", p.24.

Dunbar Lockwood, "Ukraine's Position Hardens Despite Some Positive Signs", *Arms Control Today*, Vol. 23, No. 7, September 1993, p.30.

¹⁷¹ John Lepingwell, "Ukraine, Russia, and the Control of Nuclear Weapons", RFE/RL Research Report, Vol. 2, No. 8, February 1993, p.16

support both sides. Clearly the November 18 1993 'ratification' decision represented a victory for those in Ukraine who favoured the retention of nuclear weapons. START I was ratified with a number of conditions, which included: additional security guarantees; at least \$2.8 billion in foreign aid for dismantlement; and the destruction of only a fraction of the SS-19s and SS-24s on its territory. In addition, ratification of Article V of the Lisbon Protocol, which committed Ukraine to join the NPT as a Non-Nuclear Weapon State, was withheld from ratification.

The US administration was quite justified in its disappointment at the Rada's decision given that it contradicted Ukraine's December 21 1991 Alma-Ata pledge to join the NPT as a NNWS, Kravchuk's May 7 1992 letter to then-President Bush promising to eliminate all nuclear weapons within seven years after START I's entry into force, its Lisbon Protocol commitments and Kravchuk's pledge at Massandra in September of 1993 to rid Ukraine of nuclear weapons.¹⁷⁻¹

However, debate continued and began to shift as a result of the reaction from the US and Russia. Ukraine's dire economic condition had much to do with this rethink, although US displeasure appeared to be only transitory.

On 5 December 1993 DoD and the Ukrainian Ministry of Defence (MoD) signed the Strategic Nuclear Arms Elimination Implementing Agreement, which consisted of six specific projects.¹⁷⁵ These were:

 Liquid Propellant Disposition — to assist Ukraine de-fuel its 130 SS-19s, containing 11,700 MT of propellant (3,810 MT of fuel and 7,890 of oxidiser). The project was designed to ensure that propellant disposition did not delay the weapon dismantlement program, a much more critical

¹⁷² The precise fraction to be destroyed worked out to be 36% of launchers and 42% of warheads. This was based on the START percentage cut of the entire Soviet arsenal. U.S. Congress, Office of Technology Assessment, *Proliferation and the Former Soviet Union*, OTA-ISS-605 (Washington, D.C.: U.S. Government Printing Office, September 1994), p.15.

¹⁷³ The May 23 1992 Lisbon Protocol converted the bilateral START I into a five-nation agreement incorporating Belarus, Kazakhstan and Ukraine.

According to Mitchell Reiss, President Kravchuk's negotiating strategy often proved counterproductive. "Ukraine's backsliding [on returning the nuclear weapons on its territory to Russia] ... antagonized the Bush and Clinton administrations and eroded European support during the critical time when Kiev was struggling to consolidate its independence." Reiss, *Bridled Ambition*, p.127. In particular, Kravchuk's suspension of tactical nuclear weapons withdrawals "led to a perception in the West that the Ukrainian government was unreliable and perhaps insincere in its nuclear-weapons policy." Lepingwell, "Ukraine, Russia, and the Control of Nuclear Weapons", p.9.

¹⁷⁵ Information on these agreements is taken from Assistant to the Secretary of Defense, 1996 Cooperative Threat Reduction Program Plan (unclassified), IV-13 - IV-17.

- objective from the US and Russian perspective. By 1996 all equipment had been delivered to the operating location.
- SS-19 Neutralization Facility to assist Ukraine in climinating all 130 SS-19s by the second quarter of FY 1999.
- 3. SS-19 Integrating Contract to assist Ukraine in climinating all 130 SS-19 silos, 13 ICBM launch control silos and two SS-19 training silos. It was also charged with overseeing missile deactivation and efforts to complete, demonstrate and operate the Neutralization Facility and CTR Logistics Support in Ukraine. Dismantlement began at Khmelnitskiy (housing 90 SS-19s) in April 1995 and at Pervomaysk (housing 40 SS-19s) in May 1995.
- 4. SS-19 Strategic Rocket Force Demobilization to assist Ukraine to provide housing for demobilized officers as required by Ukrainian law. Housing was required for approximately 1,820 officers.
- 5. SS-24 Weapon System Elimination the main difference between SS-24 elimination and SS-19 elimination was that SS-24s had solid rocket motors. The project consisted of four primary tasks. Task one involved contractors assessing the technologies to dispose of the solid rocket motors containing approximately 5,900 MT of propellant. The second task was to remove the missiles in preparation for silo dismantlement. The third was to transport the missiles and the propellant to a disposition location and the fourth would result in the elimination of the 46 SS-24 silos and five silos housing the associated launch control centre capsules.¹⁷⁶
- 6. Nuclear Infrastructure Elimination to eliminate the infrastructure essential to the operation of strategic delivery systems in Ukraine. This was to be achieved by removing the facilities for eliminating liquid propellant and deactivating nuclear weapons storage structures. This would have the effect of enhancing the "irreversibility of the strategic force reductions by drastically increasing the cost of using the bases to support liquid propellant strategic missiles and nuclear warheads in the future." ¹⁷⁷

¹⁷⁶ The unclassified *Program Plan* lists five primary tasks related to SS-24 Weapon System Elimination but only mentions four. See *Ibid.*, IV-17.

¹⁷⁷ *Ibid.*

According to *Arms Control Today*, US assistance for strategic nuclear weapons elimination in Ukraine totalled \$135 million and an additional implementing agreement worth \$2.26 million to assist in developing export controls.¹⁷⁸

This was followed, on December 18, with the signing of three further implementing agreements for Nunn-Lugar: \$2.4 million for a government-to-government communications link; \$5 million for emergency response equipment; and \$7.5 million to help control civilian fissile materials. The As a result Ukraine provided the US with a diplomatic note in early January 1994 required to bring the umbrella agreement into force, which, in turn, enabled the specific assistance projects listed above to be funded by the US.

From Ukraine's perspective, January 14 1994 marked a significant (and rewarding) turning point in its negotiations with the US and Russia with the signing of the Trilateral Statement. This document represented an unqualified success for Ukrainian 'nuclear diplomacy', embodying all of the assurances that Presidents' Kravchuk and Kuchma (who replaced Kravchuk in July 1994) had requested; indeed all that they could realistically have hoped for.

The Trilateral Statement provided Ukraine, in exchange for the transfer to Russia of all nuclear weapons on its territory, with security guarantees from the US, Russia and Britain, Russian compensation for the fissile material contained in the strategic nuclear warheads (to be returned within three years) as well as the tactical nuclear warheads returned in 1992¹⁸¹, in the form of LEU for power reactors and a US commitment to expand technical, financial and economic assistance. In an annex to the agreement, all 46 SS-24s were to be deactivated by November 14 1995. The first trainload of 60 SS-19 and SS-24 warheads arrived in Russia on March 6. 183

Since negotiations began in 1992, Ukraine expressed a number of concerns which, according to officials statements and reflected in the parliamentary debates, had a direct bearing on its willingness to return to nuclear weapons on its territory. These

¹⁷⁸ However, the article dates the agreements at December 4 1993. Dunbar Lockwood, "Former Soviet Republics Clear Way for Nunn-Lugar Monies", *Arms Control Today*, Vol. 24, No. 1, January/February 1994, p.28

¹⁷⁹ Ibid,

¹⁸⁰ Ibid.

¹⁸¹ In May 1996 Russia agreed to compensate Ukraine \$450 million for its tactical warheads. This took the form of relief for oil and natural gas debts. Craig Cerniello, "Ukraine Completes Final Transfer Of Nuclear Warheads to Russia", *Arms Control Today*, Volume 26, No.4, May/June 1996, p.22.

Dunbar Lockwood, "U.S. Reaches Understanding With Ukraine, Russia on Denuclearization", Arms Control Today, Vol. 24, No. 1, January/February 1994, p.19.

¹⁸³ "FACTFILE: Chronology of U.S.-Soviet-CIS Nuclear Relations", Arms Control Today, Vol. 24, No. 5, June 1994, p.33.

concerns were addressed by the Trilateral Statement, Firstly, Ukraine desired some specific security guarantees, which had not been forthcoming during earlier negotiations, 184 These Ukraine received in January 1994. Secondly Ukraine had, after May 1992, begun to demand compensation for the tactical warheads that had been withdrawn to Russia. This was in large part due to a not unreasonable feeling that Ukraine "had been had" by the tactical nuclear weapons withdrawal process 185 and a growing realisation that the fissile material had a market value. Not surprisingly these requests elicited an angry response from the Russians, who accused Ukrainian officials of negotiating in bad faith as no request for compensation had been made at the Alma-Ata meeting in December 1991. However, by January 1994 Ukraine had succeeded ensuring compensation for this material from Russia. Thirdly, Ukraine feared the Russian capability to exert economic pressure, in the form of disrupting Ukrainian energy supplies. 186 This was alleviated somewhat by the fissile material compensation deal which would provide Ukraine with LEU for its power reactors. Finally it was believed that the only reason the US was taking an active interest in Ukrainian affairs was because of the 'loose nukes' issue. According to Richard Lugar, "The impression has clearly been abroad, on occasion in Ukraine, that this was our only interest." 187 This was allayed by the US promise of an expansion of technical, financial and economic assistance.

During the same month Ukrainian Economics Minister Roman Shpek visited Washington and Clinton promised to double US financial assistance if the Rada passed the Trilateral Statement. Thus on February 3 1994 the Rada had a change of heart and unconditionally ratified START I and endorsed the Trilateral Statement. However it did not ratify the NPT. The Rada's re-evaluation appears to have been influenced by a number of factors including its dire economic position, the assurances of the Trilateral Statement and some intensive lobbying by Kravchuk.

For example, at a meeting in Moscow between Kravchuk and Yeltsin on January 15 1993, the security assurances that were offered were deemed unacceptable by Ukraine. Lockwood, "Former Soviet Republics Clear Way for Nunn-Lugar Monies", p.28.

In June 1993 Richard Lugar ruminated that Ukraine, Kazakhstan and Belarus to a certain extent feel "that they have been had" with regard to withdrawal of tactical nuclear weapons. "That somehow something happened there, something of value escaped them . . ." Comments of Richard Lugar in "U.S. Policy on Ukrainian Security", p.23.

¹⁸⁶ For example, in an Op-Ed. piece in *The New York Times* on Feb. 11 1993, Ukrainian Ambassador to the US Bilorus was reported as saying that in addition to security guarantees, Ukraine sought assurances that neither the US or Russia would apply economic pressure. Dunbar Lockwood, "Belarus Ratifies START I Pact; Ukraine Remains Last Holdout", *Arms Control Today*, Vol. 23, No. 2, March 1993, p.20.

¹⁸⁷ Quoted in "U.S. Policy on Ukrainian Security", p.2-3.

¹⁸⁸ Reiss, Bridled Ambition, p.153.

On March 4 Kravchuk visited Washington. It appears that the US was so pleased that Ukraine had agreed to ratify START I that it was prepared to overlook, for the time being, NPT accession. This was evidenced by Clinton's pledge to increase significantly economic and Nunn-Lugar aid. 189 This, however, did not mean that NPT accession had been forgotten. Visits during the next five months from high-level US officials such as Al Gore and Ashton Carter, with assurances of more Nunn-Lugar assistance and economic aid, were stepped up and efforts to satisfy Ukrainian security concerns were made. According to Mitchell Reiss, these inducements, combined with President Kuchma's realisation that his upcoming UN speech and summit with Clinton would be overshadowed by an inability to accede to the NPT, led to an "impassioned" speech before the Rada which ultimately resulted in a November 16 vote to join the NPT. 190

On March 31 1995, during a visit to Kiev, William Perry announced that US satellite producers could buy space-launch services from Ukraine as long as Kiev adhered to the Missile Technology Control Regime. This was an important US concession for Ukraine given its cash-strapped economy and unemployment problems and it was further boosted by an announcement to increase US strategic offensive arms elimination assistance from \$185 million to \$205 million. Perry also announced that "suspect site inspections" would replace continuous monitoring at the Pavlograd SS-24 assembly plant as of May 31 1995. This was undoubtedly a symbolic achievement for Ukraine, exhibiting an ability to live up to its commitments as well as US support for such behaviour. During his visit, Perry watched an SS-19 being extracted from its silo and visited a naval machinery factory converted to produce prefabricated housing. ¹⁹¹

Finally, on June 1 1996 President Kuchma announced that Ukraine had completed the withdrawal of strategic nuclear warheads to Russia. 192 As of the end of 1996, CTR assistance to Ukraine totalled \$393.75 million in notified funds and \$306.25 million in actual obligations. 193

^{189 &}quot;FACTFILE: Chronology of U.S.-Soviet-CIS Nuclear Relations", p.33.

Reiss, *Bridled Ambition*, p.121. Not until mid-1995, however, did Ukraine accede to the NPT. On June 22 1995, shortly after Ukrainian accession, Boris Yeltsin submitted START II to the Russian Duma. Yuri Nazarkin and Rodney Jones, "Moscow's START II Ratification: Problems and Prospects", *Arms Control Today*, Vol. 25, No. 7, September 1995, p.8.

Lockwood, "U.S. Signs New Agreements Expanding 'Nunn-Lugar' Support", p.27.

¹⁰² Craig Cerniello, "Ukraine Completes Final Transfer Of Nuclear Warheads to Russia", p.22.

¹⁰³ Department of Defense, Cooperative Threat Reduction Briefing Book, "CTR Funding Status—Ukraine", 07.07.97.

Belarus

During May 1992 Belarus provided the US with a 'side-letter' committing itself to the elimination of all nuclear weapons on its territory within seven years after START I came into force. The same month preliminary SSD discussions were held in Minsk, at which time Belarusian officials identified in broad terms some possible areas of assistance. As in the case of Ukraine, SSD head Burns encouraged detailed proposals to be passed through the US Embassy. However, after this meeting there were only limited exchanges through diplomatic channels. It was only in late September that SSD officials ventured back to Belarus and focused on an umbrella agreement as well as specific agreements on emergency response equipment, export controls and a government-to-government communications link (GGCL). ¹⁹⁴ Even at this early stage, contacts between the US and Belarus were not limited to the governmental level. From October 8 to 9 US and Belarusian non-governmental organisations (NGO's) held a conference on international security and nuclear non-proliferation in Minsk. Subsequent NGO workshops were held in June and October of 1994 to discuss non-proliferation and export controls.

Importantly, during this hiatus, jurisdiction over the SS-25s on Belarusian territory was assigned to Russia, in contrast to the debates that were developing in Ukraine and Kazakhstan over nuclear ownership, both administrative and operational. Indeed, according to Vyachaslau Paznyak, Director of the International Institute for Policy Studies in Minsk, the Nunn-Lugar program was never discussed in the Belarusian Parliament. This decision was reinforced by an announcement by Shushkevich in October that all strategic nuclear weapons in Belarus would be returned to Russia by the end of 1994. However, logistical and financial problems (possibly concerning compensation) delayed the withdrawal process, resulting in a

According to the terms of the agreement, the DoD would provide the Ministry of Defence with protective clothing and equipment (eg. dosimeters) as well as related training, all at a total cost of \$5 million. On export controls, technical assistance, training and limited amounts of equipment to help control Belarus's borders, participation in the Co-ordinating Committee for Multilateral Export Controls (COCOM), classroom and on-site training for licensing, enforcement and related officials, evaluation and improvement of export control enforcement programs and policies as well as computerised systems and related training to improve tracking and control of sensitive items and technology. Burns Report to the Senate Committee on Foreign Relations, p.47-48.

¹⁹⁵ Vyachaslau Paznyak, "Nunn-Lugar Program Assessment: The Case of Belarus", in Shields and Potter (eds), Dismantling the Cold War, p.174, footnote 11.

¹⁹⁶ lbid., p.169.

¹⁹⁷ Reiss, Bridled Ambition, p.152.

revised withdrawal schedule, formalised on September 24, 1993, stating that all withdrawal would be complete by the end of 1996. 198

On October 22 Belarus and the US signed an umbrella agreement. The emergency response and export control agreements were initialled in Minsk and subsequently signed in Washington. Agreement in principle was achieved on the GGCL but the details were to be worked out through diplomatic channels. These diplomatic negotiations culminated in the signing of the GGCL agreement in Minsk in January 1993.

The following month Belarus ratified both START I and the Lisbon documents and voted to accede to the NPT.¹⁹⁹ The ease with which Belarus was living up to its international commitments was not lost on US officials. Richard Armitage, in testimony before the Senate Armed Services Committee, asserted that Belarus's ratification of START I was "the kind of thing that should be rewarded and should be seen as bringing forth good benefits." However, a July 1994 study by the Office of Technology Assessment was a little less sanguine in its conclusion, arguing that Belarus hesitated briefly to ratify the NPT, "primarily for economic reasons, clearly having at least considered whether there was some way of using the presence of nuclear weapons on its territory to gain economic benefits in a time of difficulty." This determination was supported by Valerii Tsepkalo's "relatively positive" observation that Ukraine was "beating money out of the West with the help of a nuclear club."

These rewards were not long in coming. At the March 30 to April 1 1993 Vancouver Summit, US officials announced that Belarus would receive \$65 million in unspecified Nunn-Lugar funding in addition to the \$9.56 million already committed.²⁰³

On July 22 1993 Belarus formally acceded to the NPT as a NNWS. Consequently Les Aspin and Belarusian Defence Secretary Kozlovsky signed three implementing agreements. The first of these committed \$25 million to environmental clean-up in an operation known as 'Project Peace'; the second committed \$20 million to defence conversion and re-training; and the third committed \$14 million to non-proliferation

¹⁹⁸ *lbid.*, p.133.

Lockwood, "Belarus Ratifies START I Pact; Ukraine Remains Last Holdout", p.20.

²⁰⁰ lbid., p.20.

²⁰¹ OTA-ISS-605, p.13-14

²⁰² Quoted in Vyachaslau Paznyak, "Belarusian Denuclearization Policy and the Control of Nuclear Weapons" in Quester (ed), *The Nuclear Challenge in Russia and the New States of Eurasia*, p. 177, footnote 64.

²⁰³ Jon Wolfsthal, "Clinton, Yeltsin Advance Arms Control Agenda at First Summit", Arms Control Today, Vol. 23, No. 4, May 1993, p.26.

and export controls. Belarus also took delivery of US equipment for the continuous communications link used to transmit notifications required by the INF Treaty and START I.²⁰⁴

The decision to provide Belarus with \$25 million in aid for environmental clean-up was a good example of how Nunn-Lugar assistance could be fashioned to the needs of each recipient country. According to US National Intelligence Officer for Russia and Eurasia Kolt, Belarus was completely cooperative and pointed out, "rightly, that about a third of their territory suffers from contamination due to Chernobyl and that nobody has paid much attention to that or really done much about it." The provision of assistance for this project was no accident and demonstrated the *cooperative* nature of Nunn-Lugar assistance. According to Vyachaslau Paznyak, Project Peace was "one of the more successfully implemented" CTR projects, with all relevant equipment having been purchased. ²⁰⁶

On October 26 Warren Christopher visited Belarus and described it as a "shining example to states around the region." Two days later Aspin and Kozlovsky signed a memorandum of understanding calling for further cooperation, dialogue and contacts between the two defence establishments.²⁰⁷

Early in 1994 Belarusian officials requested an additional \$210 million for disarmament-associated programs such as a customs system and housing for ex-SS-25 military personnel. While the US did not grant this outright, Belarusian requests were "looked on favourably" by US officials given its prompt and forthright adherence to START I and the NPT. This was evidenced in January 1994 during a visit to Belarus by President Clinton, at which time \$50 million in assistance was promised.²⁰⁸

From 24 to 25 of January 1995 the first audit of Nunn-Lugar assistance was successfully conducted on the Continuous Communications Link (CCL) in Minsk. This proved to be the catalyst for further audits in all four CTR recipient states.²⁰⁹

²⁰⁴ "News Briefs: Belarus Formally Accedes to NPT", *Arms Control Today*, Vol. 23, No. 7, September 1993, p.31; Dunbar Lockwood, "U.S., Kazakhstan Make Progress In SSD Talks; Ukraine Balks", *Arms Control Today*, Vol. 23, No. 9, November 1993, p.25.

²⁰⁵ Testimony of Kolt in "Current Developments in the Former Soviet Union", p.18.

²⁰⁶ Paznyak, "Nunn-Lugar Program Assessment: The Case of Belarus", in Shields and Potter (eds), Dismantling The Cold War, p.181.

Dunbar Lockwood, "Ukrainian Rada Ratifies START I, But Adds 13 Conditions For Approval", Arms Control Today, Vol. 23, No. 10, December 1993, p.26.
 OTA-ISS-605, p.41.

²⁰⁹ Testimony of Ambassador Thomas Simons in "U.S. Assistance Programs for Economic and Political Reform and Dismantling of Weapons of Mass Destruction in the NIS", *Hearing before the Committee on International Relations*, House of Representatives, One Hundred Fourth Congress, First Session, March 3, 1995, p.83.

However, it was not until mid-1995 that the US and Belarus formalised an agreement for the US to assist Belarus in eliminating the nuclear infrastructure on its territory and demobilising the officers responsible for that infrastructure.

On 23 June 1995 the US and the Government of Belarus signed the Strategic Offensive Arms Elimination Implementing Agreement, consisting of four specific projects.²¹⁰ These were:

- SS-25 Fixed Structure Foundation Elimination to assist Belarus eliminate
 the fixed structure foundations for the 81 SS-25 mobile missile launchers
 deployed in Postavy, Lida and Mozyr.
- 2. Liquid Rocket Propellant Disposition to assist Belarus to incinerate approximately 1,000 MT of liquid rocket fuel and dispose of approximately 9,000 MT of liquid rocket oxidiser.
- Demobilization of Strategic Rocket Forces Officers to facilitate SRF
 officers' transition into the civilian workforce. Re-training centres focused
 on English- language, computer, business and management skills;
 automotive repair; and woodworking.
- 4. Nuclear Infrastructure Elimination to assist Belarus eliminate equipment and facilities that were key to the support of strategic nuclear forces. "This project supports Belarus' decision to become a nuclear weapons free nation by eliminating equipment or facilities that housed or processed materials needed to maintain and sustain delivery systems and nuclear weapons." 211

It will be noted that aid for Belarus was less of a 'dismantlement type' and more focused on dealing with infrastructure. This was because the mobile SS-25s based in Belarus were re-deployed in Russia rather than dismantled.²¹²

The lack of agreements between Belarus and the US after June 1995 reflected Belarus's unreserved decision to fulfil its international arms control commitments and a realisation in the US that the agreements in place were sufficient to manage the small, relative to Kazakhstan and Ukraine, threat of nuclear leakage posed by Belarus.

Lockwood, "The Nunn-Lugar Program: No Time To Pull The Plug", p.9.

²¹⁰ Information on these agreements is taken from Assistant to the Secretary of Defense, 1996 Cooperative Threat Reduction Program Plan (unclassified), IV-18 - IV-21.

Specific tasks involved elimination of the warhead storage bunkers, missile storage bunkers, unique training facilities and command and control facilities; elimination of SS-25 support items; and elimination of START I accountable items and the depot level ICBM handling equipment. In addition, the liquid fuel storage equipment was to be chemically neutralised and eliminated, *Ibid.*, IV-21.

It also reflected the belief, articulated by the Office of Technology Assessment, that "Belarussian and Western officials worry more about the transit through the country of contraband nuclear material from sources in Russia than they do about diversion from Belarussian nuclear facilities."²¹³

On November 23 1996 the last of the SS-25 warheads on Belarussian territory was withdrawn to Russia. The last SS-25 missile was ceremoniously placed on a train bound for Russia four days later. Delays in transferring the mobile SS-25s to Russia reflected a number of concerns and constraints, not all of which could be attributed to Belarus. These included the lack of any specific legal framework for strategic nuclear weapons withdrawal, Russia's preparedness to accept the withdrawals, Belarusian insistence on financial compensation for the enriched uranium contained in withdrawn warheads, the international profile accorded Belarus as a result of nuclear possession, the fact that non-nuclear status was made contingent on Western diplomatic recognition, problems concerning the conversion of liquid fuel extracted from the missiles as well as identifying an environmentally sound means of destroying SS-25 launch facilities. Izvestiya speculated that the real reason for the delay was to warn NATO not to expand eastward, by suggesting that the missiles were to act as a counter-balance to US missiles in Europe. 216

However, while the threat of nuclear leakage was real and was managed successfully by Belarus, Russia and the US, it was unclear whether Belarus would continue to exist as an independent entity. In early December, in a referendum, Belarusians voted to grant President Alexander Lukashenka far-ranging powers and it appeared that Lukashenka's sympathies lay with some sort of closer relationship with Russia. Lukashenka dramatised the breach between his beliefs and those of his predecessors when, in mid-January 1996 and again on November 13 1996, he warned that the further withdrawal of strategic nuclear weapons might be contingent on NATO expansion. 218

²¹³ OTA-ISS-605, p.41.

²¹⁴ Craig Cerniello, "Belarus Completes Transfer Of Nuclear Warheads to Russia", *Arms Control Today*, Volume 26, No.9, November/December 1996, p.18.

²¹⁵ Ibid.; Shields and Potter (eds), Dismantling The Cold War, p.178, 180; and Vyachaslau Paznyak, "Belarusian Denuclearization Policy and the Control of Nuclear Weapons", p.158-9.

²¹⁶ Susan Caskie, "Security Notes: Kazakstan, Totally Nuclear Free", *Transition*, 1 November 1996, p.62.

²¹⁷ Yuri Zarakhovich, "Voting Against Freedom", *Time*, December 9, 1996, p.54.

²¹⁸ Cerniello, "Belarus Completes Transfer Of Nuclear Warheads to Russia", p.18; *Nuclear Successor States of the Soviet Union*, May 1996, p.9.

As of the end of 1996, Cooperative Threat Reduction assistance to Belarus totalled \$117.3 million in notified funds and approximately \$76.8 million in obligations.²¹⁹

Kazakhstan

On May 19 1992 Kazakhstan transmitted a 'side-letter' to the US committing itself to eliminate all nuclear weapons on its territory within seven years of START I coming into force. This was followed, on June 10, with certification by the State Department that Kazakhstan was eligible for Nunn-Lugar assistance and Kazakhstan's ratification, in July, of START I.²²⁰

Technical discussions took much longer to begin in Kazakhstan given that the Secretary of State only certified that country in June. Thus in early November the first SSD meeting was held in the capital, Almaty. The US provided an assistance proposal outline, which included emergency response equipment, export controls, a GGCL, ballistic missile dismantlement and material control and accounting totalling \$14.6 million. According to Burns the response was enthusiastic.

Early in 1993 Nazarbayev announced the establishment of the Kazakhstan National Nuclear Centre at Kurchatov City and the Institute of Nuclear Physics in Almaty. This was a clear attempt to provide employment for the large number of scientists in Kazakhstan, largely due to Kurchatov City, which served as the residential and administrative centre for the Semipalatinsk test site. According to the Office of Technology Assessment, the scientists and technicians at Kurchatov, almost all of whom were ethnic Russians, were receiving only 10% of their funding from Moscow; the rest was supposed to come from Kazakhstan. However the projects collapsed when the government could not afford to fund them. The urgency of the situation and the desperation of the Kazakh scientists was evidenced by a suggestion to their Western counterparts that a cavity be built in Mt Degelen where reactors could be made to fail, "creating catastrophic accidents for diagnosis" in order to prevent and mitigate future nuclear accidents.²²¹

²²¹ OTA-ISS-605, p.51.

²¹⁰ Department of Defense, Cooperative Threat Reduction Briefing Book, "CTR Funding Status—Belarus", 05.06.97.

²²⁰ "Executive Branch Certifications" in "U.S. Plans and Programs Regarding Dismantling of Nuclear Weapons in the Former Soviet Union", p.45.

Fears of a potential brain drain were compounded by reports that Iran showed an active interest in acquiring nuclear materials and nuclear warheads from Kazakhstan. Concern over possible nuclear leakage from Kazakhstan was not limited to the US as evidenced by a workshop in June 1993 to help Kazak officials apply safeguards to their nuclear facilities, which was attended by representatives from the IAEA, Japan, the US, the UK and Sweden. For the US at least, results were forthcoming within a year, with the signing of a defence conversion / industrial partnership agreement for the Semipalatinsk test site on March 19 1994.

In late September 1993 a US SSD delegation initialled an umbrella agreement and completed the text for five implementing agreements. However it could not be signed because Kazak officials were attending a CIS summit in Moscow. On October 24 Warren Christopher met with Nazarbayev to sign the initialled agreements However, Nazarbayev appeared more concerned with securing a summit with President Clinton, offering to accede to the NPT in return. A tentative summit date was set for the middle of January 1994.

Finally on December 13 1993, in Almaty. Kazakhstan signed the US umbrella agreement and five implementing agreements. The first, worth \$70 million, was a Strategic Offensive Arms Elimination Implementing Agreement, which consisted of five specific projects.²²⁷ These were:

ICBM Silo Dismantlement — to assist Kazakhstan eliminate 104 SS-18s and missile silos, 16 launch control centres and two training silos located at Derzhavinsk and Zhangiz-Tobe as well as 14 silo test launchers at the Leninsk test range and 12 ICBM and command and control test silos used for blast effects testing.²²⁸

Planning began in early 1994 but was temporarily halted when Russian officials objected to US being present at the destruction of intact silo test

²²² Iran reportedly sent nuclear 'buying teams' into the former Soviet Union and was actively interested in the material recovered by the US in November 1994. Allison et al, *Avoiding Nuclear Anarchy*, p.47. ²²³ OTA-ISS-605, p.53.

²²⁴ 1996 Cooperative Threat Reduction Prog. am Plan (unclassified), A2-6.

²²⁵ Dunbar Lockwood, "U.S., Kazakhstan Make Progress In SSD Talks; Ukraine Balks", p.23.

²²⁶ Dunbar Lockwood, "Ukrainian Rada Ratifies START I, But Adds 13 Conditions for Approval", p.17,

<sup>26.
&</sup>lt;sup>227</sup> Information on these agreements is taken from Assistant to the Secretary of Defense, 1996 Cooperative Threat Reduction Program Plan (unclassified), IV-22 - IV-26. Six specific projects were negotiated. However the sixth, Biological Production Facility Dismantlement, does not relate directly to this thesis.

Pv the end of 1993 all of the SS-18s, responsible for the alleged US 'window oi vulnerability' in the early 1980s, in Kazakhstan had been de-activated. Reiss, *Bridled Ambition*, p.153.

- launchers. However, it recommenced in January 1995 after Russia and Kazakhstan reached a compromise excluding US personnel.²²⁹
- 2. Heavy Bomber Elimination according to the 1996 Cooperative Threat Reduction Program Plan, seven strategic bombers were observed in Kazakhstan during the START I baseline inspection at Dolon Air Base. According to START I, Kazakhstan was required to eliminate these bombers by 2001. In June 1995 DoD offered to assist Kazakhstan in eliminating these bombers and in August Kazakhstan requested this assistance. As a result the US agreed to provide the necessary equipment. However, according to the Harvard Project on Cooperative Denuclearization and the Program for Nonproliferation Studies at the Monterey Institute, 40 Bear H bombers armed with 370 AS-15 cruise missiles were deployed in Kazakhstan, all of which were returned to Russia. 230
- Liquid Rocket Propellant Disposition to assist Kazakhstan to incinerate 1,800 MT of liquid rocket fuel and dispose of 6,000 MT of liquid rocket oxidiser.²³¹
- 4. Liquid Fuel Equipment Elimination to assist Kazakhstan "in becoming a non-nuclear weapons state by irreversibly eliminating the existing infrastructure that was used to service and deploy ICBMs and strategic nuclear bombers." US assistance specifically targeted the ICBM-related infrastructure at Derzhavinsk, Zanghiz-Tobe, and Leninsk the strategic bomber infrastructure at Dolon and various liquid propellant tank farms.
- 5. Nuclear Infrastructure Elimination to assist Kazakhstan in permanently closing the 186 underground tunnels used for tests, critical to the operation of the Semipalatinsk nuclear weapons testing area, in Degelen Mountain. Kazakhstan's Ministry of Science and New Technologies requested US equipment, technical expertise, training and resources, which DoD agreed to provide, using the Defense Nuclear Agency as the executing agent.

²³⁰ See Allison et al, Cooperative Denuclearization, p.31; Potter et al, Nuclear Profiles of the Soviet Successor States, p.16; and Nuclear Successor States of the Soviet Union, May 1994, p.5.

According to the terms of this agreement, "Russia would remove the nuclear warheads, the SS-18 missiles, and destroy the silo headworks, while Kazakhstan would have the option of salvaging any materials before destruction of the headworks and assume all responsibility after headworks destruction." Kazakhstan requested US assistance to remove the salvageable equipment before headworks destruction, however Russian officials objected to a physical US presence. As a result, DoD awarded contracts to two Kazak companies, Montazhspetsstroy and Katep, to complete this work. *Ibid.*, IV-23 - IV-24.

In August 1995 Kazak officials told the US that some of the propellant to be eliminated was different from that being removed from the SS-18s. 1996 Cooperative Threat Reduction Program Plan (unclassified), IV-25.

The second implementing agreement committed \$5 million to the provision of emergency response equipment and related training for the removal of warheads, the removal and destruction of ICBMs and the destruction of silo launchers. The third committed \$2.3 million to the establishment of a government-to-government communications link (for the purposes of INF and START I notifications). The fourth committed \$5 million to material control and accounting and the fifth committed \$2.26 million to the establishment of an export control system. This last partly funded, in the spring of 1995, a month-long conference in Washington between Kazak officials and US legal experts, which assisted the Kazakhstan in drafting an export control law. The new law was passed by the Kazak Senate on June 3 1996. 233

At the same time that these agreements were signed, the Kazak parliament voted to accede to the NPT as a NNWS. Formal accession to the NPT occurred on February 14, 1994. The benefits were almost instantaneous. At a White House meeting the same month, Clinton promised Nazarbayev that the US would triple its assistance to Kazakhstan. This amounted to a promise of \$311 million in dismantlement aid.²³⁴

In its report on *Proliferation and the Former Soviet Union*, the Office of Technology Assessment concluded that it was not clear why Kazakhstan took so long to ratify the Lisbon Protocol and the NPT, but considered it possible that the Kazak leadership "decided to let Ukraine do the fighting for it on the issue of whether to become a nuclear-weapon free state." It also concluded that the securing of economic and security guarantees, as well as a no-first-use pledge from Russia, played a crucial role in Kazakhstan's timing.²³⁵

In November 1994 US assistance achieved one of its most spectacular, yet at the time highly secret, successes. Nunn-Lugar funds contributed to the removal of 600 kilograms of HEU from Kazakhstan to the US in operation 'Project Sapphire'. According to Graham Allison, Kazak officials did not initially know that they possessed the HEU and only approached the US after they discovered the material. ²³⁶ The fact that the material recovered comprised 104% of the declared inventory only

 ²³² Ibid., A2-5; Dunbar Lockwood, "Former Soviet Republics Clear Way for Nunn-Lugar Monies", p.28.
 233 Shields and Potter (eds), Dismantling the Cold War, p.198-99.

²³⁴ Reiss, Bridled Ambition, p.153; OTA-ISS-605, p.50.

²³⁵ OTA-ISS-605, p.53-4.

²³⁶ "Loo' e Nukes, Nuclear Smuggling, and the Fissile-Material Problem in Russia and the NIS", August 23, 1995, .../9. For an excellent desc on of the operation see William Potter, "Project Sapphire: U.S.-Kazakstani Cooperation for Nonproliferation", in Shields and Potter (eds), Dismantling the Cold War, p.345-362.

underscored the importance of US assistance to consolidate 'loose' fissile material in the FSU, particularly after Secretary of State Christopher's testimony that the Iranian Government was actively interested in this cache.²³⁷ However, this success was slightly tempered by the frank admission of Dr Gordon Oehler, Director of the Nonproliferation Center at Central Intelligence, that 8 kilograms of what was believed to be reactor-grade material was missing.²³⁸

While in Kazakhstan on April 5 1995, William Perry announced the establishment of three defence conversion projects worth \$35 million; \$14.7 million from DoD and \$21.2 million for four private US firms as well as a military-to-military cooperation plan to send six naval vessels to Kazakhstan to train Kazak crews to establish a coastal patrol fleet in the Caspian Sea. ²³⁹ Ten days later officials from Kazakhstan and Russia announced that all warheads from the 104 SS-18's located in Kazakhstan had been returned to Russia. ²⁴⁰

Technically however, this did not make Kazakhstan nuclear-free. An un-detonated nuclear device, with a yield of approximately 0.4 kilotons, remained buried in Mt Degelen at the Semipalatinsk test site. This was destroyed with conventional explosives on May 31 1995.²⁴¹

The return of all warheads to Russia facilitated the signing of an implementing agreement on nuclear weapons infrastructure elimination, which occurred on October 5 1995. Apart from monitoring, and, if necessary, supplementing existing projects, this was the final implementing agreement to be negotiated. As of the end of 1996, CTR assistance to Kazakhstan totalled \$172.5 million in notified funds and approximately \$110 million in obligations. 243

²³⁷ Ibid.; Allison et al, Avoiding Nuclear Anarchy, p.38.

Testimony of Dr Gordon Oehler in "Intelligence Briefing on Smuggling of Nuclear Material and the Role of International Crime Organizations, and on the Proliferation of Cruise and Ballistic Missiles", Hearing before the Committee on Armed Services, United States Senate, One Hundred Fourth Congress, First Session, January 31, 1995, p.23.

²³⁹ Dunbar Lockwood, "U.S. Signs New Agreements Expanding 'Nunn-Lugar' Support", p.30.

²⁴⁰ "News Briefs", Arms Control Today, Volume 25, No.5, June 1995, p.33.

^{24t} Shields and Potter (cds), Dismantling the Cold War, p.142, 194.

²⁴² 1996 Cooperative Threat Reduction Program Plan (unclassified), A2-6.

Department of Defense, Cooperative Threat Reduction Briefing Book, "CTR Funding Status—Kazakhstan, 07.07.97.

Assessment

US Nunn-Lugar assistance to Belarus, Kazakhstan and Ukraine played a crucial role in the denuclearisation of these states, thus fulfilling their revised START I obligations, and becoming Non-Nuclear Weapon State parties to the NPT. Nunn-Lugar also played a pivotal role in helping Russia in the ongoing process of consolidating and securing the nuclear materials and infrastructure located all over the FSU, and exceeding its START I reduction schedule.²⁴⁴ Despite recognition that the process was far from complete at the end of 1996²⁴⁵, CTR has been widely perceived as an effective, albeit at times protracted, response to the danger of nuclear leakage from the former Soviet Union.

However, CTR has not been immune from criticism. For example, while supportive of the program and of its achievements in the areas of denuclearisation and safeguards upgrades at several Russian nuclear facilities, Bruce Blair argued that "these efforts have not . . . been adequate to halt the erosion of nuclear control and safety in the former Soviet Union. . . [T]he overall picture is not that encouraging. In fact, it is discouraging." Other, less constructive, observers speculated on Russian behaviour and intentions. For example, William Odom of the Hudson Institute reasoned that "while it may be worth continuing to try, I believe cooperative efforts to help Russia control its nuclear weapons will become increasingly difficult and may be unproductive." He based this observation on the belief that Russian reactionaries were bent on long-term expansion into eastern and central Europe and that cooperation would only be forthcoming if the US followed a policy of firmness in Europe, that is NATO expansion. Rich Kelly and J. Michael Waller charged that CTR did not

²⁴⁴ In contrast, Nunn-Lugar can take no credit for the return to Russia of all tactical nuclear weapons by May 1992. Surprisingly, Russia's ability to withdraw these weapons without US assistance raised few eyebrows in Washington. This is particularly ironic, given that the early focus of the CTR program was on the tactical weapons withdrawal.

Many CTR programs were only just beginning to make their impact felt by the end of 1996. That the number of reported nuclear smuggling incidents increased each year through 1994, when several hundred occurred, also highlighted the fact that a great deal of work still remained to be done. The Nuclear Black Market, p.11.

²⁴⁶ "Loose Nukes, Nuclear Smuggling, and the Fissile-Material Problem in Russia and the NIS", p.32.

²⁴⁷ Odom, an aide to Jimmy Carter's National Security Adviser, Zbigniew Brzezinski, played a key role in the drafting of Presidential Directive 59, the Carter Administration's very public avowal to prepare to fight, if necessary, an 'extended' or 'protracted' nuclear war.

²⁴⁸ Quoted in *Ibid.*, p.24-25. For a Russian view on NATO expansion and possible responses, see Prof. Viktor Mikhailov, Russian Federation Minister of Atomic Energy, "NATO's Expansion and Russia's Security", September 20 1996 http://www.stimson.org/pub/stimson/rd-table/vmikhail.htm Accessed 22/2/97.

address many of the problems it was designed to remedy and that assistance may actually threaten US security by freeing up Russian resources for defence modernization while Baker Spring of The Heritage Foundation advised that the DoD's Nunn-Lugar monies would be better spent on purchasing more B-2 bombers. While these claims may contain an element of truth — they are impossible to deny unequivocally — they are not persuasive. CTR dismantles weapons that threaten the US the US can verify this. It is now on the way to making the whole process irreversible with funding for warhead dismantlement. Russian officials also showed interest in expanding CTR to include the joint dismantling of Typhoon submarines and SS-18 ICBMs, the 'pride' of the Strategic Rocket Forces. The security returns on CTR investment were enormous.

Indeed, it was not only American observers who were dissatisfied with the results of some CTR activities and concerned with the enormous returns that CTR delivered. US declarations of benign intent did not assuage Russian reservations about what some officials perceived to be one of Washington's un-stated CTR objectives, the pursuit of nuclear espionage — a charge not totally without merit it seems. According to one official, the intelligence gleaned from CTR is "huge". 250

Despite such criticisms, warranted or not, US nuclear threat reduction assistance became a permanent feature in the US Defence Budget. This fact was underlined in legislation for FY 1994 which established Nunn-Lugar as an additional *line* item. Along with permanency came growth. CTR expanded since its inception, to incorporate not just a wider variety of projects, but also a greater number of government agencies authorised to carry out those projects. This diversity had two principal advantages. It enabled departments possessing expertise in specific projects to play an active role in those areas and it also served to protect a number of projects from the budgetary knife, a theme that is pursued in greater detail in the following chapter.

This chapter has detailed CTR project implementation from 1991 to 1996 at ground level but has said little about how and why CTR was formulated in Congress.

Rich Kelly, "The Nunn-Lugar Act: A Wasteful and Dangerous Illusion", Foreign Policy Briefing 39 (Washington, D.C.: The CATO Institute, March 18, 1996); J. Michael Waller, "Author's Rebuttal to the Department of State, published in Demokratizatsiya, Vol. 5, No. 1, Winter 1997 http://wwwasfpc.org/issues/dos9.htm Accessed 14/07/99.; and Baker Spring, "The Defense Budget for Defense: Why Nunn-Lugar Money Should Go To the B-2", Executive Memorandum 424 (Washington, D.C.: The Heritage Foundation, August 1, 1995).

Beyond the measure of functional expediency, which is sometimes a quite poor indicator of policy preferences, it has not explained why certain projects were favoured and why others were either minimised or rejected. This is because CTR was not simply a clear-cut response to conditions in the former Soviet Union. Congressional perception and action proved critical, not only for the program's inception, but to its running since the end of 1991. Indeed, the evolution and expansion of the CTR program does not make ense without an understanding of the Congressional role. It is the purpose of Chapter 4 to elaborate on this role, by identifying where and how Congress has impacted on CTR and explaining why.

Chapter 4

Congress and CTR — August 1991 to December 1996

Aim and Structure

This chapter explains the Congressional impact on the US program to assist Russia to safely and securely store and dismantle its nuclear weapons, to assist the non-Russian nuclear inheritor states to return the nuclear weapons on their territory to Russia and to assist all four states to prevent the leakage of nuclear weapons, materials and expertise. The chapter begins by discussing various Congressional responses to events in the Soviet Union in the second half of 1991, paying particular attention to reactions to the potential for nuclear leakage, which culminated in the December 1991 Nunn-Lugar legislation. The legislation is examined and some of the more contentious wording is drawn out, which leads to an explanation of the early impediments to effective implementation of the program. Following this, specific areas of Congressional interest and methods of Congressional influence are discussed. The chapter concludes with a reiteration of the Congressional impact on the CTR program.

The case study-proper focuses on a five-year period, between the end of 1991 and the end of 1996. The period from August to December 1991 is outlined to introduce the case study and provide context. December 1991 has been chosen as the starting point as this was when the Nunn-Lugar legislation was passed and the program began. December 1996 has been chosen as the end point because it was at this date that the last of the three non-Russian CTR recipients became nuclear weapons free. Some projects persist in these countries and many projects continue in Russia but one of the major goals of Nunn-Lugar, the denuclearisation of Ukraine, Kazakhstan and Belarus, had been achieved and this presented an opportunity to assess CTR at a watershed in the evolution of the program. Before commencing with the case study however, a very brief discussion of the composition and procedure of Congress is necessary.

CTR on the Hill: Congress in Context

At the outset, it should be remembered that the number of Congressmen and women theoretically participating directly in decision-making on the CTR program

was limited to the members of ten Congressional committees, five from the House and five from the Senate. They numbered 76 (42 Democrats and 34 Republicans) in the Senate and 196 (118 Democrats and 78 Republicans) in the House for the 103rd Congress.² Although the numbers may seem large, particularly for the House, it was not unusual for as few as three or four Congressmen to be present at a hearing. According to Senate staffers, one to two dozen members of Congress care about any given arms control treaty and this estimation proved true for Nunn-Lugar.3 Thus, when expounding on the role of Congress in the development and implementation of the CTR program, this constituted a rather small group. This did not mean that the views of those not directly involved in CTR oversight was unimportant, in fact quite the opposite. According to House sources, there is an un-stated House rule that 'if you are not particularly interested in an issue, be against it'. In this way, members could extract concessions from advocates in return for support. A large number of Congressmen and women displayed very little interest in the Nunn-Lugar program and, as will be shown, this had a significant effect on how CTR was marketed as well as the funding levels authorized each fiscal year.

Congress and the Dissolution of the Soviet Union: August to December 1991

Influential members of Congress had shown themselves sensitive to the possibility of political and economic turmoil adversely affecting nuclear command and control well before the events of August 1991.⁵ Yet it was not until August 28, during a press conference, that House Armed Services Committee chairman Les Aspin (D-Wis.) publicly described the nuclear threat posed by the impending break-up of the

¹ These were, from the House: Appropriations, Armed Services (National Security), Foreign Affairs (International Relations), Government Operations and Select Intelligence; and from the Senate: Appropriations, Armed Services, Foreign Relations, Governmental Affairs and Select Intelligence.

² This figure does not count twice members of multiple committees. Numbers are taken from committee lists in Phil Duncan (ed), *Politics In America: The 103rd Congress* (Washington, D.C.: Congressional Quarterly Inc., 1993), p.1702-1729.

Interviews, Washington, D.C., March 5, 1998.

⁴ Interviews, Washington, D.C., March 12, 1998.

For example, in early 1990 Sam Nunn argued that "the long-standing danger of unauthorized or accidental nuclear weapons use has been heightened by turmoil and tension in the Soviet Union." Sam Nunn, "Assessing the Military Threats of the 1990s" (excerpts), Aviation Week and Space Technology, April 16, 1990, p.7. Similarly Nunn wrote that "... even before the ecent turmoil in the Soviet Union, one of the most important concerns I have had was that some of the tens of thousands of Soviet nuclear weapons could fall into the wrong hands or be launched by accident." Sam Nunn, "Nunn 1990: A New Military Strategy", CSIS Significant Issues Series, Volume XII, No. 5 (Washington, D.C.: Center for Strategic and International Studies, 1990), p.32.

Soviet Union and what he considered to be an appropriate US response. While Aspin's vision was quickly laid to rest in favour of domestic priorities, a revised version of this plan was to serve as the basis for future US assistance. The failure of this initiative and the success of the subsequent revised initiative are instructive. They reveal how urgent, in terms of US national security, Congress as a whole perceived the threat of nuclear leakage from the Soviet Union to be, and the portion of US financial and technical resources it considered appropriate to be made available commensurate with that threat.

In retrospect, Aspin's August initiative was overly ambitious. He proposed that the US transfer \$1 billion from the Pentagon authorization bill to an emergency humanitarian aid fund for the Soviet Union. Evidently Aspin considered that the best way to avert "chaos in a nation with 30,000 nuclear weapons" was to provide financial assistance to bolster the fledgling democracy and stave off the effects of the approaching winter⁶; a kind of 1991 version of the Marshall Plan. The focus began to shift, however, in September when Senate Armed Services Committee chairman Sam Nunn (D-Ga.) lent his support to the plan. Nunn had visited Moscow early that month, had met Gorbachev soon after his release from house arrest and had been alarmed by what he saw:

A nuclear superpower is literally coming apart at the seams... The danger is clear: In the midst of this turmoil sit tens of thousand of weapons of mass destruction, plus tens of thousands of scientists and technicians skilled in producing such weapons, plus tens of thousands of armed forces trained in handling and firing these weapons.

This situation was compounded by "the prospect of thousands of nuclear weapons suddenly being removed from the missiles, bombers, and ships" of the Soviet Union in accord with the unilateral initiatives proposed by Bush and Gorbachev.⁸ Together Aspin and Nunn drafted a \$1 billion bill, which would have provided humanitarian

[&]quot;Don Oberdorfer, "First Aid for Moscow: The Senate's Foreign Policy Rescue", *The Washington Post*, December 1, 1991, p.C2.

⁷ Sam Nunn and Richard Lugar, "Dismantling the Soviet Arsenal", *The Washington Post*, November 22, 1991, p.A-25.

⁸ Opening Statement of Sam Nunn in "Military Implications of START 1 and START II", *Hearings before the Committee on Armed Services*, United States Senate, One Hundred Second Congress, Second Session, August 4, 1992, p.90.

aid, as emphasized by Aspin, and nuclear dismantlement, destruction and defence conversion assistance, as emphasized by Nunn. According to Aspin, members of the administration such as Deputy Secretary of State Eagleburger, National Security Adviser Scowcroft and Defense Secretary Cheney worked closely with the Congressmen in drafting the legislation. Despite this collaboration, the administration appeared unenthusiastic about the proposed legislation and would not formally endorse it, although it was indicated that the shift in funds would not be opposed so long as it was at the discretion of the president.

However the initiative could not have been launched at a more unfortunate time, coinciding as it did with "a wave of pessimism that the [US] recession was deepening" 12, and a general feeling that domestic concerns had been neglected for too long. Foreign assistance programs, historically a frequent victim of Congressional budget-cutting, were targeted as potential areas to be cut back. 13 Barney Frank (D-Mass.), no doubt encouraged by Bush's September 27 unilateral nuclear weapons reduction initiative (see Chapter 3), spoke for an increasing number of Congressmen and women when he wrote, in the aftermath of the coup, "The Cold War has ended. America has won. And we can reap the benefits of victory by halving our military expenditure in three years without jeopardizing our position as the strongest military power." 14 Robert Smith (R-N.H.) complained that if "the Soviet Union needs money to clean up their environment and reform their military, let them stop producing the missiles and submarines that directly threaten us." 15 Patrick Leahy (D-Vt.) said he was "outraged to see the first billion dollars of the peace dividend be used for the Soviet

⁹ Aspin's views on nuclear leakage and future US nuclear policy were articulated in early 1992 after a visit to Russia and Ukraine. "From Deterrence to Denuking: A New Nuclear Policy for the 1990's", A Draft Working Paper by Representative Les Aspin, Chairman, House Armed Services Committee, in "Shaping Nuclear Policy for the 1990s: A Compendium of Views", Report of the Defense Policy Panel of the Committee on Armed Services, House of Representatives, 102nd Congress, 2nd Session, December 17 1992, p.2-26.

io Oberdorfer, "First Aid for Moscow", p.C2.

¹¹ Ibid.

¹² Ibid.

Roger Hilsman has observed that, historically, foreign aid has suffered from overselling "in the sense of claiming too much for it." Foreign aid was supposed to create military allies while also producing democratic regimes and achieving economic development. "Both of these claims created false expectations at home that eventually eroded support for foreign aid not only among conservatives but among the very liberals who were the most ardent backers of the aid program." Roger Hilsman, *To Move A Nation* (New York: Dell Publishing, 1964), p.547.

¹⁴ John Isaacs, "Congress seizes Bush's weapons initiative", The Bulletin of the Atomic Scientists, Vol.47, No.9, November 1991, p.3.

¹⁵ John Isaacs, "Bush wheeked by Wofford win", *The Bulletin of the Atomic Scientists*, Vol.48, No.1, January/February 1992, p.3.

Union."¹⁶ Alfonse D'Amato (R-N.Y.) argued that the Aspin-Nunn plan played "Santa Claus to the Soviet Union" and that the money would be better spent in the US.¹⁷ Other legislators complained about a lack of consultation, which was fair given that the initiative was introduced during conference, meaning there was no floor debate.

The administration was conspicuous by its silence. There was virtually no effort to defend the initiative from the barrage of criticism it was receiving. Indeed, of the few official comments on the proposed legislation, Secretary of Defense Cheney labeled the bill 'foolish'; this was an indication of the executive's sensitivity to domestic backlash, given that Cheney worked on that same proposed legislation. Similarly President Bush warned against cutting "into the muscle of defense of this country in a kind of an instant sense of budgetary gratification so that we can go over and help somebody when the needs aren't clear and when we have requirements that transcend historic concerns about the Soviet Union." White House reticence was due, in large part, to the impending presidential election. President Bush's foreign policy image was at its zenith, given the unification of Germany, the revolutions in Eastern Europe and a successful prosecution of the Gulf War. However this came at a price. Economic problems were blamed on Bush's neglect of domestic politics.

The domestic backlash first became apparent in November 1991 with the Senate vacancy brought about by the death of John Heinz (R-Pa.). Running on a platform emphasizing the importance of focusing on domestic problems, Democrat Harris Wofford (D-Pa.) defeated the highly favoured Republican candidate, and former attorney general, Richard Thornburgh.¹⁹

Fear that announcing a 'foreign aid program', right at a time when voters expected to be relieved of some of the Cold War military programs, would reinforce the perception of the Republicans as not sufficiently domestic-minded played its role in the administration's silence. Conscious of the stigma attached to foreign aid, officials and Congressmen supporting the Nunn-Lugar program were at pains to point out that nuclear threat reduction assistance was not foreign aid, rather it was "defense by other means".²⁰

¹⁶ Ibid.

¹⁷ C'berdorfer, "First Aid for Moscow", p.C2.

¹⁸ Sam Nunn and Richard Lugar, "The Nunn-Lugar Initiative: Cooperative Demilitarization of the Former Soviet Union", in Allan E. Goodman (ed.), *The Diplomatic Record 1992-1993* (Boulder, CO., Westview Press, 1995), p.142.

¹⁹ Isaacs, "Bush whacked by Wofford win", p.3; Curt Tarnoff, "The Former Soviet Union and U.S. Foreign Assistance in 1992: The Role of Congress", CRS Report for Congress, 93-907F, October 12, 1993, p.8-9.

²⁰ See, for example, Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, *Cooperative Threat Reduction* (Arlington, VA: Cooperative Threat Reduction Program Office,

It also reflected the fact that two different accounts were coming out of Moscow and were being received by two different audiences in Washington. The first was the government line, which was being accepted by the Bush Administration. The second, which was the more alarmist, was being reported by the military and found a more receptive audience in Congress. Senators listening to these briefings from Russian generals and Politburo members realized that they were getting two different stories and felt that the military were unlikely to overstate the problem. Based on these meetings, Senators Nunn, Lugar as well as other Congressmen and Pentagon officials, visited the Soviet Union and found that the military reports were more accurate. This resulted in an intense lobbying effort on Bush and Secretary of State James Baker upon their return.

Another reason, offered by Les Aspin a little less than eighteen months later, was attitudinal: the Bush administration had no role in writing the law and had little enthusiasm for supporting it.²³ It is also possible that the administration had observed how controversial the proposed legislation was and had decided to let the battle be fought on Capitol Hill, only making a commitment when the outcome was assured.

Not surprisingly, given the atmosphere, the Aspin-Nunn initiative was withdrawn at the time of the House conference report, "lest it bring on a filibuster against the entire defense bill." Nunn was quick to vent his frustration in the Senate, complaining that he could not "think of a better way to 'take care of your own' than by reducing the threat of proliferation around the world". This was a clear reference to comments by House Majority Whip David Bonior (D-Mich.), who had argued that in the present environment, Congress should "take care of our own." In an equally discouraging turn of events, the foreign aid bill was defeated on October 30 in the

Department of Defense, April 1995), p.1. In 1990 a Congressman, in explaining his opposition to foreign aid for twenty years, illustrated the potential electoral backlash to foreign aid per se: "It is unpopular in my district, which is very poor. Had I voted for it, it would have become a campaign issue." John Dumbrell, The Making of U.S. Foreign Policy (Manchester: Manchester University Press, 1990), p.134.

Interview, Washington, D.C., March 10, 1998. The Russian Navy's behaviour in relation to the sinking of the nuclear submarine Kursk demonstrates the continued reluctance of the military to draw attention to its own inadequacies.

²² Interview, Washington, D.C., March 10, 1998.

²³ Dunbar Lockwood, "Dribbling Aid To Russia", *The Bulletin of the Atomic Scientists*, Vol.49, No.6, July/August 1993, p.40.

²⁺ Phil Duncan (ed), *Politics In America: The 103rd Congress* (Washington, D.C.: Congressional Quarterly Inc., 1993), p.390; Oberdorfer, "First Aid for Moscow", p.C2.

²⁵ Duncan (ed), *Politics In America*, p.390.

[&]quot;Nunn and Lugar, "The Nunn-Lugar Initiative: Cooperative Demilitarization of the Former Soviet Union", p.142.

House by a vote of 262-159.²⁷ However, this disappointment only served to invigorate efforts, affect at a more modest level of funding.

The second attempt to pass a nuclear weapons security and dismantlement aid package exhibited a far more politically nuanced approach. It also benefited from an increasing number of reports from a variety of sources (both Russian and US) indicating what exactly was happening in the Soviet Union. The proposed aid package, consisting of \$500 million for nuclear weapons dismantlement aid and \$200 million to airlift food and medicine, was sold more effectively to a receptive Congress.²⁸

Senators Nunn and Richard Lugar (R-Ind.), who spearheaded the effort, emphasized that nuclear dismantlement assistance, rather than being labeled foreign aid, should be seen as "a prudent investment to reduce a grave threat that we otherwise must be prepared to deter and, if need be, defend." Congressman Lee Hamilton concurred, observing that the US could not "live safe and prosperous and free if there is turmoil and upheaval in a vast land that possesses some 30,000 nuclear warheads." This logic was reinforced by alarming reports from both Soviet officials and US intelligence on the political situation inside the USSR.

Only days after the \$1 billion aid package was dropped from the defence bill, a number of respected Soviet officials (including Alexander Yakovlev, Sergei Rogov and Andrei Kokoshin) visited and briefed key senators on the rapidly deteriorating situation in the Soviet Union, particularly with regard to the danger of nuclear weapons 'devolution'. This impression was dramatically reinforced by a briefing given by Minister of Atomic Energy Viktor Mikhailov to the Senate Arms Control Observer Group. Mikhailov stated that as a result of the cuts to the Soviet nuclear arsenal mandated by the Gorbachev October initiative (see Chapter 3., the Soviet Union would have to destroy 15,000 nuclear warheads "plus or minus 5,000". This uncertainty, combined with Mikhailov's frank admission that the Soviet Union had neither the money nor the facilities to store and dismantle these weapons, left a lasting impression on the audience.³¹

²⁷ Isaacs, "Bush whacked by Wofford win", p.3.

²⁸ The failure of the first nuclear threat reduction package and the success of the second seem to support Les Aspin's observation that legislative battles in Congress "are resolved more often than not by political pressure. . ." Les Aspin, "The Defense Budget and Foreign Policy: The Role of Congress", *Daedalus*, 104, Summer 1975, p.164.

²⁹ Nunn and Lugar, "Dismantling the Soviet Arsenal", p.A-25.

³⁰ Quoted in Duncan (ed), Politics In America, p.551.

³¹ Richard Lugar described the briefings as "very alarming". Oberdorfer, "First Aid for Moscow", p.C2.

At about the same time Senate Intelligence Committee chairman David Boren (D-Okla.) received briefings from Jack Matlock, former ambassador to the USSR, and former Senator Henry Bellmon, who had recently toured the Soviet Union. Matlock and Bellmon talked of deteriorating conditions. These impressions were complemented by intelligence briefings. Evidently this had a strong effect on Boren, who called for a 'bipartisan truce' on the nuclear dismantlement bill.³²

However, these observations must be qualified. Not all the information reaching Congress spoke of an emerging nuclear leakage problem. For example, in September 1991 Matlock testified:

it seems to me that none of the republics aside from Russia has shown any interest or desire in having in their hands nuclear weapons. So I do not think the problem is that 12 republics may compete for their part of the nuclear arsenal. I do not think that is going to happen.³³

Those who refused to fully embrace the nuclear leakage scenario did not limit their doubts to the likelihood of a 'nuclear grab' by the non-Russian successor states. Some observers went so far as to question the value attached to human life by Russian officials, in the event of a nuclear explosion on Russian soil.³⁴ Thus, although it was not unanimous, the overwhelming majority view was that nuclear leakage posed a grave threat to US interests, and key members of Congress were listening.

Congress's general appreciation of the growing threat to nuclear weapons and material command and control was further sharpened by a publication from Harvard University at this time. The study, *Soviet Nuclear Fission*, was released in November by Harvard's Center for Science and International Affairs (CSIA) as a result of

¹² Ibid.

³³ "The START Treaty In A Changed World", *Hearings before the Committee on Foreign Relations*, United States Senate, One Hundred Second Congress, First Session, September 19, 1991, p.3.

In response to a question from Senator Lugar concerning whether the Russians would consider a nuclear detonation in Moscow to be an event of cataclysmic proportions, former Undersecretary of Defence for Policy Fred Iklé answered "yes". However, former aide to Zbigniew Brzezinski, William Odom, said "no": "I just do not think the Russian view, and I have had a number of senior officials tell me this, of the value of human life is that high a priority", and Dr Paul Goble, Editor-in-Chief of the Jamestown Foundation stated that "I think that Russian views on human life are rather different from ours." Lugar followed with the observation that while Odom's views were more bleak than Iklé's, they "may be accurate". "Loose Nukes, Nuclear Smuggling, and the Fissile-Material Problem in Russia and the NIS", Hearings before the Subcommittee on European Affairs of the Committee on Foreign Relations, United States Senate, One Hundred Fourth Congress, First Session, August 22, 1995, p.39-42.

research conducted by CSIA's Post-Cold War Reconstruction Project.35 On November 19 1991 David Hamburg of the Carnegie Corporation organized for Carter, William Perry of Stanford³⁶ and John Steinbruner of Brookings, to meet with Nunn and Lugar in Nunn's office. Carter briefed the senators on the Harvard study. As a result of the shared concern over what Nunn had seen and what the Harvard team were studying, Carter, and the senators' staffers, Robert Bell, Ken Myers and Richard Coombs, adjourned to Lugar's office to draft what would become the original Nunn-Lugar legislation.37

Soviet Nuclear Fission was the first comprehensive study of the possible effects of political and economic disintegration on nuclear command and control, and remains authoritative. While it is unclear exactly how influential this was on members of Congress, it does seem likely that this study, which attracted a great deal of attention, reinforced the belief in the need for immediate action amongst those who supported nuclear dismantlement assistance and had a positive impact on some of those who were "sitting on the fence". This seems all the more likely in light of the contacts forged between the Harvard group and members of Congress in this area and the supporting role Harvard University was to play in the development of a cooperative relationship between the US and the former Soviet states.³⁸ Indeed, Les Aspin specifically referred to its positive impact in December 1991.³⁹

Two days after the meeting in Nunn's office, Nunn and Lugar convened a 'working breakfast' for a group of influential senators to garner support for the legislation. Here Carter repeated the Soviet Nuclear Fission briefing and some astute

³⁵ Kurt Campbell, Ashton Carter, Steven Miller and Charles Zraket, Soviet Nuclear Fission (CSIA Studies in International Security No. 1, Cambridge, MA: Center for Science and International Affairs, Harvard University, 1991).

¹⁶ Perry's research team at Stanford had been studying the potential for the USSR's military-industrial complex to become the engine of recovery for the Soviet Union's economy. Ashton Carter and William Perry, Preventive Defense: A New Security Strategy for America (Washington, D.C.: Brookings, 1999), p.71. 17 lbid., p.71-2.

³⁸ For example, Harvard University's "Program for Russian General Officers", created in September 1991, has brought Russian officers to Harvard to discuss issues of mutual concern. Harvard, under the auspices of the Project on Strengthening Democratic Institutions, has also hosted members from the Russian defence community with a view to cooperatively analysing issues such as "alternative reductions in strategic forces, deactivation of nuclear weapons, and industrial policy for defense conversion." Graham Allison et al (eds), Cooperative Denuclearization: From Pledges to Deeds (CSIA Studies in International Security No. 2, Cambridge, MA: Center for Science and International Affairs, Harvard University, 1993), p.151.

[&]quot;Opening Statement of Les Aspin in "Potential Threats to American Security in the Post-Cold War Era", Hearings before the Defense Policy Panel of the Committee on Armed Services, House of Representatives, One Hundred Second Congress, First Session, December 13 1991, p.120.

politicking was done to convince those legislators not motivated strictly by nuclear leakage concerns. 40

It soon became apparent that support for the nuclear dismantlement bill was high-ranking and broadly bipartisan. Nunn and Lugar were joined by twenty senators, among them Boren, European Affairs Committee chairman Joseph Biden (D-Del.), Foreign Relations Committee chairman Claiborne Pell (D-R.I.), senior Armed Services Committee member Carl Levin (D-Mich.), ranking member on the Armed Services Committee Strom Thurmond (R-S.C.), Appropriations Committee member Connie Mack (R-Fla.), second Republican on the Armed Services Committee John Warner (R-Va.) and third Republican on the Armed Services Committee William Cohen (R-Maine). Between them a proposal was drafted, other Senators were appraised of the work being done, administration officials were consulted and support from the House was solicited.⁴¹

The support of Connie Mack was important in a procedural sense because Mack was a member of the Appropriations Committee. According to one official interviewed by the author, Appropriations Committee members were "in a world unto themselves" when it came time to appropriate money and were often difficult to contact before an appropriations vote. Nunn-Lugar apparently did not have nearly enough members 'on board', given that Appropriations eventually cut the program by \$100 million. Significantly, of the Congressmen mentioned specifically by Nunn and Lugar as critical in the bill's passing, only two — Senators Mack and Pete Domenici (R-N.M.) — were Appropriations Committee members. In addition, both Leahy and D'Amato, mentioned previously as opposed to the Aspin-Nunn \$1 billion Soviet relief bill, were both members of the Senate Appropriations Committee.

One of the more innovative, and probably controversial had it been widely publicised, suggestions for obtaining Congressional support was made by Claiborne Pell. In order to alert Congressmen to the dangers of "loose nukes", he argued, an exchange of target lists would be beneficial in that "it would have a stimulating effect on me or any other politician to know that his particular home community is on the target list." While no action appears to have been taken on Pell's suggestion, it indicates how parochial some members of Congress were considered to be.

⁴⁰ Carter and Perry, Preventive Defense, p.72.

⁴¹ Ibid.; Isaacs, "Bush whacked by Wofford win", p.4.

⁴² Interview, Washington, D.C., March 9, 1998.

Committee lists are taken from Phil Duncan (ed), Politics in America 1992: The 102nd Congress (Washington, D.C.: Congressional Quarterly Inc., 1991), p.1656, 1667.

^{44 &}quot;The START Treaty In A Changed World", September 25, 1991, p.78.

Finally the revised nuclear dismantlement assistance bill went to the Senate and virtually sailed through, being passed by a vote of 86-8, which included ultraconservative Senator Jesse Helms (R-N.C.) as a co-sponsor. The food and medicine humanitarian aid package that Aspin had initially proposed was also adopted by a vote of 87-7. Congressmen Murtha (D-Pa.) and McDade (R-Pa.) were instrumental in passing the legislation through the House, which was approved by voice vote. 45 The extent of the support can be gauged by the fact that Nunn and Lugar named Senators Pell, Thurmond, Boren, Levin, Domenici, Exon (D-Neb.), Warner, Cohen, Biden, McCain (R-Ariz.) and Mack and Representatives Aspin, Gephardt (D-Mo.), Hamilton (D-Ind.), Foley (D-Wash.), Michel (R-III.), Dickinson (R-Ala), Fascell (D-Fla.), Broomfield (R-Mich), Solarz (D-N.Y.) and Spratt (D-S.C.) as critical in the bill's passing.46 However, as mentioned above, the initial assistance package was cut significantly by a House-Senate Appropriations Committee conference. The nuclear dismantlement bill was cut from \$500 million to \$400 million and the humanitarian aid package was cut from \$200 million to \$100 million.47

The December 1991 Nunn-Lugar Legislation

The nuclear dismantlement bill was officially entitled the "Soviet Nuclear Threat Reduction Act of 1991", Title II of the "Conventional Forces in Europe (CFE) Treaty Implementation Act of 1991", however it became widely referred to as the Nunn-Lugar legislation. The legislation was included in the unrelated CFE Treaty Implementation Act because the Fiscal Year 1992 Defense Authorization Bill had already passed. Nunn-Lugar authorized the President to provide "the Soviet Union, any of its republics or any successor entity" with a total of \$400 million for Fiscal Year (FY)⁴⁸ 1992 to "(1) destroy nuclear weapons, chemical weapons, and other weapons, (2) transport, store, disable, and safeguard weapons in connection with their

⁴⁶ Nunn and Lugar, "The Nunn-Lugar Initiative: Cooperative Demilitarization of the Former Soviet Union",

⁴⁸ The fiscal year runs from October 1 to September 30.

⁴⁵ Statement of Harold Smith, Assistant to the Secretary of Defense for Atomic Energy, in "U.S. Assistance Programs for Economic and Political Reform and Dismantling of Weapons of Mass Destruction in the NIS". Hearing before the Committee on International Relations, House of Representatives, One Hundred Fourth Congress, First Session, March 3, 1995, p.10. Interview, Washington, D.C., March 10, 1998.

p.153.

Thristopher Paine and Thomas Cochran, "So Little Time, So Many Weapons, So Much To Do", The Bulletin of the Atomic Scientists, Vol.48, No.1, January/February 1992, p.15; Oberdorfer, "First Aid for Moscow", p.C2. Oberdorfer considered these cuts to be 'slight'. However given the small amounts involved, relative to the defence budget, the cuts were huge and amounted to a reduction of over 28.5%.

destruction, and (3) establish verifiable safeguards against the proliferation of such weapons."49

Num-Lugar provided a concise rationale for US aid by describing the 'nuclear threat' posed by the political and economic crisis in the Soviet Union, linking the resolution of this problem directly to US national security interests and outlining how the proposed recipient was to qualify for this aid. Specifically Congress identified three nuclear command and control dangers posed by events in the Soviet Union and proposed a course of action to prevent nuclear leakage. See Appendix B for the precise legislative wording.

The three dangers were that the disposition of nuclear weapons among several republics was not conducive to weapons safety or international stability; that there was a possibility that weapons components could be seized, sold, stolen or used; and that weapons, weapons components or weapons know-how could be transferred outside the territory of the Soviet Union, contributing to nuclear proliferation. In order to help to prevent these dangers from being realized, the legislation proposed to assist in the transportation, storage, safeguarding and destruction of nuclear weapons in the Soviet Union or any successor entities. ⁵⁰

The language was instructive. Drafting legislation in excruciating detail to ensure that loopholes cannot be found and exploited has been a matter of the highest priority for all legislative bodies; one need only peruse the START II Treaty to get a feel for the attention to detail that is paid to arms control treaties.⁵¹

Yet the use of the generic term 'nuclear weapon' was favoured over more specific phraseology such as launcher or warhead. Thus it was unclear precisely what the program proposed to destroy. This sometimes led to the erroneous impression that actual warheads would be dismantled and that the US would play, at the least, an observatory role in this process. Initially, both Congressmen and senior officials were not clear about the distinction. In response to a question from Senator Carl Levin as to whether it would be in the interests of the United States to seek Russian warhead dismantlement, Secretary of Defense Richard Cheney responded affirmatively, and went on to say that warhead dismantlement "has been the intent of Congress in the

50 Ibid., Sec. 211.

⁴⁰ This was not, however, simply a hand-out. The President was also directed to obtain reimbursement "for the cost of such assistance from natural resources or other materials available to the recipient government." "Soviet Nuclear Threat Reduction Act of 1991", Public Law 102-228—Dec. 12 1991, Sec. 211, 222.

⁵¹ The text of START II can be found at the State Department website:

http://www.state.gov/www/global/arms/starthtm/start2/st2intal.html

Nunn-Lugar language and we have sought to carry that out."52 Indeed, the report from a Congressional delegation that visited Moscow in February 1992 reflected the view that Nunn-Lugar funding was intended to facilitate warhead dismantlement.⁵³ Richard Lugar's frank admission that "this does stretch the imagination a bit in terms of Americans and/or NATO people actually in the Soviet Union intrusively, in this case not inspecting but actually dismantling weapons"54, seemed to indicate that the US would at least observe such dismantlement. Sam Nunn went even further, During hearings on START I and II he asked Robert Gallucci, Assistant Secretary of State for Politico-Military Affairs, whether the US could confidently certify that the warheads that it was assisting to destroy were actually being destroyed and not recycled or transferred.55 However, during the first five years of the program Russian officials made clear that they neither needed nor wanted US assistance in the warhead dismantlement process.⁵⁶ Safe and Secure Dismantlement (SSD) — as the US team responsible for negotiating Nunn-Lugar assistance with the "nuclear inheritor states" was known — chief negotiator William Burns described his view on warhead dismantlement as follows: "I would not want to be responsible for a program where we sent technicians to dismantle their nuclear weapons, even if they asked for it."57

In subsequent hearings on nuclear threat reduction activities, members of Congress exhibited some misgivings concerning warhead dismantlement and the CTR program, despite official protestations that this was never the intent of original

⁵² "Military Implications of START I and START II", July 28, 1992, p.37. Similarly, in his opening remarks at a hearing regarding US nuclear threat reduction assistance, Senate Foreign Relations Committee Chairman Claiborne Pell stated, mistakenly, that US assistance to Russia would "gain assured destruction of nuclear warheads and the elimination of the horrible threat they pose." Remarks of Claiborne Pell in "U.S. Plans and Programs Regarding Dismantling of Nuclear Weapons in the Former Soviet Union", *Hearing before the Committee on Foreign Relations*, United States Senate, One Hundred Second Congress, Second Session, July 27, 1992, p.1.

Members of the delegation met with Russian officials to determine "progress in warhead dismantlement and the expenditure of the \$400 million in U.S. aid for this purpose." [Emphasis Added] "Trip Report From A Congressional Delegation's Visit To Moscow, Russian Federation: February 20-24 1992", p.2 in Hearings on National Defense Authorization Act for Fiscal Year 1993—H.R. 5006 and Oversight of Previously Authorized Programs before the Committee on Armed Services, House of Representatives, One Hundred Second Congress, Second Session, Department of Energy Defense Nuclear Facilities Panel Hearings on Department of Energy Defense Programs, March 18, 30, 31, April 1, 6, 28, 30 1992.

^{54 &}quot;The START Treaty In A Changed World", October 23, 1991, p.94.

^{55 &}quot;Military Implications of START I and START II", p.250. Emphasis added.

Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, Cooperative Threat Reduction, p.16.

⁵⁷ William Burns in "Disposing of Plutonium in Russia", Hearing before the Committee on Governmental Affairs, United States Senate, One Hundred Third Congress, First Session, March 9, 1993, p.17.

legislation.⁵⁸ For example, Senator Hank Brown (R-Colo.) expressed concern that the Nunn-Lugar legislation was drafted to aid nuclear weapons dismantlement: "Now, the Soviet Union [sic] says that they do not want the United States involved in the dismantling of these weapons... Russia has ruled out a direct U.S. role in the dismantlement operation..." For Brown, this constituted a mismanagement of the legislation. From the Department of Defense perspective, warhead dismantlement was always a long-term goal of CTR activity and warhead dismantlement reflected 'the art of the possible' rather than an immediate CTR objective.⁶⁰ Although Nunn-Lugar called for the US to assist in destroying former Soviet nuclear weapons, Russian officials resisted. Therefore, assistance initially focused on safety, security and non-proliferation projects.⁶¹

As mentioned above, a few members of Congress expressed surprise and disappointment that CTR could not directly address warhead dismantlement but this was symptomatic of the larger relationship between the US and Russia. While Presidents' Clinton and Yeltsin agreed to re-target missiles previously aimed at each other out to sea and there had been a significant warming in relations between the two Cold War enemies, signified by Russian inclusion in such forums as the G-7 (now referred to as the G-8) as well as the introduction of the "Partnership for Peace", the relationship retained suspicions borne of more than eighty years of antagonism. Russian officials made clear their reluctance to allow American personnel to participate in, or even observe, the highly sensitive process of warhead dismantlement and US officials stated that they offered assistance but did not "push" to get involved. Rather, they waited for the Russians to ask. Russian officials made some offers to allow a US role in warhead dismantlement based on a reciprocal Russian role in US warhead dismantlement but Washington showed just as much resistance to this proposal as the Russians.

US officials, and most of the interested members of Congress, adopted a 'wait and see' attitude to warhead dismantlement.⁶⁴ According to US officials and

50 Statement of Senator Hank Brown in "Disposing of Plutonium in Russia", p.6-7.

⁶² Department of Defense, "CTR Background Briefing", Washington, D.C., 13.3.98.

63 Allison et al, Avoiding Nuclear Anarchy, p.124.

Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, Cooperative Threat Reduction, p.16.

The FY 1999 CTR budget request included, for the first time, \$9.4 million for warhead dismantlement. Department of Defense, Cooperative Threat Reduction, CTR FY 1998 & FY 1999 Funds, 25.2.98.

⁶¹ Testimony of Joseph Kelley, Director of International Affairs Issues at the General Accounting Office, in "Disposing of Plutonium in Russia", p.25.

⁶⁴ Information is based on interviews conducted with current US officials and Congressional staffers in Washington, D.C., March 5, 9, 10, 1998.

Congressional staffers, very few of those in Congress who actually made the distinction between nuclear warheads and nuclear weapons thought it to be meaningful. In addition, most Congressmen realized that taking an 'all-or-nothing' attitude to warhead dismantlement, that is, making CTR aid contingent on this specific project, would in effect cut off one's nose to spite one's face. The pragmatic approach — doing everything possible to remove the threat of nuclear leakage now and warhead dismantlement would hopefully come later — was understood to be far more sensible and productive. Just as importantly, very few made the distinction. Most members did not make the distinction and chose to trust the voting preferences of senior Congressmen rather than analyze the issue for themselves.⁶⁵ While the lack of understanding in general often contributed to problems attracting support for CTR funding, as still occurs with members who equate Cooperative Threat Reduction with foreign aid, this particular lack of understanding probably eased the passage of funding. Objecting to CTR funding on the grounds that it failed to address warhead dismantlement would have been a quite arcane argument, however it may have carried some weight if critics had have been able to show that the most dangerous part of the nuclear weapons they were supposed to be destroying were still intact. In this case, lack of understanding and interest helped to keep a potentially lethal challenge merely hypothetical.

An initiative designed to provide \$1 billion in aid to the Soviet Union survived, albeit at a reduced budget of \$500 million: \$400 million for nuclear weapons dismantlement and \$100 million for humanitarian aid. The program was created in Congress and survived due to the efforts of key members of Congress, in spite of the White House's apparent indifference. For example, before the vote was taken, Senate Appropriations Committee chairman Robert Byrd (D-W.Va.) asked Republican supporters whether the President supported Nunn-Lugar, to which Minority Leader, and amendment co-sponsor, Robert Dole (R-Kan.) replied, "We do not yet know." Reflecting on the partially emasculated assistance package the day after the legislation passed, Les Aspin lamented: "if the President had spoken up at the right point, or even if Jim Baker had done it or Dick Cheney had done it, we would have gotten that \$1 billion in the original proposal. But it is for the lack of a little bit of foresight and a

66 Paine and Cochran, "So Little Time, So Many Weapons, So Much To Do", p.15.

⁶⁵ Interviews, Washington, D.C., March 5, 1998. On the tendency in Congress to defer to senior members see Aspin, "The Defense Budget and Foreign Policy", p.160.

little bit of explaining it in the right terms Only a few months later Senator Biden stated somewhat incredulously that when he, Nunn, Lugar and Boren went to the floor to pass the legislation "we could not even get a letter, not even a letter from the President of the United States or the Secretary of State to be read on the floor of the Senate to say that they supported our efforts. . . . It was all the more remarkable for the fact that Congress has traditionally been considered parochial and slow when initiating action in the foreign policy sphere. In what could be described as a reconsideration of his earlier views on nuclear threat reduction policies, Senator Leahy summed up succinctly the conflicting pressures of a domestic constituency and the urgency of the problem of nuclear leakage in the former Soviet Union when he stated: "None of us are getting votes back home for standing up for foreign aid . . . But we do it, because we know that it is important for our country."

The birth and passage of the Nunn-Lugar bill provided a glaring example of the overstated nature of the old adage, "the president proposes, Congress disposes". The vas a creature of Congress. The rest of the chapter will be devoted to investigating how Congress has helped shape this program since its inception.

⁶⁸ "U.S. Assistance To The New Independent States", Hearings before the Subcommittee on European Affairs of the Committee on Foreign Relations, United States Senate, One Hundred Second Congress, 2nd Session, March 19; April 8 and 9; May 5,6 and 14 1992, p.355.

"Foreign Operations, Export Financing, and Related Programs Appropriations for Fiscal Year 1996", Hearings before a Subcommittee of the Committee on Appropriations, United States Senate, One Hundred Fourth Congress, First Session on H.R. 1868, May 18, 1995, p.427.

⁷¹ Robert Dahl, Congress and American Foreign Policy (New York: W.W. Norton, 1964), p.58.

⁶⁷ Statement of Aspin in "Potential Threats To American Security In The Post-Cold War Era", p.101.

⁶⁹ John Spanier and Eric Uslaner, American Foreign Policy Making and the Democratic Dilemmas, 6th ed., (New York: MacMillan, 1994), p.176-77. Ironically, Secretary of State James Baker expressed his concern for US assistance becoming a hostage to Congressional committees when he implored: "Now if we think it through too much longer it will die and . . . we will get bogged down up here in legislative debate that would kill it. . . So I really hope that we are not going to think it to death . . ." "Legislation Authorizing Assistance To The Former Soviet Union, S. 2532", Hearing before the Committee on Foreign Relations, United States Senate, One Hundred Second Congress, Second Session, April 9, 1992, p.33.

Programmatic Teething Problems

Despite its promise, the first years of the Nunn-Lugar program were characterized by bureaucratic delays, overly optimistic expectations and misunderstandings between partners at all levels, resulting in a distinct lack of progress in nuclear threat reduction programs across the board. This inspired former President Richard Nixon, in March 1992, to describe the US response as "pathetically inadequate" and to charge that continued inaction could lead to a devastating debate over "who lost Russia?" Indeed, of the \$800 million authorized cumulatively for fiscal years 1992 and 1993 (\$400 million for each year) for nuclear dismantlement activities, \$330 million expired before the DoD could execute it⁷³ and the story was almost a great deal worse. The House Appropriations Committee was especially critical at this stage, 1993, given that it had voted not to renew the \$330 million that had expired at the end of FY 1993, and had also voted not to appropriate any of the \$400 million requested for FY 1994; the logic being that the executive could not spend the funds already appropriated so more money was unnecessary. Although the \$330 million in expired funds was lost, lobbying by the administration, as well as Senators Nunn and Lugar, saved the FY 1994 funds. 74 The whole performance was re-enacted in 1994 when then-House Appropriations Defence Subcommittee Chairman John Murtha tried to delete all FY 1995 funding, again reasoning that because DoD had failed to spend the money appropriated in previous years, it must not need more money.⁷⁵ Once again, after intense lobbying, the full funding request was approved. 'Glacially slow progress' also fostered disillusionment and injected some sharp criticism into the debate over the priorities and goals of specific programs and the underlying motivation for the program in general. This stagnation could be traced back to all concerned parties, in varying degrees. The slow pace of CTR implementation has been documented extensively elsewhere. 77 For the purposes of this

⁷² Hugh Sidey, "Blasts from the Past", *Time*, March 23, 1992, p.29 quoted in Nunn and Lugar, "The Nunn-Lugar Initiative", p.148.

Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, Cooperative Threat Reduction, p.16.

⁷⁴ Richard Combs, "U.S. Domestic Politics and the Nunn-Lugar Program", in Shields and Potter (eds), *Dismantling The Cold War*, p.49.

¹⁵ Dunbar Lockwood, "The Nunn-Lugar Program: No Time To Pull The Plug", Arms Control Today, Vol. 25, No. 5, June 1995, p.9.

⁷⁶ 'Glacially slow progress' was how Dunbar Lockwood described the first year and a half of the program. Lockwood, "Dribbling Aid To Russia", p.39.

⁷⁷ See, for example, John Shields, "Conference Findings on the Nunn-Lugar Cooperative Threat Reduction Program: Donor and Recipient Country Perspectives", *The Nonproliferation Review*, Vol. 3, No. 1, Fall

chapter, the factors influencing slow implementation will be briefly summarized, paying particular attention to the role of Congress.

One of the chief impediments to implementation in early 1992 was Congress's requirement that each recipient be certified to qualify for US assistance. To be certified, the President was directed to declare to Congress that each recipient was committed to investing its own resources in the destruction process, foregoing any military modernization that exceeded legitimate defence requirements, foregoing the use of components from destr yed nuclear weapons in new weapons, facilitating US verification of weapons destruction, complying with all relevant arms control agreements and observing internationally recognized human rights.⁷⁸ While certification was required for each fiscal year, initial certification proved to be the most time-consuming. On April 8 1992 Russia, Belarus and Ukraine were certified and on June 17 Kazakhstan was certified after making an unambiguous commitment to nonnuclear status. However, this only allowed the states to qualify for aid; umbrella agreements had to be negotiated to establish the legal framework for assistance and then implementing agreements had to be negotiated to define individual assistance areas. This cumbersome process was further delayed by a requirement that the Department of Defense notify Congress fifteen days in advance of its intent to obligate funds. For this reason negotiations normally took place after Congressional notification, to ensure sufficient funding was available for program execution.⁷⁹ While this program accounting, which continued after program implementation through audit and examination requirements, elicited a great deal of criticism from officials in recipient states, it was critical to continued support for CTR activities, given Congressional interest in ensuring that tax-payer dollars were spent on the programs for which they were allocated. This sentiment was reflected in comments by Representative Christopher Smith (R-N.J.), who explained that foreign aid, "even to the most needful and deserving nations in the world, must never be immune to the hard questions about fiscal prudence and about whether we have got our priorities straight."80

^{1995;} and John Shields and William Potter (eds), Dismantling the Cold War: U.S. and NIS Perspectives on the Nunn-Lugar Cooperative Threat Reduction Program, CSIA Studies in International Security (Massachusetts: The MIT Press, 1997).

⁷⁸ Public Law 102-228—Dec. 12 1991, Sec. 211.

⁷⁹ Assistant to the Secretary of Defense, 1996 Cooperative Threat Reduction Progra n Plan (unclassified), (Washington, D.C.: Department of Defense, 1996), 111-2.

^{80 &}quot;U.S. Assistance Programs for Economic and Political Reform and Dismantling of Weapons of Mass Destruction in the NIS", p.3.

Concern over how CTR funds were to be spent was not limited to program oversight. The Nunn-Lugar legislation also required that the program "should, to the extent feasible, draw upon United States technology and United States technicians."81 While this restriction sounded innocuous enough, in practice it slowed project implementation considerably. According to a 1994 Office of Technology Assessment report, Department of Defense officials interpreted this as providing a "guiding tenet to spend Nunn-Lugar funds in the United States."82 Although this slowed the process, it was were probably crucial in eliciting support from the majority of Congressmen and women who exhibited little direct interest in the program but voted on it. By ensuring that US contractors received the vast majority of the work associated with CTR assistance, the program was marketable as a domestic jobs-provider.⁸³ However, it forced executive officials to plead for funds in the sometimes recalcitrant House of Representatives. For example, in testimony before the House International Relations Com: cittee, Assistant Secretary of Defense for Atomic Energy Harold Smith implored his audience: ". . . I want to emphasize most strongly that this program provides taxpayer dollars to U.S. corporations. Let me repeat. The money goes to U.S. that all members of the House are up for re-election every two years, the preoccupation amongst most representatives with domestic issues was hardly surprising. 85 As a result, parochialism delayed implementation of projects and elicited criticism from recipient countries. This was exacerbated by officials who were forced to defend CTR assistance largely in terms of what it could do for US business. In addition to increasing delays through acquisition and transport arrangements, the insistence on using US contractors required a competitive bidding process, which proved timeconsuming, given the often drawn-out tender and appeal process.

⁸¹ Public Law 102-228—Dec. 12, 1991, Sec. 212.

⁸² Office of Technology Assessment, *Proliferation and the Former Soviet Union*, OTA-ISS-605 (Washington, D.C.: U.S. Government Printing Office, September 1994), p.24, 26.

In recognition of the persistent criticism that local (FSU) technology could be used more cheaply, quickly and effectively in many cases, an important caveat was added to fiscal year 1995 legislation stating that while activities should still draw upon US technicians and technology, "the United States should work with local contractors in Belarus, Kazakhstan, Russia, and Ukraine when doing so would expedite more effective use of those funds . . ." Public Law 103-337—Oct. 5, 1994, Sec. 1209. However, US contractors continued to receive 94-95% of the work. Interviews, Washington, D.C., March 5, 10 1998

⁸⁴ "U.S. Assistance Programs for Economic and Political Reform and Dismantling of Weapons of Mass Destruction in the NIS", p.12.

⁸⁵ Charles Kegley and Eugene Wittkopf, American Foreign Policy: Pattern and Process, 3rd ed., (London: MacMillan, 1987), p.428.

This was not the only reason for resistance in the House. The fact that nuclear threat reduction assistance was identified with the Senate, most obviously as being referred to as the Nunn-Lugar program, engendered some jealousy in the House and was one of the primary motivations for renaming Nunn-Lugar the Cooperative Threat Reduction Program in 1993.⁸⁶

In 1975, Les Aspin had spoken of the benefits of 'spreading the wealth', albeit in relation to new weapons systems, when he argued that a system that, "through contracting and subcontracting, has managed to spread its economic largess throughout the country" is less likely to be cut than one "whose economic benefits are highly localized in a single state, or in one or two Congressional districts . . ."87 Porkbarreling has played a role in the CTR program although its impact is difficult to gauge overall. Certainly pork-barreling was important in obtaining the required Congressional support for the initial nuclear threat reduction legislation. A former senior Defense Department official said that he had been asked to spread the wealth but had refused to participate. A specialist from the Union of Concerned Scientists argued that pork-barrel politics was not pushed hard enough. While the relatively small amount of money involved in CTR has somewhat restricted the selling power of the program, a number of key Congressional supporters have large CTR projects based in their home states. (See Appendix C for the US CTR contractor list).

While these impediments, so prevalent in the early years of Nunn-Lugar, continued throughout the period under study, one should not draw the conclusion that Congress-imposed restrictions were solely, or even largely, responsible for applying the brakes to the CTR program on the US side. The Administration also contributed to the slow implementation rate. While officials frequently cited strict conditions imposed by Congress and a very narrow definition of which programs were to be funded by the program (a criticism which could be applied to Congress and the Administration equally) as the main source of delay, less frequently mentioned was the distinct lack of enthusiasm for the program shown by the Bush Administration, as compared to its own rhetoric. According to Les Aspin in 1993, Bush Administration

88 Carter and Perry, Preventive Defense, p.72.

⁸⁶ Interview with a former senior Defense Department official, 26 March 1998.

⁸⁷ Aspin, "The Defense Budget and Foreign Policy", p.156.

⁸º Interview with a former senior Defense Department official, 26 March 1998.

Interview, Washington, D.C., 13 March 1998. It was suggested by the interviewee that taking a map of the United States and a transparency of the corresponding contract list up to the Hill would be one way of impressing upon members of Congress the value of CTR.

officials "didn't want to spend the money [because] it wasn't their idea" and they "didn't like it much". Thomas Cochran, Senior Scientist at the Natural Resources Defense Council, was even more damning in his criticism. Cochran argued that although delivery systems had been successfully consolidated in Russia, little else had been achieved:

Now, some 2½ years later, we see that implementation of Nunn-Lugar by this and the previous administration have largely failed to accomplish its central purpose and it is unlikely to do so unless there are fundamental reforms in the administration's policies and implementation efforts. The administration's programs can be characterized as attempting too little, moving too slowly and most regrettably it may even be too late to achieve the desired result.⁹²

This criticism was given credence by the fact that the monies made available for Nunn-Lugar by the Bush Administration were reprogrammed Department of Defense funds. In other words, the \$400 million set aside for CTR activities each fiscal year was 'siphoned' from existing defence programs, taken directly from Operations and Maintenance funds; a recipe sure to engender resistance on the part of Defense officials. In addition, Deputy Secretary of Defense John Deutch argued that the executive branch did not, initially, organise itself "sufficiently rapidly to execute this [CTR] promptly."93 According to interviews with a former DoD official and a close observer of the program, this was largely as a result of two groups within government. The first group were the people in charge of the procurement process. These were mostly lawyers, who feared the potentially disastrous results of doing business with Russia and its pervasive black market. In order to account for every cent, strict rules were placed on procurement procedures. The second group were the diplomats, traditional arms controllers who wanted everything negotiated. Delegations would meet and discuss matters whereupon they would be kicked upstairs to inter-agency meetings whose members had neither the authority nor experience to implement any decisions reached.94

⁹¹ Lockwood, "Dribbling Aid To Russia", p.40.

⁹² Testimony of Cochran in "U.S. Nuclear Policy", *Hearing before the Committee on Foreign Affairs*, House of Representatives, One Hundred Third Congress, 2nd Session, October 5, 1994, p.100.

⁹³ *lbid.*, p.24,

⁹⁴ Interviews, 26 March 1998.

As explained in Chapter 3, the Clinton team made a number of important changes to CTR, such as making CTR an additional line item in the Defence Budget and appointing Ashton Carter and Graham Allison Assistant Secretaries of Defence, reflecting the increased importance attached to threat reduction activities.⁹⁵

However, barriers to an increased rate of implementation remained. A prime example was the reluctance of both Administrations to grant reciprocal transparency (which, with regard to arms control compliance, has superceded verification in US terminology) rights on nuclear warhead dismantlement sites to Russian officials. While opinion was divided on this question, both among members of Congress and executive branch officials⁹⁶, there was also a fair degree of confusion as to what this transparency constituted, and even suggestion that it was inconsistent with the Atomic Energy Act of 1954.97 However, while progress was slow, it was forthcoming. On March 16 1994 DoE Secretary Hazel O'Leary and Russian Minister of Atomic Energy Viktor Mikhailov announced that one round of inspections would be held at each other's storage facilities (Pantex and Tomsk-7) for plutonium removed from dismantled nuclear warheads. 98 According to Arms Control Today, this proposal was "prompted by congressional concerns about U.S. inability to monitor warhead dismantlement in Russia."99 This agreement took a large step towards becoming institutionalized with the establishment of Safeguards, Transparency and Irreversibility (STI) Talks in May 1995,¹⁰⁰

Agreement was, in part, a consequence of an increased willingness on the part of CTR negotiators and US officials, such as Secretary of Energy Hazel O'Leary, to

⁹⁵ Early in 1995, Secretary of State Warren Christopher told Clinton that he wanted to quit. The President sounded out Sam Nunn to replace Christopher but Nunn declined. Bob Woodward, *The Choice* (New York: Simon and Schuste.; 1996), p.49.

⁹⁶ See, for example, comments of Senator Thurmond, Dr Frank von Hippel and Dr Robert Blacker, former Assistant to the Secretary of Defense for Atomic Energy, who argued that the Federation of American Scientists and the Natural Resources Defense Council brought up demands for reciprocity "as much as or more than the Russians", in "Military Implications of START I and START II", p.93, 100, 179-86; and "Regional Threats and Defense Options for the 1990s", Hearings before the Defense Policy Panel and the Department of Energy Defense Nuclear Facilities Panel of the Committee on Armed Services, House of Representatives, One Hundred Second Congress, 2nd Session, March 27, 1992, p.419-20.

⁹⁷ See comments of Cheney in "Military Implications of START I and START II", p.69.

⁹⁸ Dunbar Lockwood, "U.S., Russia Reach Agreement For Plutonium Site Inspections", Arms Control Today, Vol. 24, No. 3, April 1994, p.22.

⁹⁹ John Deni and Dunbar Lockwood, "DOD Plans Calls for More Transparency In Managing U.S.-Russian Plutonium", *Arms Control Today*, Vol. 24, No. 3, April 1994, p.23.

¹⁰⁰ See Carnegie Endowment for International Peace and The Monterey Institute of International Studies, Nuclear Successor States of the Soviet Union: Nuclear Weapon and Sensitive Export Status Report, No. 4, May 1996, p.24-5.

push for the attainment of more ambitious nuclear threat reduction goals and reflected prevailing sentiment in Congress. It also stood in stark contrast to the views expressed by former SSD chief William Burns, whom James Goodby succeeded in March 1993, on reciprocity. Burns argued that on "the issue of dismantlement of launchers, as an example, they need our technology. They don't have too much to offer in return, so there is no argument on their side that we will give you this, if you let us in here and there."

Importantly it should be noted that not all members of Congress were supportive of attempts to make verification more effective. The most vocal of these critics was the conservative senator Malcolm Wallop (R-Wyo.). Wallop's disillusionment extended beyond verification to encompass the relevance of the whole arms control process. In 1992 he argued that "the only thing verified out of all of this is . . . that when you really need arms control it does not measure up to the job because you cannot trust, cannot verify, cannot find out all you need . . ." As evidence he claimed that INF Treaty-restricted weapons had appeared in Eastern Europe after the withdrawal of Soviet troops — a claim corroborated by German officials in March 1990. According to Wallop, the problem with painstakingly negotiated arms control agreements,

engaging in a whole series of most complex negotiations about dots and commas and words and definitions [was that the political statement attached to the process] exceeds the competency of the agreement . . . The most honest thing you can say about the START agreement was that

Burns testimony before the Senate Governmental Affairs Committee in "Disposing of Plutonium in Russia", p.22. Similarly, Robert Blacker argued that a concern for Russian nuclear weapons security should not result in a mandate for Russian inspections at US facilities. "An automatic requirement for reciprocity is, frankly, old-think." "Military Implications of START I and START II", p.173.

Wellop and Nunn had clashed during the 1980s over strategic defences. Phil Duncan (ed), Politics in America 1994: The 103rd Congress (Washington, D.C.: Congressional Quarterly Inc., 1993), p.1689-1690; Janne E. Nolan, Guardians of the Arsenal: The Politics of Nuclear Strategy (USA: BasicBooks, 1989), p.160-61. On Nunn's views see, for example, William S. Cohen and Sam Nunn, "Arms Race Breakthrough or Breakdown?", in Zbigniew Brzezinski et al (eds), Promise or Peril: The Strategic Defense Initiative (Washington, D.C.: Ethics and Public Policy Center, 1986) p.397-40; Sam Nunn, "Interpretation of the ABM Treaty", in Kenneth Luongo and W. Thomas Wander, The Search For Security In Space (Ithaca: Cornell University Press, 1989), p.279-297; and, more recently, Sam Nunn "Changing Threats in the Post-Cold War World" in Shields and Potter (eds), Dismantling the Cold War, p.xix,

¹⁰³ Comments of Wallop in "Military Implications of START I and START II", p.182.

The Proliferation Primer, A Majority Report of the Subcommittee on International Security, Proliferation, and Federal Services, Committee on Governmental Affairs, United States Senate, January 1998, p.58. On the SS-23s remaining in Bulgaria and Slovakia, see "News Briefs: Bulgaria, Slovakia Still Hold SS-23s", Arms Control Today, Vol. 27, No. 6, September 1997, p.33.

it was begun in an era when those kinds of negotiations had . . . significance, and concluded in an era when events have already passed it by. My problem with all of this is that ultimately these agreements, should we go back to an era of greater confrontation, will be binding on us in ways in which they will not be binding upon them. 105

While Wallop's concerns did not represent the views of Congress as a whole, the arguments contained a degree of validity and had to be addressed by Administration officials, particularly given the Biden Condition and the groundwork being laid for START III. These are described below.

Influencing CTR: 1992 to 1996

The initial Nunn-Lugar legislation reflected the pioneering work that had been done. Although \$400 million was authorized for Fiscal Year 1992, the Department of Defence was given discretionary authority to initiate negotiations and set preliminary funding levels for specific projects. This was necessary given the inherently novel nature of the program. However, since Fiscal Year 1992, CTR follow-on legislation specified monetary amounts to be spent on specific programs, reflecting Congress's real foreign policy-making power: setting budgetary limits.

Defense Conversion: The Power of Constituents?

A prime example of the Congressional power to determine CTR objectives by controlling the purse strings was the fate of the non-profit Defense Enterprise Fund, authorized by the Cooperative Threat Reduction Act of 1993 and established in June 1994, to provide seed capital for US-Russian military conversion projects. ¹⁰⁶ Defence conversion was politically unpopular in Congress, largely due to the fact that conversion projects included the provision of housing to demobilized Strategic Rocket Forces officers, despite the fact that Russian, Belarussian and Ukrainian officers could not, by statute, be demobilized until they were provided with housing. ¹⁰⁷ Secretary of

¹⁰⁵ Comments of Wallop in "Military Implications of START I and START II", p.182, 184, 207-8.

General Accounting Office, Cooperative Threat Reduction: Status of Defense Conversion Efforts in the Former Soviet Umon, Report to Congressional Requesters, GAO/NSIAD-97-101, April 1997, p.2-3; Public Law 103-160—Nov. 30, 1993, Sec. 1204.

Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, Cooperative Threat Reduction, p.15.

Defence Perry observed that defence conversion and providing housing were critical to weapons dismantlement efforts because if the focus was simply on destroying weapons, while ignoring "the people and facilities, the Soviet nuclear Hydra could turn around and grow new warheads." ¹⁰⁸

However, critics argued that such assistance fell beyond the scope of CTR's core objective, narrowly defined as the "transportation, storage, safeguarding, and destruction of nuclear and other weapons in the [former] Soviet Union . . . and to assist in the prevention of weapons proliferation." Indicative of the attitude to defence conversion was Representative John Kasich's (R-Ohio) observation: "How do you tell a factory worker in Detroit who can't get a loan that we have got to set up a revolving fund for the Russians when they are using money to still build defensive things that are aimed at us?" ¹¹⁰

This was one of the few areas where public opinion had a tangible impact on US CTR policy. When the defence conversion project was first started, the Senate Armed Services Committee was inundated with postcards and letters from military groups representing active and retired personnel complaining about the housing program in CTR.¹¹¹ This outcry was exacerbated by the announcement in the US of a number of military base closures at the same time.

Despite what appeared to be an incredible lack of foresight, given that defence conversion simultaneously diminished the Russian military threat and provided opportunities for US business, no funding was allocated by Congress for the DoD's Defense Enterprise Fund (DEF) for FY1995 or FY1996, although a small amount of prior-year funding was utilized to keep the fund alive. 112

According to some critics, US defense conversion programs were not converting existing defense enterprises, rather they converted defense enterprises that were shut for years and were only re-opened in order to be converted.¹¹³ This claim

Amanda Bichsel, "How the GOP Learned to Love the Bomb", *The Washington Monthly*, October 1995, p.30

p.30.

Public Law 102-228—Dec. 12, 1991, Sec. 211. The shortsightedness of this interpretation is compounded by the fact that statute requires Russian, Belarussian and Ukrainian officers be provided with housing before they are demobilized. Thus, "[d]elay or termination of these projects will cause further delays in dismantlement of missile silos and launchers in these states and possibly frustrate our CTR goals." Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, Cooperative Threat Reduction, p.15.

¹¹⁰ Comments of Representative Kasich in "Potential Threats To American Security In The Post-Cold War Era", p.116.

¹¹¹ Interview, Washington, D.C., March 6 1998.

¹¹² Shields and Potter (eds), Dismantling The Cold War, p.52.

¹¹³ Interview, Washington, D.C., March 6 1998.

has, in part, been corroborated by the first Executive Director of the ISTC, Glenn Schweitzer. 114

Originally named the Demilitarization Enterprise Fund, the DEF was reworded as *Defense* Enterprise Fund in order to disassociate itself with demilitarization or defence conversion, which was not seen as 'defence' spending. For many in Congress, as well as government, defence was interpreted as being the acquisition of assets such as tanks, missiles and bombers. Defence conversion was seen as foreign aid rather than traditional defence, and while it was understood to be important, there was resistance to its inclusion in the DoD budget. In addition, it was often perceived to be somewhat ineffective. According to a June 1 1995 House National Security Committee report, even if defence conversion was feasible — a proposition the report deemed debatable — such funding should be considered foreign aid, and not the responsibility of DoD or the CTR program.

Importantly, this was not the only reason for lack of progress in DEF-sponsored projects. In the case of Belarus, \$5,000,000 was obligated for the DEF, but due to "the difficulties with Belarussian privatization laws and the current poor business climate, no DEF funds [were] released" since the end of 1996. This was reflective of wider problems in the US-Belarussian relationship. To move beyond the case study parameters very briefly, Belarus's annual certification was not renewed on February 14, 1997. This was due to concerns relating to the actions of President Aleksandr Lukashenka, Lukashenka, who was elected in July 1994, conducted a Constitutional referendum in November 1995 and subsequently dissolved the Parliament. During this time and since, Lukashenka steadily accumulated power, ruling by decree and appointing all key officials. According to a 1996 Radio Free Europe / Radio Liberty Human Rights Report, the judiciary and media were not free, Belarus's human rights record "worsened significantly" under Lukashenka, the Committee for State Security and the Ministry of Internal Affairs, both answerable to the President, were the chief law enforcement and police organs, the economy was still largely state-controlled and freedom of speech and the press were illusory. 117 In addition, Russian was elevated to

¹¹⁴ Glenn Schweitzer, *Moscow DMZ* (New York: M.E. Sharpe, 1996), p.142.Nevertheless Schweitzer remains a strong advocate of the program.

Theodor Galdi, "The Nunn-Lugar Program for Soviet Weapons Dismantlement: Background and Implementation", CRS Report for Congress, 94-985F, Updated December 11 1995, p.7.

Department of Defense, Cooperative Threat Reduction Briefing Book, "CTR Funding Status-Belarus", 05,06,97.

Radio Free Europe / Radio Liberty excerpted from the <u>U.S. Department of State Human Rights Report</u> 1996, Belarus: Human Rights, January 30 1997 http://www.rferl.org/bd/be/info/be-hr.html Accessed 25/9/97.

a state language, Soviet symbols were re-introduced as national symbols and economic integration with Russia was being actively pursued. 118

According to Congressional staffers, Congressmen and women took notice of this non-certification decision. It demonstrated that certification was not merely a rubber stamp for recipient countries who could do basically what ever they wanted and still be assured of CTR assistance. This was particularly important and reassuring in light of the fact that sections of Congress and the government had expressed doubts about the continued eligibility of Russia given its prosecution of a war in Chechnya that many considered a violation of human rights as well as the Russian Constitution. One must question, however, whether US officials would apply the same strict rules to Russia as they did to Belarus — a Belarus that had completed the denuclearization process a mere two and a half months before the de-certification decision was taken.

More successful, and less vulnerable to the Congressional budget knife, was the Industrial Partnering Program. It seems that this program was more successful largely as a result of the less stringent auditing and examining requirements attached to DoE programs by Congress, as opposed to those attached to DoD CTR activities. ¹²¹ However, officials were taking no chances and renamed the Industrial Partnering Program the Initiatives for Proliferation Prevention Program in spring 1996, allegedly "because many in the U.S. Congress erroneously assumed that the program's objectives revolved around the transfer of U.S. technology to NIS institutes." ¹²² While this viewpoint was often couched in terms of the sale of supercomputers to Russia, it also reflected a wider debate as to the most appropriate security relationship between the US and Russia. Supporters of a more cooperative relationship saw the computer sales as good because they helped the Russians to stop testing nuclear weapons. Those who objected to the sales did so because they thought *any* assistance to Russia was dangerous. ¹²³

119 Interviews, Washington, D.C., March 5, 10, 1998.

121 See Allison et al, Avoiding Nuclear Anarchy, p.87.

¹²³ Interview, Washington, D.C., March 9, 1998.

¹¹⁸ Personal communication with Dr Peter Lentini, Monash University, September 25, 1997.

On the Russian constitution and the war in Chechnya see Soili Nystén-Haarala, "Does the Russian Constitution justify an offensive against Chechnia?", Central Asian Survey, Volume 14, No. 2, 1995, p.311-17. I am indebted to Dr Peter Lentini for bringing this reference to my attention.

¹²² Kostyantyn Hryshchenko, "Reducing the Nuclear Threat through Joint Efforts: The View from Ukraine", in Shields and Potter (eds), Dismantling The Cold War, p.159.

Budgetary Ceilings and CTR Programming

While Congress set budgetary limits on specific CTR programs — according to Les Aspin, "Congress is most comfortable dealing procedurally with national security matters it allowed the executive branch a degree of latitude in actually disbursing those funds. Since 1994 statutory language granted "Limited Authority To Exceed Individual Limitation Amounts" if "the Secretary of Defense determines that it is necessary to do so in the national interest . . . " although the Secretary was required to notify Congress of his intent to do so and provide justification for doing so. In addition fifteen days were required to elapse following notification before an obligation exceeding the specified amount could be made. 125 Although the executive branch was given some discretion in CTR spending if it deemed circumstances to require, Congress retained ultimate power in deciding which projects would be funded and at approximately what levels; a practice that increased with time. For example, as mentioned above, Congress did not limit funding for any program for the first year of the program, FY1992. However, FY 1993 legislation restricted funding for six specific projects, three projects were restricted for FY1994, seven for FY1995, nine for FY1996 and twelve limitations as well as two prohibitions for FY1997. While this allowed Congressional committees to maintain a tight rein over DoD CTR activities, it also resulted in various projects, initially funded by Nunn-Lugar, being transferred to other departments in order to avoid the Congressionally-imposed CTR restrictions and auditing and examination requirements. 127 Congress retained oversight authority but the departments secured a little more latitude in implementation. According to Richard Combs, Senior Legislative Assistant to Sam Nunn during CTR's formative period, Deputy Secretary of Defence John Deutch was instrumental in transferring programs out of Defence in order to allay Congressional concern, particularly in the House

¹²⁴ Aspin, "The Defense Budget and Foreign Policy", p.167.

¹²⁵ Public Law 103-337—Oct. 5, 1994, Sec. 1206.

¹²⁶ Public Law 102-228—Dec. 12, 1991; Public Law 102-484—Oct. 23, 1992, Sec. 1421; Public Law 103-160—Nov. 30, 1993, Sec. 1205; Public Law 103-337—Oct. 5, 1994, Sec. 1205, 1206; Public Law 104-106—Feb. 10, 1996, Sec. 1202, 1208; Public Law 104-201—Sept. 23, 1996, Sec. 1502, 1503.

For example, Material, Protection, Control and Accounting activities are run by the Department of Energy, the Science and Technology Centres are run by the Department of State, the Departments of State and Commerce run Export Controls activities and the Departments of Defense and State run the Defense Enterprise Fund. Jason Ellis, "Nunn-Lugar's Mid-Life Crisis", Survival, Vol. 39, No. 1, Spring 1997, p.105. It should also be noted that this has not been the sole reason for the transfer of some responsibilities from DoD to other departments. It also reflects the expertise of the separate departments in managing specific project areas.

Appropriations Committee, that several CTR programs should not be administered by DoD. While this did have the desired effect, not everyone was entirely sure about what was happening. Harry Johnston (D-Fla.) complained in 1995 that ". . . it is a lot tougher to vote for foreign assistance today than it was last year. Particularly when Congress is playing musical chairs with this money." 128

There has been another, more unfortunate, consequence of the CTR legislation. By placing ceilings on program spending for each year, officials did not estimate the total requirements for achieving CTR objectives or devise a process to ensure longrange tasks coincided with annual budget requests. This was not for lack of Congressionally-mandated reporting requirements. For example, the President, the Department of Defence, the Comptroller General, the CTR Program Office as well as Congressional support agencies such as the Congressional Research Service and the General Accounting Office all provided reports on various aspects of the program. 129 Of these, the reports required from the Office of the President were the most onerous, including a report not less than fifteen days before the obligation of any funds for a program specifying the amount of money involved, which account the money came from and the purpose for which it was being spent as well as larger reports submitted at the end of each quarter of the fiscal year (which became semiannual reports for FY1994) detailing amounts of money spent, where the money came from, what it was used for, a description of the participation of the relevant US government agency in the activity, the effectiveness of the endeavour and any other information deemed appropriate. 130 However, it was not until October 1994 that Congress required the Secretary of Defense to submit a multiyear planning report to estimate the "total amount that will be required to be expended by the United States in order to achieve the objectives of Cooperative Threat Reduction programs [and a] multiyear plan for the use of amounts and other resources provided by the United States for Cooperative Threat Reduction programs and to provide guidance for preparation of annual budget

130 Public Law 102-228—Dec. 12, 1991, Sec. 231, 232.

¹²⁸ "U.S. Assistance Programs for Economic and Political Reform and Dismantling of Weapons of Mass Destruction in the NIS", p.18.

The GAO regularly reviewed DoD reports for Congress. DoD expressed concern with a May 19, 1995 GAO draft report that was leaked to the press before it had been reviewed by the Executive Branch for accuracy. According to Assistant Secretary of Defence Harold Smith, "an inaccurate picture of the progress made under the CTR program was presented to the press. Unfortunately, such distortions may be used to justify Congressional actions which could unfairly damage this valuable program." Appendix VII, "Comments From the Department of Defense", General Accounting Office, Weapons of Mass Destruction: Reducing the Threat From the Former Soviet Union, An Update, Report to Congressional Requesters, GAO/NSIAD-95-165, June 1995, p.37. According to a Congressional Research Service official, leaked GAO draft reports were not uncommon. Interview, Washington, D.C., March 5, 1998.

submissions."¹³⁴ This had the effect of forcing the planning process to incorporate three years of CTR activities driven largely by exigencies of the time. The planning problem was compounded by a 2001 deadline (now extended to 2006 in Russia and Ukraine) on new CTR projects. As the program progressed and the full extent of the nuclear leakage problem in the former Soviet Union became clear, the likelihood of achieving CTR's objectives within this time-frame became increasingly remote.¹³²

Finally, the Congressionally-imposed limit of \$400 million per year, and sometimes substantially less than that (see below), for the entire CTR program had a somewhat stifling effect on program supporters. According to an October 1994 General Accounting Office report to Congress, "program officials . . . continue to ask for \$400 million annually because of a belief that this level has been deemed acceptable by Congress, "133 In other words, Ashton Carter and his successors pitched their budget requests at around the \$400 million mark because Congress authorized that amount in 1991 and \$400 million was passed in the 1991 legislation because those members of Congress not totally convinced by the arguments of CTR advocates, found the price-tag tolerable. Program officials and CTR supporters in Congress continued to target the \$400 million figure during the years of this case study due to a realization that trying for substantially more ran the risk of attracting the sustained scrutiny and opposition associated with large defence programs. 134 The \$400 million funding level, less than two tenths of one per cent of the defence budget, had the advantage of a low profile in Congress; a fairly small program in a large expenditure. This was an effective way of keeping CTR running but it hamstrung those who believed that CTR was under-funded and incommensurate with the dangers it was addressing in the former Soviet Union. Thus, while program officials were probably right that a \$400 million limit was the most they could expect from Congress, they helped to ensure that it was a self-fulfilling prophecy.

Public Law 103-337—Oct. 5, 1994, Sec. 1205. "This requirement for a multiyear CTR plan was intended to provide Congress with greater visibility into DOD's long-term CTR strategy and the resources needed to implement that strategy." General Accounting Office, Weapons of Mass Destruction: Status of the Cooperative Threat Reduction Program, Report to Congressional Requesters, GAO/NSIAD-96-222, September 1996, p.6.

According to a 1994 GAO report, "U.S. officials note that CTR projects will only lay the foundation for addressing the FSU proliferation threat." General Accounting Office, Weapons of Mass Destruction: Reducing the Threat From the Former Soviet Union, Report to Congressional Requesters, GAO/NSIAD-95-7, October 1994, p.7.

¹³³ Ibid., October 1994, p.2.

¹³⁴ The flip-side of this is that at \$400 million, CTR was too small to generate real pork-barrel interest.

CTR Funding: FY1992-1997

1992	\$400 million
1993	\$400 million
1994	\$400 million
1995	\$400 million
1996	\$300 million
1997	\$365 million

While the imposition of budgetary ceilings was the most direct way that Congress influenced the pace and scope of CTR assistance, it was by no means the only way. James Lindsay has described the weakness in much of the current Congressional literature as follows:

A major flaw with legislative scorecards is that they assume that influence can be determined on the basis of observed behavior alone. Yet in any stable institutional arrangement people will act strategically. Just as chess players consider their opponents' possible moves and plan several steps ahead, Congress and the executive branch anticipate one another's behavior and modify their own behavior accordingly. ¹³⁵

The next section attempts to illuminate some of the less tangible ways Congress influenced CTR.

Legislative Amendments: Direct Foreign Policy-Making

Attaching amendments to bills, which may or may not have been related to the imposition of budgetary ceilings, was also an effective way of injecting Congressional preferences into the policy-making process. These could take two broad forms: expressing concern and demonstrating interest in an issue, or attaching so-called 'killer' amendments. Concerns, or markers of interest, did not usually threaten funding, rather they put the Administration on notice that this was a legitimate area of concern in Congress and would have to be taken into consideration to avoid the

¹¹⁵ James Lindsay, "Congress and Foreign Policy: Why the Hill Still Matters", *Political Science Quarterly*, Vol. 107, No. 4, Winter 1992-93, p.613.

potential imposition of binding legislation. Non-binding resolutions have also been described as a way for Senators to get "on the record and off the hook". 136 'Killer' amendments, while sometimes reflecting legitimate concerns, were intended to actually delete funding for the entire program based on conditions that were often impossible to satisfy.

A prime example of the former — an amendment designed to express concern but not derail US policy — was tied directly to the issue of transparency, and came in the form of a binding condition on the Senate Foreign Relations Committee's resolution of ratification of START on July 1 1992. Named after its key sponsor, Joseph Biden, the 'Biden Condition' stated:

the prospect of a loss of control of nuclear weapons or fissile material in the former Soviet Union could pose a serious threat to the United States and to international peace and security, [thus] in connection with any further agreement reducing strategic offensive arms, the President shall seek an appropriate arrangement, including the use of reciprocal inspections, data exchanges, and other cooperative measures, to monitor

- (A) the numbers of nuclear stockpile weapons on the territory of the parties of this Treaty; and
- (B) the location and inventory of facilities on the territory of the parties to this treaty capable of producing or processing significant quantities of fissile materials.¹³⁷

The condition was to be attached to "any further agreement" because attaching a binding condition to ratification of START would have required a return to the tables to negotiate and, given the highly sensitive nature of the request, would have effectively killed the treaty.

This form of arms control, sometimes referred to as 'production monitoring', was not new; indeed it could be traced back to the Baruch Plan of June 1946. ¹³⁸ In a more

¹³⁶ Ted Greenwood, Making the MIRV: A Study of Defense Decision Making (Cambridge, MA: Ballinger, 1975),p.135.

¹³⁷ "Biden Condition Added by the Senate Foreign Relations Committee to the Proposed Resolution of Ratification of the START Treaty" in "Military Implications of START I and START II", p.109.

¹³⁸ Ivan Oelrich, "Production Monitoring for Arms Control", in Michael Krepon and Mary Umberger (eds), Verification and Compliance: A Problem-Solving Approach (Cambridge: Ballinger, 1988), p.119-120.

recent incarnation, the National Defense Authorization Act of 1991 had requested that the Department of Energy provide Congress with a report detailing the onsite monitoring techniques, inspection arrangements and national technical means of verification the US could use to verify the dismantlement of nuclear warheads, a ban on the production of additional plutonium and HEU for warheads and the ultimate disposal of plutonium and HEU recovered from dismantled warheads. 139 The report, released in July 1991, was limited to technical discussion and did not attempt to "address the policy issue of whether it would be in the US national security interest to seek [these] agreements". 140 While the report was rather skeptical of the ability of the US to reliably verify Soviet fissile material and warhead inventories, politically it expressed a Congressional interest in more far-reaching arms control measures. Similarly, although more proactive in their vision to control former Soviet fissile material, Senators Cranston and Pell sponsored the 1991 'Nuclear Weapons Security and Plowshares Act'. This bill proposed to create a mechanism whereby former Soviet states could trade nuclear materials for food credits and other essential commodities but was eventually 'diluted' by the Armed Services Committee to a request for a report from the Administration.¹⁴¹ These efforts laid the groundwork for the Biden Condition.

The Biden Condition was comprehensive in its calls for inspections and safeguards to avoid breakout, production and dismantlement schedules, an end to HEU and plutonium production and the extension of negotiations to all nations capable of producing nuclear weapons materials. Similar language in the House version of the Fiscal Year 1993 Defense Authorization Act mirrored the Biden Condition concerns about reciprocity concerning stockpiles and facilities. However there was one very important difference. The Biden Condition was binding while the House provision expressed a "Sense of Congress" and so was not. This meant that the executive could, if it wished, pay lip service to the House "Sense of Congress" but effectively do nothing to facilitate its provisions. The only danger was the risk of political fallout. ¹⁴³

Department of Energy, "Report To Congress: Verification of Nuclear Warhead Dismantlement and Special Nuclear Material Controls, July 1991", reprinted in "Military Implications of START I and START II", p.240-248.

¹⁴⁰ *Ibid.*, p.242.

Prepared Statement of Cranston in "U.S. Plans and Programs Regarding Dismantling of Nuclear Weapons in the Former Soviet Union", p.21.

[&]quot;Excerpts from the Defense Authorization Act for Fiscal Year 1993 (as passed by the House), Subtitle D: International Fissile Material and Warhead Control" in *Ibid.*, p.110-11.

Possibly the most well-known example of a non-binding "reservation" interpreted "loosely", resulting in enormous political fallout, was the so-called Jackson amendment to SALT I. See Barry Blechman, *The Politics of National Security: Congress and U.S. Defense Policy* (New York: Oxford University Press, 1990), p.67-73.

The Biden Condition, however, required that the executive take certain actions. ¹⁴⁴ Thus officials had to respond to its specific concerns.

The transparency measures were clearly intended to apply to the impending START II Treaty and symbolized a Congressional dissatisfaction with the provisions of the Nunn-Lugar legislation and START. However, executive officials were insistent that the Administration did not want to be constrained by such binding language. There were three stated reasons for this position. The first was that reciprocal monitoring would be inconsistent with US security interests, specifically the protection of nuclear weapons design information. The second was that the administration "would oppose any interpretation of this condition that linked the ratification or implementation of the new treaty to an additional agreement to be negotiated. . . [and] risks at least a delay and possibly the unraveling of the important accomplishments of the Washington Joint Understanding." The third, linked to the first, was that even if the parties could verify the commitments made and monitor undeclared weapons and facilities, which was considered very unlikely, the methods would be too intrusive for both the US and Russia. 147 Douglas Graham, Deputy Assistant Secretary of Defense for Strategic Defense, Space, and Verification Policy, justified the Administration position by arguing that US efforts were "sufficient to accomplish the basic goals" that were expressed in the Biden Condition, although he appealed to the Senate to "adopt a more flexible approach to this problem that enables us to address it in the most effective manner, and in our view that involves continuation of the week that we have ongoing in the area of SSD [Safe and Secure dismantlement]."148

148 Testimony of Graham in *Ibid.*, p.202.

¹⁴⁴ US negotiators had raised the issue of mutual inventory controls as early as August 1964. However, according to a senior official involved in the effort, "the United States sought to satisfy the rhetorical commitment to arms control while using verification as the means of assuring that nothing would happen. Looking back... both the Americans and the Russians had a kind of "let's get together for lunch" attitude toward the subject at the time; each side knew the other was not entirely serious about it." John Newhouse, *Cold Dawn: The Story of SALT* (New York: Holt, Rinehart and Winston, 1973), p.70.

Chairman of the Research Arm of the Federation of American Scientists, Frank von Hippel, was quite explicit: "Indeed, I believe the Biden Condition was attached to the ratification resolution in part because the Administration had not responded to Congressional interest in nuclear-warhead and material arms control." Prepared Statement of von Hippel in "Military Implications of START I and START II", p.98. This seemed to demonstrate that at least some Congressmen made the distinction between nuclear warheads and weapons and believed it to be important.

¹⁴⁶ The June 17 1992 Joint Understanding between Presidents Bush and Yeltsin established the framework for START II, specifically the limit of 3,500 deployed strategic warheads.

¹⁴⁷ Testimony of Cheney and Blacker in "Military Implications of START I and START II", p.69, 173,

In practice, the Biden Condition had an impact, albeit tempered, on US START and CTR policy. This was due, in part, to a split within senior Congressional ranks. Sam Nunn felt that such demanding provisions were being introduced too soon in the US-Russian relationship, a view echoed by former SSD chief negotiator William Burns who described the Biden Condition as "premature". At an operational level Nunn argued that the Biden Condition could not apply to START II because that treaty was already under negotiation. Rather START III included a response to Biden. Specifically, START III would be "the first strategic arms control agreement to include measures relating to the transparency of strategic nuclear warhead inventories and the destruction of strategic nuclear warheads. . . [Both the US and Russia] will consider the issues related to transparency in nuclear materials." This transparency would be facilitated through CTR. In addition, a turf battle was also at play. The Biden Condition was seen as a prerogative issue. It had emerged from the Foreign Relations Committee but was considered to be within the Armed Services Committee realm.

The START II Treaty did not require the parties to provide an inventory of stockpiles and facilities and Nunn-Lugar assistance did not demand that this condition be met either. In addition, a February 12 1992 proposal by Russian Foreign Minister Andrei Kozyrev for a reciprocal exchange of data between all nuclear powers on inventories of nuclear weapons and fissile materials, and on nuclear weapons production, storage and elimination facilities was shelved by the US government. However, steps were taken in this direction. The STI Talks, which aimed to "establish an exchange on a regular basis of detailed information on aggregate stockpiles of nuclear warheads, on stocks of fissile materials, and on their safety and security", resulted in US law being amended in 1994 to allow the disclosure of classified and sensitive information to Russia. In practical terms it resulted in the disclosure of all US excess fissile material on February 6 1996. Following this, a Joint Statement by Presidents Clinton and Yeltsin declared that the proposed START III agreement "will be the first strategic arms control agreement to include measures relating to the

¹¹⁹ "Interview — William F. Burns: Dismantling the Cold War's Arsenals", *Arms Control Today*, Vol. 23, No. 7, September 1993, p.7.

The White House, Office of the Press Secretary, Press Release, "Joint Statement on Parameters on Future Reductions in Nuclear Forces", March 21 1997 http://www.usis.usemb.se/press/baltic/FUTURE-REDUCTIONS-FACTS.htm Accessed 10/7/97.

¹⁵¹ Interview, Washington, D.C., March 5, 1998.

NRDC Policy Brief, "The 'Biden Condition' on START Ratification: Monitoring of Nuclear Warheads and Fissile Materials", reprinted in "Military Implications of START I and START II", p.226.

¹⁵³ Nuclear Successor States of the Soviet Union: Nuclear Weapon and Sensitive Export Status Report, No. 4, May 1996, p.24.

transparency of strategic nuclear warhead inventories and the destruction of strategic nuclear warheads."¹⁵⁴ While these developments dovetailed nicely with positions advanced in the Senate and House, and Congressional pressure played its role, they were clearly executive-driven goals developed in executive time-frames, and as such it would be drawing a rather long bow to argue that Congress's influence in this area was decisive.

The Biden Condition could be seen as an attempt to affect a change in the objectives of the nuclear arms control process. Subsequent agreements made these objectives more attainable, although Administration officials justified refusing strict compliance with the provisions set out by Biden by arguing that while they might agree with the provisions in principle, they would not jeopardize current and pending agreements or risk US security. This could be contrasted with efforts to ensure that the provision of CTR assistance met the criteria Congress had set for US funding to be proffered as well as for recipient state eligibility.

Another expression of interest, which did not strictly challenge any of the six exclusions mandated by Congress, but was considered by many as a yardstick of Russian cooperation, was the Markey Amendment to the FY 1994 Defence Authorization Bill. Sponsored by Representative Edward Markey (D-Mass.), a 'crusader' against the nuclear power industry¹⁵⁵, the amendment tied the release of \$75 million in Nunn-Lugar funds for the construction of plutonium storage facility in Russia to presidential certification that Russia was committed to terminating production of weapons-grade plutonium. According to Frank von Hippel, Markey's objective was not unreasonable from the Russian perspective at the time. Von Hippel testified in 1992 that the then-leadership in Russia "would welcome this kind of development. It is not clear that we will have that leadership indefinitely, and I do not think we should pass this opportunity by."156 Due, in part, to the Markey Amendment, the Gore-Chernomyrdin Commission agreed to form a working group to study options for closing Russian plutonium production reactors, commitments which were reiterated at the January 1994 Clinton-Yeltsin summit. 157 In June 1994 Vice-President Gore and Prime Minister Chernomyrdin signed an agreement committing Russia to

¹⁵⁴ The White House: Office of the Press Secretary, "Press Release: Joint Statement on Parameters on Future Reductions in Nuclear Forces" March 21 1997 http://www.usis.usemb.se/press/baltic/FUTURE-REDUCTIONS-FACTS.htm Accessed 10/07/97.

¹⁵⁵ Duncan (ed), Politics In America, p.735.

Testimony of von Hippel in "Military Implications of START I and START II", p.96.

¹⁵⁷ Todd Perry, "Stemming Russia's Plutonium Tide: Cooperative Efforts To Convert Military Reactors", The Nonproliferation Review, Winter 1997, p.106.

end plutonium production "no later than the year 2000." At the time it was understood that Russia would replace the reactors but, due to US-Russian differences over funding and shut-down schedules, agreement was reached in 1996 to convert the reactors. According to one official, although the Markey Amendment failed to bind the Administration, the Congressman could be mollified by the fact that the concerns his amendment raised were being addressed through the plutonium cut-off agreement. For Markey, this was not an attempt to kill CTR. Rather, it was signaling a clear expression of interest in plutonium production cut-off in order to generate action on the issue, and in this sense the amendment was successful. Both Biden and Markey sought to pursue their concerns within the CTR framework, but amendments have not always been so constructive.

In 1991 the doomed Aspin-Nunn proposal included a provision that the President should pursue 'barter' with the (former) Soviet Union. According to Representative Charles Bennett (D-Fla.), "that really came from me, because I am chairman of the Stockpile Committee, and this panel had had great difficulty getting things like magnesium, which the Russians have a lot of and we have none of, and there are other matters like that which could certainly amount to billions of dollars if they could make it available." 161 No action was taken on this, but the issue did not die. In 1993 Congressman Gerald Solomon (R-N.Y.), one of the key Nunn-Lugar critics, sponsored an amendment to obtain reimbursement from the recipient states for US assistance provided by CTR. At face value, this may have seemed like an amendment designed specifically for its domestic appeal, and a particularly cynical one at that, given that at the time virtually all of the CTR contracts had been awarded to US companies. 162 However, it was argued that Solomon was only trying to secure the reimbursement that the President had been directed to obtain by Congress according to the original Nunn-Lugar legislation. Public Law 102-228 stated that assistance shall be conditioned, to the extent the President determined appropriate after consultation with the recipient government, on the recipient government reimbursing "the United States Government for the cost of such assistance from natural resources or other materials available to the recipient government. . . The President shall encourage the satisfaction of such reimbursement arrangements through the provision of natural resources, such

¹⁵⁸ Ibid., p.104.

¹⁵⁹ Ibid

¹⁶⁰ Interview, Washington, D.C. March 5, 1998.

¹⁶¹ Statement of Bennett in "Potential Threats to American Security in the Post-Cold War Era", p.97.

¹⁶² The author considers this a fairly reasonable assessment.

as oil and petroleum products and critical and strategic materials, and industrial goods.⁵¹⁶³ The amendment failed to attract the required support, providing two important insights into congressional perceptions of the Nunn-Lugar program.

The first insight was that Solomon's amendment did not attract enough support to pass, despite the fact that it reflected the 1991 legislation. Few members of Congress possessed the interest in, or understanding of, the program to be concerned with whether or nor the amendment passed. Few members would have received more than a cursory briefing from their staff on the Nunn-Lugar program and fewer still would have taken the time to read the legislation in detail. While the amendment did attract some support, this was more of a reflection of Solomon's stature in the House and his reputation as a GOP 'lead attack dog'. ¹⁶⁴ Thus, of the small number of Congressmen who even knew of the reimbursement arrangements in the legislation, an even smaller number actually cared about whether the provision was being met.

The second insight was that a pragmatic approach to CTR and was shared by the program's advocates. While Nunn-Lugar advocates included the reimbursement arrangements in the original legislation, there was an understanding that the program was unique and legislators and officials did not possess a crystal ball. Some approaches would work while others would not. CTR was 'the art of the possible'. Reimbursement-in-kind was one of the innovations that did not work. Those who were aware of the reimbursement provision allowed it to slide when it became clear that the recipient states' economies were in no position to be reimbursing the US for assistance provided. In addition, US business was already reaping all the benefits from the CTR contracts and there was no need to threaten further Nunn-Lugar activities and US contracts by insisting on an obscure provision that would not be fulfilled and would only be resented by the inheritor states.

CTR and the Biological Weapons Convention

Recipient state eligibility for Nunn-Lugar assistance was an on-going concern for legislators and executive branch officials alike, and received a great deal of coverage in the print media. Much of this interest focused on the allegation that Russia failed to comply with its Biological Weapons Convention (BWC) obligations. ¹⁶⁵

¹⁶³ Public Law 102-228—Dec. 12 1991, Sec. 222

¹⁶⁴ Duncan (ed), Politics In America 1994, p.1083.

¹⁶⁵ The Biological Weapons Convention was signed on 10 April 1972 and entered into force on 26 March 1975. The September 14, 1992 Joint Statement on Biological Weapons issued by the US, the UK and

Reports that Russia had violated the Convention had been circulating well before 1994. However, it was not until this date that general questioning and concern turned into action. This took the form of a Sense of Congress resolution attached to the 1994 CTR legislation.

That Congress considered BWC violations to be a serious obstacle to CTR funding can be adduced by examining the 1994 legislation. The entire CTR Public Law, PL 103-337—Oct. 5 1994, totaled a little less than 6½ pages. Of this, matters relating to Russia's biological weapons program and the resulting Congressional requirements occupied 2½ pages. The resolution claimed that,

Despite President Yeltsin's decree of April 11, 1993, stating that activities in violation of the Biological Weapons Convention are illegal, questions continue to arise regarding offensive biological weapons research, development, testing, production, and storage in Russia...[I]n assessing the President's fiscal year 1996 budget request for foreign assistance funds for Russia, and for other programs and activities to provide assistance to Russia, including the Cooperative Threat Reduction programs, Congress will consider United States Government assessments of Russia's compliance with its obligations under the Biological Weapons Convention¹⁶⁸

US Government assessments were to take the form of classified and unclassified reports. The resolution also contained a limitation, namely that \$25,000,000 in CTR funding not be obligated until the President submitted the first of the reports. Although this limitation was largely toothless, requiring the submission of a Presidential report, the resolution as a whole clearly reflected the Congressional

Russia confirmed the commitment of the respective governments to the Convention and outlined steps designed to increase confidence in that commitment. Public Law 103-337—OCT, 5, 1994, Sec. 1207 (7). On allegations that Russia continues to violate the Biological and Chemical Weapons Conventions, see Sue Lackey, "Russia violates bio-chem treaties", Jane's Intelligence Review, October 1999, p.3.

For example, ACDA Director Ronald Lehman testified in November 1991 that the then-Soviet Union was in violation of its BWC obligations. "The START Treaty in a Changed World", *Hearings before the Committee on Foreign Relations*, United States Senate, One Hundred Second Congress, First Session, November 7, 1991, p.130.

¹⁶⁷ On the Russian Biological Weapons program see, for example, Anthony Rimmington, "Fragmentation or Proliferation? The Fate of the Soviet Union's Offensive Biological Weapons Programme", *Contemporary Security Policy*, Vol. 20, No. 1, April 1999, p.86-110.

¹⁶⁸ Public Law 103-337 — Oct. 5 1994, Sec. 1207 a (5), b (5).

mood. However, it was not until the following year that the Congressional influence began to be felt.

To digress briefly. According to the CIA, it was unclear to what extent Boris Yeltsin was a willing or able accomplice in the 'misinformation campaign' concerning Russia's CW and BW programs. "He [Yeltsin] may be unable or unwilling to ensure that subordinates are carrying out his orders to terminate the offensive CW and BW programs. Because of his precarious political position and the panoply of problems facing him, he may be unwilling to risk a confrontation with military supporters of these programs." 169

1995 CTR legislation required that the President certify to Congress that Russia was in compliance with its BWC obligations, that procedures had been agreed upon for the US and the UK to visit military biological facilities in Russia and that these visits had, in fact, taken place. If this could not be done, the President was required to provide an alternative certification that he could not do so. As it turned out, the President could not certify that Russia was in compliance and that visits had taken place. This meant that \$60,000,000 in funds earmarked for the planning and design of a chemical weapons destruction facility could not be obligated or expended for this purpose. However, Congress did not bar the funds completely. Rather they were made available to supplement strategic offensive weapons elimination in all recipient states as well as for nuclear infrastructure elimination in the three non-Russian republics. 170 While it could be argued that Congress's role was trivial, merely transferring funds between accounts, the BWC compliance issue had implications beyond the 1995 legislation and sent an unambiguous signal to the executive branch. It signaled that Congress was not content to draft legislation and let the Administration interpret it as it saw fit. While the Clinton Administration was concerned with probable Russian breaches of the BWC, it had not shown any inclination to link BWC compliance with Nunn-Lugar funding. Thus it was not a decision the Administration would have made by choice and demonstrated that Congress's role in CTR implementation could be proactive, not merely reactive. According to one observer, it also had the unintended consequence of negatively impacting on the US-Russian nuclear security and nonproliferation dialogue. 171

¹⁶⁹ "Worldwide Threat to the United States", *Hearing before the Committee on Armed Services*, United States Senate, One Hundred Fourth Congress, First Session, January 17, 1995, p.46.

¹⁷⁰ GAO/NSIAD-96-222, p.19, 6,

¹⁷¹ Vladimir Orlov, "Perspectives of Russian Decision-makers and Problems of Implementation", in Shields and Potter (eds), *Dismantling the Cold War*, p.88.

However, signaling intent and allowing the Administration to shift funds from project to project in order to avoid answering hard questions about Russian behaviour was not enough for some Congressmen. In 1995 Robert Dornan (R-Calif.) successfully attached conditions to the FY 1996 Defence Authorization Bill, which passed by a vote of 244 to 180, that would have drastically altered Russian eligibility for CTR assistance as well as the Clinton Administration's room to manoeuvre in providing that assistance. The amendment prohibited CTR funding unless the President could certify that the Russian government had terminated research into its alleged biological weapons program. In addition, the amendment deleted the words 'committed to' from the introduction to the certification requirements, which would make the certification procedure a virtually impossible task. The 'killer' amendment was removed in conference but that did not signal the end for such finessed attacks on the entire Nunn-Lugar program.

Dornan's amendment was reproduced a year later in a slightly more expanded and politically nuanced form. Gerald Solomon introduced a floor amendment to the FY 1997 Defence Authorization Bill, which would have expanded the list of conditions for recipient state certification from six to ten. This expanded list included the termination of military activities in Chechnya and the ending of Russian intelligence sharing with Cuba. Potentially most damaging, because it was a very hard claim to dispute unequivocally, was Solomon's charge that the Russians were diverting funds freed up by Nunn-Lugar to nuclear weapons modernization programs. The question of CTR freeing up resources for nuclear modernization was a persistent, if only minor, thorn in the side of the Nunn-Lugar program. A number of non-government analysts made the same allegation. For example, Baker Spring of *The Heritage Foundation* quoted a GAO allegation that some of the scientists employed by the ISTC in Moscow were "continuing their weapons-related activities, working for the center only part of the time", and Rich Kelley of the CATO Institute claimed that "CTR funds have eased the Russian military's budgetary woes, freeing resources for

¹⁷² Bichsel, "How the GOP Learned to Love the Bomb", p.30.

175 Ellis and Perry, "Nunn-Lugar's Unfinished Agenda", p.19.

¹⁷³ Jason Ellis and Todd Perry, "Nunn-Lugar's Unfinished Agenda", Arms Control Today, Vol. 27, No. 7, October 1997, p.19.

¹⁷⁴ Ibid., This was not the first time the issue of Cuba had impacted on discussions about US aid to Russia. For example, in 1995, Representative Robert Menendez (D-N.J.) exclaimed: "Now as someone who supported Russian aid, I have had a very tough time explaining it [the Lourdes signal intelligence facility in Cuba which Russia rents for \$200 million annually] back at home." See "U.S. Assistance Programs for Economic and Political Reform and Dismantling of Weapons of Mass Destruction in the NIS", p.23-4.

such initiatives as the war in Chechnya and defense modernization." ¹⁷⁶ It has also been a concern shared by Congressmen. In a convoluted way, Representative Robert Menendez expressed a similar sentiment. He said that he was deeply concerned that US aid was giving Russia the "wherewithal to have other things done for them by the U.S. government that they do not themselves have to spend money on that they might be spending money on otherwise." ¹⁷⁷

Solomon's timing was impeccable. At the time the amendment was introduced, reports had begun to surface in the media about a secret underground military complex (believed to be a strategic nuclear forces command bunker) at Yamantau Mountain in the Urals. The project, begun during the Brezhnev era, had been resumed by the Russian military and appeared, in the eyes of US legislators, particularly galling considering they were voting funds for weapons dismantlement procedures that the Russians supposedly could not finance themselves. 178 The renewed construction was seized upon by critics in Congress, who pointed out that Nunn-Lugar assistance could only be disbursed if the President certified, among other conditions, that Russian military programs did not exceed "legitimate defense requirements". 179 According to Administration officials, the complex "seemed inappropriate given Russia's economic crisis but claimed that it did not constitute excessive military modernization." The political saliency of the issue was reflected in the House vote. After an unprecedented lobbying effort from CTR supporters, which required the intervention of Cabinet Secretaries, the National Security Council, the Office of the Vice-President and a coalition of non-government organizations, the amendment was defeated 220-202. 181

Partisan Politics: The 1994 'Republican Revolution'

At the same time that the Russian biological weapons program started to become a concern on Capitol Hill, a sea-change was occurring in the composition of Congress. The impact of the Republican-dominated Congress, following the

¹⁷⁶ Baker Spring, "The Defense Budget for Defense: Why Nunn-Lugar Money Should Go To the B-2", Executive Memorandum 424, (Washington, D.C., The Heritage Foundation, August 1,1995), p.1; Rich Kelly, "The Nunn-Lugar Act: A Wasteful and Dangerous Illusion", Foreign Policy Briefing 39, (Washington, D.C., The CATO Institute, March 18, 1996), p.1.

[&]quot;U.S. Assistance Programs for Economic and Political Reform and Dismantling of Weapons of Mass Destruction in the NIS", p.24.

^{178 &}quot;Moscow's secret base keeps US guessing", The Age, April 17, 1996, p.9.

Stockholm International Peace Research Institute (SIPRI), SIPRI Yearbook 1997: Armaments, Disarmament and International Security (Oxford: Oxford University Press, 1997), p.380.

180 Ibid. Emphasis added.

¹⁸¹ Ellis and Perry, "Nunn-Lugar's Unfinished Agenda", p.19.

'Republican Revolution' of November 1994, had a significant impact on the Cooperative Threat Reduction Program.¹⁸² The conservative backlash was reflected in the first legislative cycle over which the Republicans had control, Fiscal Year 1996. For the first time funding was reduced from the \$400 million benchmark. The CTR program was slashed to \$300 million and it could have been worse if not for the efforts of Democrats in the Senate Armed Services Committee who lobbied hard to increase funding from the \$200 million deemed acceptable by the House National Security (formerly Armed Services) Committee.¹⁸³

The antipathy between the Republican-dominated Congress and Administration was palpable. While forty years in the Congressional wilderness assured a confrontational approach by Republicans, the groundwork for this schism had been laid in 1992 when the Democratic Administration was selected. Clinton drew his team from Democratic Congressmen, staffers and the Democratic Party, and there was virtually no effort to forge links with the Republican minority in Congress. This policy worked well while the Democrats were strong in Congress but it had the effect of creating an institutional divide when Republicans assumed control of both Houses in the 1994 mid-term elections. 184 According to Richard Combs, "Republican members of Congress who had been unenthusiastic and sometimes hostile toward expenditure of U.S. dollars on cooperative threat reduction . . . finally had the votes in their respective committees and in the full Senate and House to translate their concerns into law."185 Indeed, Republicans hostile to any agreement with the Russians were elevated to positions where their views would have a real impact on foreign aid in general, the provision of which Jesse Helms likened to pouring US taxpayers' money down "foreign rat holes" 186, and CTR programming in particular, which many Congressmen continued to associate with foreign aid. Jeremy Rosner summed up the new situation succinctly: "The Republican capture of both the House and the Senate has brought an entirely new cast of committee chairmen, many of whom are the ideological opposites of their Democratic predecessors. Policy differences abound across the aisle. There is now more enthusiasm for defense spending, less for foreign aid."187

183 Ibid., p.50-2.

¹⁸² Shields and Potter (eds), Dismantling The Cold War, p.50.

¹⁸⁴ Interview, Washington, D.C., March 13 1998.

¹⁸⁵ Shields and Potter (eds), Dismantling The Cold War, p.xxx.

¹⁸⁶ Quoted in Jeremy Rosner, *The New Tug-of-War: Congress, the Executive Branch, and National Security* (Washington, D.C., Carnegie Endowment, 1995), p.14.

¹⁸⁷ *Ibid.*, p.2.

One surprisingly good indication of the forthcoming Republican attitude to the Democratic Administration and policy priorities was contained in the Contract With America published by the Republican National Committee in 1994. 188 Among the ten bills to be taken to the floor within the first one hundred days of the 104th Congress (nine of which were subsequently passed) were the Fiscal Responsibility Act, which was intended, with certain exceptions, to balance the budget, and the National Security Restoration Act. Amongst four other provisions, the Restoration Act intended to restore defence spending "firewalls" that "prohibit the transfer of Defense Department funds to other departments and agencies in order to fund social spending programs unrelated to military readiness." This provision, which reflected the Republican penchant to view defence as buying hardware and proliferation as a military rather than diplomatic problem 190, had a direct impact on the CTR program. Newt Gingrich's remarks in the appendix to the Contract With America were instructive: "I am very prepared to cooperate with the Clinton administration. I am not prepared to compromise. The two words are very different." The new Republican majority closely followed the lead of Gingrich who in 1995, according to Clinton's first Counselor and Senior Director for Legislative Affairs on the staff of the NSC, was "proving himself the most influential Speaker in decades." 192

In stark contrast to the 'bipartisan foreign policy' pursued by the Truman Administration and the Congress, most notably Senators Arthur Vandenburg (R-Mich.) and Tom Connally (D-Texas), during the immediate post-World War II period 193, the Republicans who entered office in 1994 wanted to be in opposition to the Administration. The sense of frustration at being out of office, combined with a perception that the traditional Republican hold on foreign policy had been lost, led to a combative posture. The Administration made itself a relatively easy target for foreign policy attacks during its first term given disastrous events in Somalia, a "long delayed"

189 *Ibid.*, p.93.

191 Contract With America, p.186.

102 Rosner, The New Tug-of-War, p.27.

¹⁸⁸ Rep. Newt Gingrich, Rep. Dick Armey and the House Republicans, *Contract With America* (New York: Republican National Committee, 1994).

Interview with a Senate Governmental Affairs Committee staffer, Washington, D.C., March 5 1998. John Ruggie has observed that "generalized anti-cooperative security sentiments are quite strong in the legislative branch of government, particularly on the Republican side of the House." John Gerard Ruggie, Winning the Peace: America and World Order in the New Era (New York: Columbia University Press, 1996),p.159.

See, for example, Arthur M. Schlesinger Jnr, *The Imperial Presidency* (Boston: Houghton Mifflin Company, 1973), Chapter 6.

and "timid" intervention in Haiti¹⁹⁴ as well as an inconclusive (from the Republican perspective at least) foray into Bosnia.¹⁹⁵ Republicans wanted to hurt Clinton and the CTR program provided a target. The above-mentioned 'killer' amendments introduced by Representatives Dornan and Solomon were only the most obvious corollaries of this trend.

CTR and Iran

Congress, like the executive, displayed an incessant fixation with Iran, focusing particularly on proposed nuclear reactor and ballistic missile deals between that country and Russia as well as Iran's allegedly burgeoning chemical and biological weapons programs. Iran was a constant thorn in the side of US policy makers, legislators as well as members of the general public (both informed and uninformed) for a variety of reasons, chief among these being the painful memory of the 1979-80 revolution and subsequent hostage crisis; Iran's willingness to abide by the letter, but apparently not the spirit, of the Nuclear Nonproliferation Treaty (NPT); its alleged sponsorship of international terrorism; and its perceived role as a destabilizing force in the region. To take only one example. According to Near Eastern and South Asian Affairs Subcommittee Chairman Senator Sam Brownback (R-Kan.):

In the years since the Islamic revolution, Iran has developed into a militant nation intent on exporting its particular brand of Islam and using terror both internally and externally to achieve its aims. It is a rogue state, seemingly unsusceptible to reason, uninterested in international norms, and committed to the development of weapons of mass destruction. . . The executive branch and the Congress, Republicans and Democrats, we all agree that Iran represents a significant threat to the

¹⁹⁴ Barry Blechman, "The Intervention Dilemma", in Brad Roberts (ed), *Order and Disorder after the Cold War* (Cambridge, MA: The MIT Press, 1995), p.154.

¹⁶⁵ See, for example, the observations of Republican Gordon Smith in "Bosnia: Status of Non-Compliance With The Dayton Accords", *Hearing before the Subcommittee on European Affairs of the Committee on Foreign Relations*, Senate, 105th Congress, 1st Session, July 17, 1997, p.3.

See, for example, Howard Diamond, "U.S. Sanctions Russian Entities For Iranian Dealings", *Arms Control Today*, Vol. 29, No. 1, January/February 1999, p.25; *The Proliferation* Primer, January 1998, p.20-26; and Laurie Boulden, "CIA, DIA Provide New Details on CW, BW Programs in Iran and Russia", *Arms Control Today*, Vol. 26, No. 6, August 1996, p.32, 33.

American people, to our friends, and to our interests in the Middle East and the world over. 197

In addition, the powerful Israel lobby in the United States ensured that the aforementioned factors remained fresh in the collective US memory. According to one insider, former Secretary of State Warren Christopher spent more time and passion on the proposed Iran reactor deal than on safeguarding fissile material in the former Soviet Union. Such a skewing of priorities placed a possible threat in ten or twelve years in front of an urgent and immediate danger. It should not be overlooked, however, that this potential deal threatened to present a *very* immediate danger. In 1995, MINATOM attempted to include enrichment equipment in the sale. 200

This 'phobia' with Iran, possibly dating back to Christopher's tour as Deputy Secretary of State during the Carter Administration²⁰¹, was popular with Congress as was recently evidenced by the fact that playing the 'Iran card' also occurred to Senate Majority Leader Trent Lott (R-Miss.). Lott, widely touted at the time as the leading Republican for the 2000 Presidential nomination, showed great interest in introducing legislation that would make CTR funding contingent on the termination of Russian cooperation with Iran.²⁰² However, the focus on Iran had the unfortunate effect of aggravating US-Russian relations and actually strengthening Minister of Atomic Energy Mikhailov's domestic position. According to Alexander Pikayev, Senior Scientist with the Russian Institute for World Economy and International Relations, "In the eyes of many Russian decision-makers, Minatom's firm position [on the reactor

¹⁹⁷ Opening statement of Brownback in "Iran and Proliferation: Is the U.S. Doing Enough? The Arming of Iran: Who Is Responsible?", *Hearings before the Subcommittee on Near Eastern and South Asian Affairs of the Committee on Foreign Relations*, United States Senate, One Hundred Fifth Congress, First Session, April 24, 1997, p.1.

Information on Christopher's possible motives is taken from interviews, March 26, 1998.
 Interview, Cambridge, MA, March 26 1998; Allison et al, Avoiding Nuclear Anarchy > 140.

Jessica Eve Stern, "Cooperative Activities to Improve Fissile Material Protection, Control and Accounting", in Shields and Potter (eds), Dismantling the Cold War, p.340.

During the last eight months of the Carter Administration, Christopher led the negotiations to free the hostages. Warren Christopher, In The Stream Of History: Shaping Foreign Policy for a New Era (Stanford, CA: Stanford University Press, 1998), p.7. On the Carter Administration and Iran see, for example, Gaddis Smith, Morality, Reason, and Power: American Diplomacy in the Carter Years (New York: Hill and Wang, 1986), p. 180-207.

²⁰² Interview, Washington, D.C., March 9, 1998. On the value of Iran to Russia as a regional ally see Paul Goble, "The Roots of Russian-Iranian Rapprochment", *RFE/RL Newsline*, Vol. 3, No. 59, Part 1, 25 March 1999.

deal] contrasted favorably with the weak Kremlin policy of unilateral concessions to the West, which failed to buy even Western neutrality over Chechnya."²⁰³

While members of Congress were sensitive to Iran's putative nuclear ambitions²⁰⁴, the majority have been reluctant to link the proposed Russian reactor sale to CTR authorization. Senator Sam Brownback's frustration — "For my part, I believe that selling reactors to Iran and receiving aid from the United States are mutually exclusive. After all, why should Russia spend U.S. tax dollars to support our avowed enemy"²⁰⁵ — was representative of the Congressional mood but his policy prescription was not. Officials and Congressional staffers agreed unanimously that Russia's dealings with Iran were not helping efforts to sell CTR, yet few were willing to directly link the continuation of the CTR program to the Iranian problem, reflecting an understanding that the US-Russian relationship was bigger than regional concerns in Iran. 206 Under direct questioning from Representative Lee Hamilton over whether the US should apply conditionality, that is, should the US "not give aid to Russia unless they stop supplying materials, resources, and assets for the [Iranian] nuclear reactor", Ambassador Thomas Simons, Coordinator of US Assistance to the NIS replied: "We would oppose that, Mr. Chairman, because we think that it is cutting off our nose to spite our face. In other words, we should pursue improvements. We are opposed to the reactor transfer. But we do not believe that we should stop support for reform on that account."207 Similarly, Dr John Gibbons, Director of the Office of Science and Technology Policy, stated:

whatever bumps on the road our relationship may go through, over issues ranging from Chechnya to nuclear cooperation with Iran, we cannot let

²⁰³ Pikayev, "The CTR Program and Russia: Is a New Start Possible? A Russian View", in Shields and Potter (eds), *Dismantling the Cold War*, p.122.

²⁰⁴ See, for example, "Intelligence Briefing on Smuggling of Nuclear Material and the Role of International Crime Organizations, and on the Proliferation of Cruise and Ballistic Missiles", *Hearing before the Committee on Armed Services*, United States Senate, One Hundred Fourth Congress, First Session, January 31 1995, p. 2, 30; "Worldwide Threat to the United States", p.22-3, 37, 40. "Worldwide Intelligence Review", *Hearing before the Select Committee on Intelligence*, United States Senate, First Session on Worldwide Intelligence Review, January 10 1995, p.34-5, 51, 54-6.

Statement of Brownback in "Iran and Proliferation: Is The U.S. Doing Enough? The Arming of Iran: Who Is Responsible?", p.4.

²⁰⁶ Russian officials have expressed disappointment, even irritation, with this linkage. Orlov, "Perspectives of Russian Decision-makers and Problems of Implementation", in Shields and Potter (eds), *Dismantling the Cold War*, p.88.

²⁰⁷ Simons in "U.S. Assistance Programs for Economic and Political Reform and Dismantling of Weapons of Mass Destruction in the NIS", p.16.

cooperation in managing these materials become a casualty. The security stakes for both countries are simply too high.²⁰⁸

The consensus amongst Congressional staffers was that although events in Iran were a legitimate concern, which needed to be addressed, Nunn-Lugar was not the appropriate 'stick' to wield. Threatening to cut CTR funding as a way of modifying Russian behaviour or as a form of retaliation was not an effective way to induce Russian good behaviour, particularly given the quite small amounts of money involved in many projects. Equally as important, funding cuts had the effect of reducing US security by slowing the destruction and dismantlement rate in the former Soviet states. The growing acceptance of the Nunn-Lugar program as an effective and enduring nonproliferation tool was a testament to the program's achievements and the skill and persistence of the program's advocates since its inception in 1991.

Although it technically falls beyond the purview of the case study, a similar rider is worth describing briefly.210 Introduced to the FY 1998 House Defense Authorization Bill by Representatives Solomon and Dana Rohrabacher (R-Calif.) in 1997, the amendment mirrored an amendment successfully attached to the FY 1998 House Foreign Assistance Authorization Bill by Rohrabacher. It conditioned all \$348 million in assistance to Russia on Moscow's cancellation of a proposed sale of 'Sunburn' nuclear-capable anti-ship missiles to China and passed by a vote of 213-205, catching CTR advocates by surprise. On procedure, using his prerogative as ranking member of the National Security Committee, Ron Dellums (D-Calif.) called for a re-vote. After intense lobbying, the amendment was defeated by a vote of 215-206. While the linking of CTR assistance to Russian potential dual-use exports to Iran and China failed, the fact that these specific amendments were introduced was evidence that there was real concern for such behaviour amongst knowledgeable members of Congress and they could marshal support behind this cause. In the case of the Solomon-Rohrabacher Amendment, only some fancy technical footwork and intense lobbying by Dellums and John Spratt (D-S.C.) enabled CTR supporters to

²⁰⁸ Prepared statement of Gibbons in "Loose Nukes, Nuclear Smuggling, and the Fissile Material Problem In Russia and the NIS", p.92.

Although some individuals interviewed expressed doubts concerning specific Nunn-Lugar funded projects, all agreed that the program contributed to US security and that only unambiguous proof of Russian bad faith, such as a dedicated biological weapons program or a diversion of CTR funds to nuclear modernization, should lead to a reappraisal of assisting in the fulfillment of the program's core objectives. Interviews, Washington, D.C., March 5-12, 1998.

Information on the Solomon-Rohrabacher Amendment is taken from Ellis and Perry, "Nunn-Lugar's Unfinished Agenda", p.19-20; Interview, Washington, D.C., March 5, 1998.

narrowly defeat the amendment. It seems probable that these attacks will only increase in the future. According to a senior DoD official, trying to explain to the average member of Congress why CTR should not be linked to Russian anti-ship missile sales to China was a particularly difficult job. The official also observed that Solomon's amendments got more nuanced and harder to defend against each year, particularly when such amendments are largely viewed as votes for Solomon (and the United States) and against China.²¹¹

Nunn-Lugar II

One new Congressional initiative to develop in 1996 was the "Defense Against Weapons of Mass Destruction Act of 1996", or Nunn-Lugar II legislation. Reflective of the heightened perception of possible nuclear terrorism in the United States²¹², which was based on the increase in nuclear smuggling incidents, the sarin gas attack in Tokyo's subways, the World Trade Center bombing and the Oklahoma City Federal Building bombing, the legislation also offered a convenient way of providing additional support for on-going CTR programs. The legislation, an amendment to the FY 1997 defence appropriations bill, was introduced by Senators Nunn, Lugar and Domenici and asked for \$235 million "to improve the U.S. ability to respond to the use or threatened use of weapons of mass destruction in the United States."213 The Senate unanimously approved the bill (98-0) and it has been suggested that this reflected both the stature and force of personality of the bill's sponsors, as well as being a way of thanking Senator Nunn for his service to Congress as a "master of pork-barrel politics".214 However, the House-Senate defence authorization conference reduced the sum to \$201 million.²¹⁵ The bill's key provision were firstly, to coordinate US federal, state and local agencies to respond to incidents involving nuclear, radiological, chemical and biological weapons; secondly, to procure equipment for the U.S. Customs Service (as well as assistance for customs officials and border guards in the

²¹¹ Conversation with a senior DoD official, Washington, D.C., March 13, 1998.

²¹⁴ Interview, Washington, D.C., 13 March 1998.

One of the earliest examples of nuclear terrorism in the US occurred in 1974 when an extortionist threatened to explode a nuclear bomb in Boston. This and two crashes involving US bombers carrying nuclear weapons (Palomares, 1966 and Thule, 1968) resulted in the establishment of the Nuclear Emergency Search Team (NEST). Robert Blackwill and Albert Carnesale (eds), New Nuclear Nations: Consequences for U.S. Policy (New York: Council on Foreign Relations, 1993), p.204.

²¹³ Craig Cerniello, "Senate Approves 'Nunn-Lugar II' To Counter Domestic WMD Threats", *Arms Control Today*, Vol. 26, No. 5, July 1996, p.23.

²¹⁵ "FACTFILE: U.S. Security Assistance to the Former Soviet Union", *Arms Control Today*, Vol. 26, No. 7, September 1996, p.25.

FSU and Eastern Europe) to detect and interdict such weapons and to impose tougher sentences on those involved in the importation or exportation of such weapons; thirdly, to strengthen existing CTR programs such as DoE's MPC&A and 'lab-to-lab' programs, the development of technologies to verify Russian nuclear weapons dismantlement and convert plutonium into forms suitable for long-term storage or energy production and the establishment of a program to modify or replace Russian dual-purpose reactors; and fourthly, to create a "National Coordinator for Non-proliferation Matters" as well as a "Committee on Non-proliferation". While the effectiveness of this Congressional initiative falls beyond the scope of this case study, a number of points are worth noting.

There was a clear shift in the Congressional debate on CTR activities and nuclear leakage. Indicative of this was the change in focus of Congressional CTR hearings. Beginning in 1994 there was a perceptible shift in the focus of Congressional interest in Cooperative Threat Reduction, Previously, Congressional hearings had concentrated on micromanaging CTR funding, as evidenced by the questions asked of, and testimony provided by witnesses such as SSD Special Envoy William Burns, the General Accounting Office's Frank Conahan and Joseph Kelley as well as Assistant Secretary of State for Politico-Military Affairs Robert Gallucci. 217 Largely as a result of a dramatic increase in the number and seriousness of nuclear materials smuggling incidents, the focus shifted to hearings on potential nuclear, chemical and biological terrorist threats to the United States and the broader implications of CTR activities.²¹⁸ A confluence of events forced a number of key Congressional members, albeit those who appreciated the potential danger of nuclear leakage from the beginning, to take measures designed to counter a possible act of nuclear terrorism on the US mainland. It is also clear that Nunn-Lugar II was conceived, in addition to its practical application, as a potential selling point for an increasingly reluctant Congress.

²¹⁶ Cerniello, "Senate Approves 'Nunn-Lugar II' To Counter Domestic WMD Threats", p.23, 28.

²¹⁷ See "U.S. Plans and Programs Regarding Dismantling of Nuclear Weapons in the Former Soviet Union"; "Military Implications of START I and START II"; and "Disposing of Plutonium in Russia".

See, for example, "Challenges to U.S. Security in the 1990s"; "Worldwide Intelligence Review"; "Worldwide Threat to the United States"; "Intelligence Briefing on Smuggling of Nuclear Material and the Role of International Crime Organizations, and on the Proliferation of Cruise and Ballistic Missiles"; "U.S. Assistance Programs for Economic and Political Reform and Dismantling of Weapons of Mass Destruction in the NIS"; "Loose Nukes, Nuclear Smuggling, and the Fissile-Materia! Problem in Russia and the NIS"; "Proliferation: Russian Case Studies", Hearing before the Subcommittee on International Security, Proliferation, and Federal Services of the Committee on Governmental Affairs, United States Senate, One Hundred Fifth Congress, 1st Session, June 5 1997; "Nuclear Terrorism and Countermeasures" and "Current and Projected National Security Threats to the United States", Hearing before the Select Committee on Intelligence, United States Senate, One Hundred Fifth Congress, 2nd Session on Current and Projected National Security Threats to the United States, January 28 1998.

According to a number of officials interviewed by the author, "all politics is local" and most members concentrate on day-to-day issues that affect themselves and their constituents more than long-term trends.²¹⁹ Thus Nunn-Lugar II was packaged to appeal to these tendencies in Congress. Couched in terms that presaged a direct threat to US citizens — something tangible — renewed support for archetype Nunn-Lugar activities could be garnered. It was not coincidental that two Federal Emergency Management Agency (FEMA) training programs for acts of WMD terrorism were preceded by large press announcements and took place right before the staging of international events in the same location. The first took place in Denver before the G-7 Summit and the second in Atlanta before the Olympics.

More recently, in March 1998 Walter Slocombe, Under Secretary of Defense for Policy, testified before the Senate Armed Services Committee on three transnational threats, "new threats that have reached greater prominence in the post-Cold War national security environment": the proliferation of weapons of mass destruction; terrorism; and the flow of narcotics into the United States. Significantly, although Slocombe referred to CTR in the 'proliferation of weapons of mass destruction' section of his prepared statement, the Nunn-Lugar-Domenici (Nunn-Lugar II) legislation was included in the "terrorism generally" section which related to continental USA. The Under Secretary concluded by stating that these "three transnational threats are all very real and dangerous threats to America's national security, and the Defense Department is fully engaged and committed to countering each of them. Slocombe was associating Nunn-Lugar II with not just a WMD attack on the US homeland, but within the larger threat of drugs and terrorism—a connection guaranteed to elicit a fervent response from members of Congress.

Nunn-Lugar II has already proven capable of buttressing CTR funds without a corresponding reduction in the established annual CTR authorization. This is a valuable contribution given that the Cooperative Threat Reduction program, taken at its highest FY 1992 to 1996 funding level of \$400 million, amounted to less than two tenths of one per cent of the entire defence budget.²²³

²¹⁹ Interviews, Washington, D.C., March 5, 9, 1998.

Prepared Statement of Walter Slocombe in "Transnational Threats", Hearing before the Senate Armed Services Committee, March 5, 1998 (hearing transcript), p.1.

²²¹ *lbid.*, p.23-4. ²²² *lbid.*, p.28.

Assistant to the Secretary of Defense for Yuclear, Chemical and Biological Defense Programs, Cooperative Threat Reduction, p.14. The FY 1999 i idget request is \$442.4 million.

Assessment

In December 1991, the Nunn-Lugar Cooperative Threat Reduction program was conceived in Congress as a relatively short-term solution to an urgent international problem, namely the "storage, transportation, dismantling and destruction of Soviet nuclear weapons." By the end of 1996, CTR had become a line item in the defence budget, an integral part of the US counter-proliferation program and was described by Richard Lugar as "a triumph of interdepartmental and bureaucratic cooperation in the national interest." The case study has revealed the various ways in which Congressional influence on the CTR program has been felt. These are reiterated below.

The first and most productive method was Congressional control of CTR funding. This included both the overall CTR allocation and, increasingly as time went on, funding for individual programs. Congressional preferences were most effectively translated into practice in this area, which is not surprising given that, as illustrated in Chapter 1, Congressional objectives during the Cold War were most commonly achieved through management of program funding.

While the authorization and appropriation of money was Congress's strength in influencing CTR, the annual level of Nunn-Lugar funding was of fundamental import to the program's survival. The small amount of money involved, from a high of \$400 million for fiscal years 1992 through 1995 to a low of \$300 million for fiscal year 1996, provided CTR with a comparatively low profile in a \$263 billion US DoD budget outlay. According to a Congressional source, CTR was more of a debating point on the House and Senate floor than a program on which to stake one's political credibility 228; as distinct from an issue like missile defences. Support, or at least the prevention of sustained opposition, was maintained in part because the relatively small CTR price-tag shielded it from the controversy that accompanied more expensive and high-profile issues such as NATO enlargement and the ABM debate. Of course, the downside of this was that the price-tag limited the pork-barrel attraction of CTR.

²²⁴ Public Law 102-228—Dec. 12 1991, Sec.211.

The term 'counter-proliferation' was adopted by DoD in 1992. For the fundamentals of counter-proliferation see Prepared Statement of Walter Slocombe in "Transnational Threats", p.3-10. For a more detailed discussion of the problem of proliferation see Brad Roberts, "From Nonproliferation to Antiproliferation", *International Security*, Vol. 18, No. 1 (Summer 1993), p.139-173.

Statement of Lugar in "U.S. Plans and Programs Regarding Dismantling of Nuclear Weapons in the Former Soviet Union", p.29.

This figure is the mean for FYs 1992 to 1997. International Institute for Strategic Studies, *The Military Balance*, 1997/98 (London: Oxford University Press, 1997), p.16.

²²⁸ Interview, Washington, D.C., March 5, 1998.

The second method was legislative amendments. Whether constructive amendments, such as those introduced by Senator Biden and Representative Markey, or hostile "killer" amendments such as those introduced by Representatives Solomon, Dornan and Rohrabacher, this was Congressional foreign policy-making at its most visible. It was also largely unsuccessful. The amendments offered by Solomon, Dornan and Rohrabacher all failed to attract the required support to pass and Biden and Markey's amendments were both acknowledged by CTR officials as reasonable but not acted upon. To be sure, Biden and Markey's concerns were addressed but this was, in large part, because they reflected the thinking of those running the program anyway.

This is not to suggest, however, that all CTR-related amendments were doomed to failure from the outset. As evidenced by the somewhat politicized amendments introduced by Representatives Solomon, Dornan and Rohrabacher, conditioning CTR assistance on Russian international behaviour was a natural association for many members of Congress and became more prevalent the longer the program proceeded. While Nunn-Lugar proponents consistently argued that Russian behaviour in other areas should not impinge on CTR funding, except possibly in the case of a return to hostile Cold War-type relations, it was a job made harder each year when, in the words of one government official, the Russians were "screwing around" in countries like Iran, Iraq, China and India.²²⁹ This sentiment was echoed by CTR supporter Representative Lee Hamilton, who, in 1995, lamented:

There is this horrible war in Chechnya, and massive human rights violations by the military against civilians, and it is still going on. A war conducted by Mr. Yeltsin. We have got great concerns about what Russia is doing with regard to supplying nuclear reactors to Iran. We hear about Russian pressure on its neighbors, and hostility to NATO enlargement. And we have deep questions in our minds about the commitment of the government to reform, or their capability to bring about that reform. Now why is it then in the national security interest of the United States to support this government? You understand where I come from. I voted for aid to Russia. I am just laying out for you what I am going to hear again, and again, and again on the floor of the House and in committee, as this

²²⁹ Interview with an ACDA official, Washington, D.C., March 9, 1998.

moves forward. It is a lot tougher to vote for today than it was a year ago.²³⁰

In preparing amendments, both Congressional supporters and critics made use of the extensive official reporting requirements attached to CTR. Concerned members of Congress pored over the steady stream of reports from government agencies and Congressional support agencies. Like their predecessors, the Arms Control Impact Statements initiated in the 1970s, the CTR reports were an important source of information and an effective way for Congress to maintain program oversight.

This oversight responsibility garnered support in its own right for the program. One reason why Congress sustained interest in CTR was because Congressional involvement was diverse. Many agencies were involved in the implementation of CTR activities — the Departments of Defense, Energy, State, Commerce, Treasury and Justice as well as the CIA and, more recently, the FBI — which gave Congress a wide jurisdiction. It allowed far-reaching and effective oversight of the entire program.

Oversight also enabled Congress to ensure that the programs CTR was funding were operating in the manner they had been intended. This issue of transparency, identified in Chapter 1 as an extremely important concern for Congress (particularly during the 1970s and 1980s), was similarly viewed on the Hill for the CTR program. This was demonstrated by the certification procedures authorizing eligibility for CTR assistance, the extensive audit and examination requirements attached to CTR projects and the Congressionally-mandated reporting requirements discussed previously. While the somewhat onerous oversight procedures ensured that Congress received a reasonably complete picture of how the program was operating in the FSU and what the nuclear inheritor states were doing, several CTR projects were transferred to other US government departments to escape these obligations that impeded prompt implementation.

Of overriding importance to the development of the CTR program in Congress have been the personalities involved. From the middle of 1991 to the end of 1996, Senators Nunn and Lugar, with the assistance of men such as Les Aspin, Pete Domenici and Ron Dellums, have proved critical to the naissance, development and general survival of CTR. These were passionate believers both in the nuclear leakage

²³⁰ Hamilton in "U.S. Assistance Programs for Economic and Political Reform and Dismantling of Weapons of Mass Destruction in the NIS", p.15.

danger and the contribution CTR made to prevent this danger. Not only could CTR proponents see their program producing results in the former Soviet Union, several also involved themselves in the dialogue between the parties. CTR provided legislators with unprecedented access to heads of state and heads of the key ministries and departments, both in the former Soviet Union and in the United States.²³¹ While it is not new for Congressional delegations to meet directly with former Soviet officials and senior negotiators — conducting the more traditional Congressional role of hosting official delegations from the former Soviet Union and visiting the nuclear inheritor states to discuss CTR problems and prospects - Nunn, Lugar and others played an active, as opposed to observatory, role. Indeed, in some instances Senators Nunn and Lugar participated directly in the negotiating process.²³² Russian officials discussed issues with these senators precisely because it was understood that Nunn and Lugar could deliver on the agreements they made, back on the Hill. This was reinforced by a very close relationship between Senators Nunn and Lugar and senior Defence Department officials. According to DoD and Congressional sources, Nunn, Lugar and their staffs were in constant contact with DoD and were often asked for their advice.²³³

One of the great ironies of the CTR program was that Congress displayed remarkable bipartisanship during 1992 and 1993 when the program was finding its feet, the rate of implementation was slow and the executive branch was decidedly lukewarm to the effort. However, in 1994 and 1995, just as the Clinton Administration began to show some genuine interest and results were being achieved, Congress began to become combative. This, in no small part, can be attributed to the Republican majority in Congress, ushered in by the 1994 mid-term elections. Since then, the support base for Nunn-Lugar narrowed considerably with the retirement of two of CTR's key advocates, Sam Nunn and William Perry, in late 1996 and early 1997 respectively, and the enormous prestige and credibility they took with them.²³⁴ However, Senator Lugar maintained his tireless efforts in support of CTR and was joined by Senator Pete Domenici who took the mantle for Nunn. These two were

²³¹ According to a Senate staffer for a conservative Republican (and CTR supporter), visits by Russian officials to Capitol Hill did not achieve very much. The Russians 'loved' to come when the US paid and they got to enjoy themselves. 'No wonder the same officials keep turning up.' Interview, Washington, D.C., March 6 1998.

²³² Interview. The interviewee was not prepared to elaborate on this point.

²³³ Interviews, March 10, 26, 1998.

²³⁴ Not all CTR supporters will lament the passing of Nunn and, in time, Lugar, from the scene. According to a senior Senate staffer, conservative Republicans have been irritated by Nunn and Lugar's proclivity for meeting with Russian officials but not inviting other Congressmen. Interview, Washington, D.C., March 6 1998.

assisted by the support of Congressmen such as Ron Dellums, who became House Armed Services Committee chairman in January 1993, and Jeff Bingaman (D-N.M.), who showed a distinct interest in calls for the de-alerting of nuclear weapons. The support of the two senators from New Mexico, Domenici and Bingaman, for CTR-related activities is hardly surprising given DoE is the largest employer in that state and is the home of Los Alamos and Sandia national laboratories. DoE's continued critical role in lab-to-lab MPC&A efforts, as well as a probable supplier of devices for de-alerting procedures, will guarantee some employment within New Mexico. In addition, it has been said that the ghost of Sam Nunn still presides over the CTR program although it seems clear that even this ghost will fade with time.

Despite acceptance of the national security benefits of CTR by many in Congress and direct participation in the negotiating process by several Congressmen, it is clear from Congressional hearings that CTR supporters were fighting an uphill battle to maintain awareness on Capitol Hill of the threat of nuclear leakage from the former Soviet Union. One need only peruse the opening statements of Sepator's Nunn and Lugar to see how they continually stressed the dangers present in the FSU and praised the glowing achievements of the CTR program. While there was undoubtedly a large degree of enthusiasm in these speeches, they also came across as being slightly laboured, as if they were salesmen trying to sell a car to a distinctly ambivalent customer. This was indicative of the wider public perception that the collapse of communism in Eastern Europe ushered in a new era of peace. The end of the Cold War shifted people's focus more to domestic matters, and placed the Cold War legacy, such as the loose nukes problem, in the 'out of sight, out of mind' basket. Representative Thomas Lantos (D-Calif.) expressed his exasperation with this trend during hearings in 1994 when he asked to place CIA Director James Woolsey's testimony on organized crime and nuclear security in the FSU in the Congressional record because, "at a time when the country appears to be preoccupied with the O.J. Simpson affair, there are other issues of perhaps even greater consequence for national security."239 It was also

²³⁵ Interview, Washington, D.C., March 5, 1998.

²³⁶ This is not to suggest that the support of the New Mexico Senators for CTR is not genuine, as the author believes it is.

²³⁷ For Domenici's views on nuclear non-proliferation issues, see Senator Pete Domenici, "The Domenici Challenge", *The Bulletin of the Atomic Scientists*, Vol.54, No.2, March/April 1998, p.40-44.
²³⁸ Interview, Washington, D.C., March 5, 1998.

²³⁰ "Challenges to U.S. Security in the 1990s", Hearing before the Subcommittee on International Security, International Organizations and Human Rights of the Committee on Foreign Affairs, House of Representatives, One Hundred Third Congress, Second Session, June 27 1994, p.78.

reflected in Senator Lugar's unsuccessful presidential campaign during 1995-96, at which time he tried to highlight the dangers of the proliferation of nuclear, chemical and biological weapons. As Richard Combs argued, this demonstrated that the "issue remains of low political salience for most American voters." ²⁴⁰

In what can only be viewed with ambivalence, public awareness of, and Congressional interest in, the loose nukes problem was given a boost with the release of the 1997 movie *The Peacemaker*. Despite the inevitable bastardization of the subject matter by Hollywood, which would not have been difficult given that the inspiration came from the book *One Point Safe*²⁴¹, William Potter and Kenneth Luongo (formerly of DoE) expressed hope that the film would generate public interest and consequently elicit a heightened government response. Chairman of the House Military Research and Development Subcommittee Curt Weldon (R-Pa.) went one step further, remarking that it was "somewhat ironic . . . that Steven Spielberg, David Geffen, and Jeffrey Katzenberg [*Peacemaker*'s producers] may have done more this past weekend to alert Americans of the real dangers of nuclear terrorism than our President, Vice President, and the entire administration has done in the past 4½ years."

However, lack of understanding and interest amongst the majority of Congressmen and women is a problem that is exacerbated by time, and quick fixes such as Hollywood movies will do little, if anything, to reverse deeper tendencies toward apathy and de-sensitization. Unfortunately, the CTR program inadvertently contributed to this trend. As most of the big jobs, such as cutting up bombers and filling in silos, began to approach completion, CTR's achievements became less conspicuous. The national security benefits of cutting up a bomber were more tangible to many members of Congress than the much more long-term and mundane tasks of MPC&:A and providing employment for former nuclear weaponeers. Evidence of this was the Department of Energy's *Technology for Nonproliferation* demonstration on Capitol Hill on March 11, 1998. The demonstration included displays and hand-outs by officials from DoE, the nuclear labs and private firms of new technologies in the nonproliferation fight. This was a concerted effort to highlight the threat of nuclear

²⁴⁰ Shields and Potter (cds), Dismantling The Cold War, p.56.

²⁴¹ Andrew Cockburn and Leslie Cockburn, One Point Safe (New York: Doubleday, 1997).

²⁴² John Barry, "Reality Check", *The Bulletin*, October 7 1997, p.72.

Opening Statement of Weldon in "Nuclear Terrorism and Countermeasures", Hearing before the Military Research and Development Subcommittee of the Committee on National Security, House of Representatives, One Hundred Fifth Congress, 1st Session, October 1 1997, p.1-2.

leakage and nuclear terrorism as well as the impress upon Congressmen and officials the value of such technology for use both in the former Soviet Union and in the US.

The release of *The Peacemaker* and DoE's nonproliferation technology demonstration fall beyond the parameters of the case study. However, their importance to this thesis lies in the fact that it was hoped that both would reinvigorate support for nonproliferation activities in the FSU. This reveals how capricious Congressional and public minds were considered to be, given that CTR had just assisted in securing the most spectacular case of nuclear rollback in history.

From 1991 to 1996, CTR assistance to Russia, Ukraine, Kazakhstan and Belarus was slow but produced results. In the words of Richard Lugar, "something remarkable has been accomplished by the United States of America, working with cooperative people in the new states to take advantage of this window of opportunity which we all pray will continue to be open." Congress was responsible for the birth of the program and continued to play a central role in the program as it developed during these years. As will be shown in the following chapter, the development of CTR, and Congress's role in that process, have significant implications for theories that purport to explain international relations.

²⁴⁴ Statement of Lugar in ""U.S. Plans and Programs Regarding Dismantling of Nuclear Weapons in the Former Soviet Union", p.17.

Chapter 5

US Cooperative Threat Reduction Policy and International Relations Theory

Aim and Structure

The preceding two chapters have described the CTR program as it developed in the United States between 1991 and 1996. This chapter introduces three dominant strands of international relations theory — neorealism, neoliberal institutionalism and constructivism — into the discussion. Neorealism emphasizes the state's concern for its own survival and views cooperation as a predominantly zero-sum game. Neoliberal institutionalism stresses the 'institutionalized' nature of international relations and the greater capacity of states to work together to share mutual gains. Constructivism attaches importance to ideas and identity formation and claims that this has implications of fundamental import for the study of international relations. Each of these theoretical perspectives provides a very different account of the CTR program. This chapter seeks to determine which, if any, of the three can provide the most satisfactory explanation of US nuclear threat reduction policy.

The chapter is divided into four parts. Part One focuses on neorealist theory and distills the key neorealist assumptions and claims. Following this introductory work, a neorealist explanation of the US CTR program is proffered. Part Two follows the same format as Part One but focuses on neoliberal institutionalist theory. Part Three does the same with constructivism. Finally, Part Four provides an overall assessment of the neorealist, neoliberal institutionalist and constructivist explanations of CTR in order to identify the strengths and weaknesses in the competing approaches and, ultimately, to determine which one of the three paradigms comes closest to providing a satisfactory explanation of the formulation and evolution of US nuclear threat reduction policy.

In the interests of clarity, it is important to note at the outset that this chapter focuses on US policy. The other side of the debate, and equally important, is the motivations of the former Soviet states. Obviously, the theories employed here could also be used in an attempt to provide theoretical grounding for decisions made by

Russia, Ukraine, Belarus and Kazakhstan. However, while this would undoubtedly be a worthy undertaking, it is not a task of this thesis.

Part 1

Neorealism

Kenneth Waltz's neorealist theory, formulated most fully in his 1979 book *Theory of International Politics*¹, has been selected as the primary template here, because it remains seminal and is immune from a recent criticism leveled at subsequent reformulations of neorealism — namely, that many of these writings forego core realist premises and "advance the very assumptions and causal claims in opposition to which they traditionally, and still, claim to define themselves."²

Neorealism, as defined by Waltz, posits that the international system is formed "by the coaction of self-regarding units." Units, in this context, are states. The primary motivation of states in the international system is to ensure their own survival, all other aims being subordinate to, as well as contingent on, survival. The international system can be described as anarchical, in the sense that there is no central authority to arbitrate disputes between states. The implications of anarchy are fundamental to neorealist theory and distinguish it from the classical realists' grounding of politics in human nature. The lack of an overarching authority results in pervasive suspicion and fear of other states' intentions — "Nations act in situations of tempered antagonism and precarious partnership, each nation's best choice depending on what it expects the other to do" — and a realization that "those who do not help themselves, or who do so less effectively than others, will fail to prosper, will lay

¹ Kenneth Waltz, Theory of International Politics (New York: Random House, 1979).

² Jeffrey W. Legro and Andrew Moravcsik, "Is Anybody Still a Realist?", *International Security*, Vol. 24, No. 2, Fall 1999, p.6. This realist "slide from power to preferences" has been labeled a "midrange explanation of state behaviour." *Ibid.*, p.32, 34-5. For the realist responses to this charge and the ensuing debate see Peter Feaver, Gunther Hellman, Randall Schweller, Jeffrey Talizierro, William Wohlforth, Jeffrey Legro and Andrew Moravcsik, "Correspondence: Brother, Can You Spare a Paradigm? (Or Was Anybody Ever a Realist?)", *International Security*, Vol. 25, No. 1, Summer 2000, p.165-193.

³ Waltz, Theory of International Politics, p.91.

The most eloquent expositions of classical realism can be found in Hans Morgenthau, *Politics Among Nations: The Struggle for Peace and Power*, 3rd ed. (New York: Alfred A. Knopf, 1964) and Edward Hallett Carr, *The Twenty Years' Crisis*, 1919-1939 (New York: Harper and Row, 1964).

⁵ Graham Allison, Essence of Decision: Explaining the Cuban Missile Crisis (USA: HarperCollins, 1971) p.15.

themselves open to dangers, will suffer." This realization engenders a basic lack of trust, which is exacerbated by the fact that states inherently possess an offensive capability — from spears and rocks to nuclear weapons. Consequently, it pays to be selfish in a self-help world because "if a state loses in the short run, it may not be around for the long haul."

In an anarchic environment, where survival is paramount, "security is the highest end" because only if a state is secure can it pursue goals such as tranquility, profit and power. Beyond the attainment of security, Waltz is rather vague, simply observing that states, "at a minimum, seek their own preservation and, at a maximum, drive for universal domination." In order to ensure security and to guard against dependence, states necessarily aim to maximize their position relative to others. Hence, relative gain, rather than absolute gain, is the preferred outcome of state interaction: "A state worries about a division of possible gains that may favor others more than itself." This applies to allies as well as enemies. As Joseph Grieco has explained, states fear that "their increasingly powerful partners in the present could become all the more formidable focs at some point in the future."

According to neorealists, powerful constraints are placed on the prospects for, as well as the utility of, cooperation. Agreements are based on expediency. Robert Jervis has argued that because "there are no institutions or authorities that can make and enforce international laws, the policies of cooperation that will bring mutual

[&]quot;Waltz, Theory of International Politics, p.118. In an earlier formulation, Waltz argued that "a state has to rely on its own devices, the relative efficiency of which must be its constant concern." Kenneth Waltz, Man, the State and War: A Theoretical Analysis (New York: Columbia University Press, 1954), p.159.

John Mearsheimer, "The False Promises of International Institutions", *International Security*, Vol. 19, No. 3, Winter 1994/95, p.11. Kenneth Waltz makes the point that states "are free to disregard the imperatives of power, but they must expect to pay a price for doing so." Waltz, "Structural Realism after the Cold War", *International Security*, Vol. 25, No. 1, Summer 2000, p.37.

⁸ Waltz, Theory of International Politics, p.126.

⁹ lbid., p.118.

Robert Gilpin has argued, within the neorealist framework, that prestige, "rather than power, is the everyday currency of international relations, much as authority is the central ordering feature of domestic society." Prestige enables states to achieve their aims without resorting to the use of power to enforce their wills. However, as Gilpin concedes, while factors such as respect and common interest underlie prestige, ultimately the hierarchy of prestige rests on economic and military power. Robert Gilpin, War and Change in World Politics (Cambridge: Cambridge University Press, 1981), p.31.

¹¹ Kenneth Waltz, "Anarchic Orders and Balances of Power", in Robert Keohane (ed), *Neorealism and Its Critics* (New York: Columbia University Press, 1986), p.102-3. See also Waltz, "Structural Realism after the Cold War", p.39, 40.

Joseph Grieco, "Anarchy and the limits of cooperation: a realist critique of the newest liberal institutionalism", *International Organization*, Vol. 42, No.3, Summer 1988, p.499.

rewards if others cooperate may bring disaster if they do not."¹³ For neorealists, the terms of cooperation are determined by the existing power balance.¹⁴ More precisely, "interstate bargaining outcomes reflect the relative cost of threats and inducements, which is directly proportional to the distribution of material resources."¹⁵ As a result, powerful states participate when it is in their interests to do so. Weak states have much less latitude to choose whether or not to 'cooperate'.

The United States and Russia: A Neorealist Explanation of CTR

It is relatively easy to begin to construct a neorealist account of the US CTR program, one that fulfills the realist maxim: "the strong do what they can and the weak suffer what they must." After all, assistance was provided on US terms — in the form of goods and services, rather than cash grants — and focused on containing threats that seemed to have direct implications for US national security and wider interests. 17

This is not to suggest that the United States possessed a monopoly on the money, technology and expertise Russia required to safely and securely store and dismantle its nuclear weapons. Other states, including Britain, Japan, Germany, Switzerland, Canada and the Scandinavian countries, contributed and Russia was capable of producing, albeit with much less ease than the United States, much of the equipment required to complete the tasks of nuclear dismantlement. However, only the US could provide this important asset on the scale required. This has provided enormous leverage over the direction of the program.

Robert Jervis, "Cooperation under the Security Dilemma", in Robert Art and Robert Jervis (eds), International Politics: Anarchy, Force, Political Economy, and Decision Making, 2nd ed. (USA: HarperCollins, 1985), p.86. Similarly, Andrew Kydd explained that mistrust necessarily leads to a fear that "the other side is malevolently inclined and bound to exploit one's cooperation rather than reciprocate it." Kydd, "Trust, Reassurance, and Cooperation", International Organization, Vol. 54, No. 2, Spring 2000, p.325.

According to Susan Strange, international arrangements "are only too easily upset when either the balance of bargaining power or the perception of national interest (or both together) change among those states who negotiate them." Strange, "Cave! hic dragones: a critique of regime analysis", in Stephen Krasner (ed), International Regimes (Ithaca: Cornell University Press, 1983), p.345. On the weakness of international institutions see Waltz, "Structural Realism after the Cold War", p. 18-27.

¹⁵ Legro and Moravcsik, "Is Anybody Still a Realist?", p.17.

¹⁶ Ibid. See also Waltz, "Structural Realism after the Cold War", p.15-16.

¹⁷ The construction of the neorealist argument presented here has benefited from the some of the ideas developed by Stephen Walt in *The Origins of Alliances* (Ithaca: Cornell University Press, 1987), p.43-5.

This has generated mixed feelings in the US. Some officials have expressed frustration at the tack of assistance from other countries but have resigned themselves to the fact — "if the US doesn't do it, no-one would do anything" — while others have stated that offers of such assistance have actually been counter-

The projects that received the largest funding directly related to tangible threats to US security. Such projects included: strategic offensive arms climination — the ICBMs, SLBMs and bombers that were overwhelmingly targeted against the US and were the units of accountability under START I and II counting rules; fissile material storage facilities, which protect the fissile material removed from dismantled launch vehicles and which present the greatest temptation for domestic or foreign sale or theft; and chain of custody projects to enhance security and control of nuclear weapons and fissile material, through the provision of such equipment as fissile material containers, armoured blankets, secure railcars and MPC&A. These were the biggest jobs and required large amounts of money to be completed, but they did not generate the sort of controversy in the US that less tangible CTR projects attracted. The poorly funded and politically controversial projects, such as providing housing for demobilized officers and the Defense Enterprise Fund (DEF), have been harder to link directly with US security and thus have received minimal (and sometimes zero) funding.

The US has not only been able to allocate the largest funding to projects it considers important, it has also pushed the program in directions that are beneficial to US interests, sometimes against Russian preferences. The most powerful example of this was the funding of warhead dismantlement procedures. Russian officials consistently, sometimes heatedly, opposed US assistance in this area but finally gave in as evidenced by the first CTR funding for Russian warhead dismantlement in Fiscal Year 1999.²¹ This has been a US goal since the inception of CTR and has come to fruition largely due to US insistence (see Chapter 4).

Just as Washington has provided generous funding for the projects it considered important, it has also consistently withheld money from those projects it deemed of relatively low import from a US national security perspective. The lack of

productive, given that the Russian military have been reluctant to accept European assistance and much more at ease with the bilateral US-Russian relationship. Interviews, Washington, D.C., 9, 10 March, 1998.

This does not mean that these high-priority projects have been problem-free. The most significant problem has been the relationship between DoD/DoE and MINATOM regarding MPC&A and fissile material storage. See, for example, Graham Allison et al, Avoiding Nuclear Anarchy (Cambridge, MA: The MIT Press, 1996), p.124-6; General Accounting Office, Weapons of Mass Destruction: Status of the Cooperative Threat Reduction Program, Report to Congressional Requesters, GAO/NSIAD-96-222, September 1996, p.7-10; and General Accounting Office, Nuclear Nonproliferation: Status of U.S. Efforts to Improve Nuclear Material Controls in Newly Independent States, Report to Congressional Requesters, GAO/NSIAD/RCED-96-89, March 1996.

Theodor Galdi, "The Nunn-Lugar Program for Soviet Weapons Dismantlement: Background and Implementation", CRS Report for Congress, 94-985F, Updated Dec. 11 1995, p.7.

Department of Defense, CTR FY 1998 & FY 1999 Funds, CTR Background Briefing, Washington, D.C., March 13, 1998.

funding for the Defense Enterprise Fund and the previously discussed refusal to obligate \$60,000,000 for chemical weapons destruction based on alleged Russian non-compliance with its Biological Weapons Convention obligations are two of the most obvious examples.²² Given the amount of money authorized each year, the impact of these measures may have been relatively small, but US hostility towards housing projects and unwillingness to fund other social construction projects, as well as defence conversion efforts, illustrated the fact that US officials retained the final say over what would and would not be funded, and programs low on the list of priorities remain there, regardless of the wishes of the recipient states.

It is not surprising, therefore, that when many of the big projects began nearing completion in 1996, there was a shift in focus towards greater emphasis on 'loose' fissile material in the FSU. 'Nunn-Lugar II' legislation combined project funding for counter-nuclear terrorism activities within the US with the strengthening of CTR projects (such as MPC&A and the 'lab-to-lab' program) in the former Soviet Union.²³ These issues can be understood in terms of US self-interest, hence they are the projects that can be sold to domestic audiences.²⁴

The US ability to determine the focus of the assistance provided has also been manifested in the issue of reciprocity. There has been a great deal of reluctance by US officials to grant reciprocal monitoring rights for the Russians, reflecting extremely unequal bargaining positions. This reality was described bluntly by first SSD head William Burns, who stated that on "the issue of dismantlement of launchers, as an example, they need our technology. They don't have too much to offer in return, so there is no argument on their side that we will give you this, if you let us in here and there." While it is true that the position on reciprocity softened somewhat, it remained clear that the US set the agenda and the mutual on-site inspections were not as intrusive as they might appear. As neorealists would suggest, the greater

²² GAO-NSIAD-96-222, p.19, 6. See also the ruminations of former first deputy chief of Biopreparat, Ken Alibek in Ken Alibek and Stephen Handelman, *Biohazard* (London: Hutchison, 1999), p.258-67.

²³ Craig Cerniello, "Senate Approves 'Nunn-Lugar II' To Counter Domestic WMD Threats", *Arms Control Today*, Vol. 26, No. 5, July 1996, p.23,

According to official sources, the issue of terrorism was politically popular in the 1996 to 1998 period. Interviews, Washington, D.C., March 5, 9, 1998.

²⁵ Burns in "Disposing of Plutonium in Russia", *Hearing before the Committee on Governmental Affairs*, United States Senate, One Hundred Third Congress, First Session, March 9, 1993, p.22. According to the GAO, Russian officials stopped raising the issue of reciprocity in relation to fissile material storage in 1994. GAO/NSIAD-96-222, p.8, footnote 13.

For example, in May 1995 the Safeguards, Transparency and Irreversibility Talks resulted in a US proposal "calling for reciprocal declarations of excess fissile material stockpiles, to be partially confirmed by on-site inspections. Under the proposal, excess material would include all fissile material except that used in nuclear weapons, in naval propulsion reactors, or reserved for these purposes." Emphasis added.

dependency of Russia on US assistance ensured that Russia was required to do almost all of the cooperating.

While it was true that many US officials and members of Congress considered nuclear leakage to be a threat to US security (this was how the CTR program was sold to the executive, the Congress and the public), there was a very immediate danger that if nuclear leakage occurred, the consequences would be first felt in areas contiguous to the former Soviet Union, or even within the former Soviet Union. Conflicts in Chechnya and Nagorno-Karabakh, as well as reports of interest in nuclear materials by countries like Iraq and Iran, highlighted this possibility.

For the US, the danger was that nuclear weapons, nuclear materials or nuclear expertise could fall into the hands of 'rogue states' such as Iran and Iraq or terrorists such as the Aum Shinrikyo Sect or the PLO²⁷, who might choose to target continental USA, US forces overseas or other US interests. While this was a real threat, Russia faced the threat of nuclear leakage to contiguous or neighbouring states, sub-state actors²⁸ and terrorist groups and the actual threat of nuclear weapons, material, infrastructure and expertise in the possession of three former Soviet republics. For Moscow, the danger was much more tangible and much more urgent²⁹ and this gave the US a great deal of bargaining leverage.³⁰ The high-level support for CTR from Russian policymakers derived from the "bottom-line understanding . . . that U.S. funding and technical assistance were crucial to Russian efforts to destroy strategic

Carnegie Endowment for International Peace and The Monterey Institute of International Studies, Nuclear Successor States of the Soviet Union: Nuclear Weapon and Sensitive Export Status Report, No. 4, May 1996, p.24.

²⁷ On Aum Shinrikyo see Global Organized Crime Project, *The Nuclear Black Market*, CSIS Task Force Report, (Washington, D.C.: Center for Strategic and International Studies, 1996), p.16; On the PLO see Mitchell Reiss, *Bridled Ambition* (Washington, D.C.: Woodrow Wilson Center Press, 1995), p.105.

²⁸ Chechen rebels had, on more than one occasion, claimed to possess nuclear weapons and had even gone as far as planting a radioactive canister in a Moscow park on Thanksgiving in 1995 to make their point. They did, however, tell the Russian authorities where to look for the canister. Interview, Washington, D.C., 10 March 1998; Harold Elletson, *The General Against The Kremlin, Alexander Lebed: Power and Illusion* (London: Little, Brown and Co., 1998), p.246.

²⁹ It should be noted that two witnesses testified before Congress that officials in Moscow were patently less concerned with the value of human life than their counterparts in the West. See "Loose Nukes, Nuclear Smuggling, and the Fissile-Material Problem in Russia and the NIS", Hearings before the Subcommittee on European Affairs of the Committee on Foreign Relations, United States Senate, One Hundred Fourth Congress, First Session, August 22 1995, p.39-42.

³⁰ There were reports that Soviet officials deliberately exaggerated the danger of nuclear leakage in late 1991 in order to extract more funding from the US. See Mark Kramer, "Warheads and Chaos", The National Interest, No. 25, Fall 1991, p.95. However, since that time Allison et al have argued precisely the opposite, namely that MINATOM has a vested interest in understating the security threat. Allison et al, Avoiding Nuclear Anarchy, p.78, 125. Many of the reports that came back from Russia seemed to corroborate even the most alarming stories being voiced by visiting observers.

weapons in accordance with START time lines, reduce the risk of accidents during nuclear warhead dismantlement, and minimize proliferation risks by assisting development of a modern system of MPC&A." According to Colonel-General Evgenii Maslin, head of the 12th Main Directorate of the Russian MOD, "We would like to carry out the process of nuclear warhead dismantlement by ourselves, but we should be realists — there is a lack of financial resources in Russia." According to one close observer, when Washington was considering bombing Iraq in early 1998, Russian embassy officials confided that despite Moscow's displeasure with US actions, CTR would survive because Russia needed it and this is exactly what happened.³³

The 'cooperation' that the US dictated and Russia accepted was reflected in the original nuclear threat reduction legislation. Public Law 102-228 stated that it was "in the *national security interests* of the United States" to provide \$400 million to the Soviet Union, its republics and any successor entities "to facilitate on a priority basis the transportation, storage, safeguarding, and destruction of nuclear and other weapons . . ."³⁴ Senator Joseph Biden was just as explicit. On November 25, 1991 he stated: "We are not assisting the Soviet Union. We are assisting ourselves. History would mark it as one of mankind's most tragic follies if, at this juncture — this ironic coincidence of victory and danger — we failed to act decisively to help eliminate the Soviet nuclear arsenal that has for so long threatened our very survival."³⁵

CTR assistance has made a vital contribution to promoting the irreversibility of nuclear weapons reductions in Russia and to lessening the threat of nuclear leakage. These achievements have included the elimination of 248 ICBMs and 30 SLBMs; the dismantlement of 50 ICBM silos and 40 heavy bombers; the construction of a fissile material storage facility; the civilian employment of more than 15,000 scientists and engineers throughout the former Soviet Union formerly employed in the production of weapons of mass destruction; and an agreement on the US purchase of 500 metric tons of HEU from dismantled Russian nuclear weapons.³⁶

³¹ Vladimir Orlov, "Perspectives of Russian Decision-makers and Problems of Implementation", in Shields and Potter (eds), *Dismantling The Cold War*, p.87.

³² Ibid.

¹¹ Interview, Washington, D.C., March 13, 1998.

¹⁴ Public Law 102-228—DEC. 12, 1991, Sec. 211. Emphasis added.

¹⁵ John Isaacs, "Bush whacked by Wofford win", *The Bulletin of the Atomic Scientists*, January/February 1992, p.4.

¹⁶ CTR Funding – Russia, July 14 1999 < http://www.ctr.osd.mil/funding/fundrus.htm Accessed 14/07/99.

All of this was achieved on a budget that amounted to less than two-tenths of one per cent of defence spending. The US could offer these terms and Russia was under pressure to accept anything it could get. The US could not have asked for a better way to reduce the Russian nuclear threat at a price that was not only cheap, particularly compared to Cold War military spending, but also benefited US business. It is difficult to conceive of many other cooperative endeavours that the US has entered into that have benefited US interests more. When considering the merits of the nuclear threat reduction program, had Kenneth Waltz's fundamental question: "Who will gain more?" been asked, the answer would have been a resounding 'the US!' William Wohlforth, in describing Western behaviour toward the Soviet Union during the Gorbachev-era claimed: "Cooperation was on offer on the very same terms that had been available for decades . . . "37 His argument applies equally to US-Russian nuclear relations in the 1990s. Indeed, according to the Office of Technology Assessment, there was an impression prevalent among Russian scientists and politicians "that the U.S. [CTR] program is mainly aimed at aiding U.S. industry and at disarming the Russian military."38 While the exact US proposals may have been novel, the underlying objectives certainly were not.

Although the CTR program has complemented the bilateral nuclear arms control process, realists could argue that the underlying US-Russian relationship has changed remarkably little. Public pronouncements that the Cold War has ended and that the US and Russia no longer consider each other enemies are easy to make. Yet developments since the Gulf War have displayed much that realists could incorporate into their theoretical perspective. For example, some strong tensions between the US and Russia have grown since the 'honeymoon' period between 1991 and 1993. These have included: NATO expansion; the apparent US intent to re-interpret (or abrogate 'if necessary') the ABM Treaty; Russian violations of the Conventional Armed Forces in Europe (CFE) Treaty flank limits; alleged Russian breaches (with possible government complicity) of the BWC; the proposed Russian nuclear reactor sale (among other high-technology deals) to Iran; the wars in Yugoslavia; Russian policy in the 'near abroad'; and the war in Chechnya.³⁹

William Wohlforth, "Realism and the End of the Cold War", *International Security*, Vol. 19, No. 3, Winter 1994/95, p.120.

³⁸ U.S. Congress, Office of Technology Assessment, *Proliferation and the Former Soviet* Union, OTA-ISS-605, (Washington, D.C.: US Government Printing Office, September 1994), p.5.

³⁰ NATO Expansion, The ABM Treaty, the BWC, the reactor sale to Iran, the wars in Yugoslavia and Chechnya are discussed in Chapter 4. On CFE see, for example, "News Briefs: Russia Admits CFE Violation", Arms Control Today, Vol. 29, No. 6, September / October 1999, p.38; and Wade Boese,

In November 1993 a new Russian military doctrine was promulgated. This heavily qualified Russia's stance on no-first-use of its nuclear weapons. While the no-first-use pledge was not explicitly repudiated, the doctrine "defines so many exclusions that almost all states near Russia, including all . . . NATO states, are excluded from the pledge's provisions." According to Lepingwell, this reflected Russian concern with the conventional strategic imbalance. It was also designed to send a clear political message to Ukraine (at that time Ukraine had not denuclearized or acceded to the NPT), potential NATO members and potential proliferators in the region. This document was revised again in 1999, in the wake of the Kosovo crisis, to allow for a nuclear response to chemical weapons as well as conventional weapons "in situations that are critical for the national security of the Russian Federation and its allies." Clearly, Russian military and political leaders subscribed to the view that nuclear weapons possess both military and political value and that while the US-Soviet Cold War may have been over, relations between Moscow and Washington had not suddenly transformed from power balancing to 'perpetual peace'.

Similarly, US nuclear weapons policy exhibited neorealist tendencies during the period covered by the case study. According to then-Secretary of Defense William Perry, US policy, as outlined in the 1994 Nuclear Posture Review (NPR), was guided by the concepts of 'leading' and 'hedging'. By 'leading', the US encouraged further reductions in nuclear arsenals. By 'hedging', the US sought to maintain sufficient nuclear forces to ensure deterrence if "developments in Russia do not go as we have hoped." This 'hedging' included the flexibility to reconstitute nuclear forces by 'uploading' warheads onto missiles. It was precisely this ability that Russian officials have linked with US 'breakout' potential and have been determined to prevent.

The tension between 'leading' and 'hedging' is strong. In response to questioning on potential enemies among the nuclear weapon states, Deputy Secretary

[&]quot;Russia Not in Compliance With CFE Flank Limits", Arms Control Today, Vol. 29, No. 5, July / August 1999, p.24.

⁴⁰ John Lepingwell, "Is START Stalling?", in Quester (ed), The Nuclear Challenge in Russia and the New States of Eurasia, p.105.

⁴¹ Ibid., p.105-6.

⁴² Dr Nikolai Sokov, "Overview: An Assessment of the Draft Russian Military Doctrine", October 1999 http://cns.miis.edu/pubs/reports/sokov.htm Accessed 25/10/99.

Testimony of William Perry in "U.S. Nuclear Policy", Hearing before the Committee on Foreign Affairs, House of Representatives, One Hundred Third Congress, Second Session, October 5, 1994, p.2.

14 Ibid., p.11.

Nikolai Sokov, "Russia's Approach to Deep Reductions of Nuclear Weapons: Opportunities and Problems", Second Edition, *The Henry L. Stimson Center*, Occasional Paper N ..27, September 1997, p.23, footnotes 35 and 37.

of Defense John Deutch remarked: "Let me say they range from Russia — here I think there is no question about the fact that they are not an enemy. There is also no question about the fact that we have to be concerned about their future political course." The NPR also recommended improvements to US command, control and communications — early warning, connectivity of nuclear forces to the National Command Authority (NCA) and the ability to pass secure messages between the NCA and nuclear forces — to allow nuclear forces to be more effectively utilized if needed.

NATO expansion and the desire to deploy missile defences could also appear directed against Russia, despite official protestations to the contrary. Critics argue that these are hardly the actions of a state that considers the US-Russian relationship benign. Under these circumstances, and from a neorealist perspective, the CTR program is an incredibly cheap and effective way for Washington to encourage its most powerful strategic adversary to carry out its treaty-mandated nuclear reductions. It also contributes to the fulfillment of America's other major concerns relating to nuclear weapons in the former Soviet Union: averting nuclear leakage and maintaining a quantitative nuclear advantage over any actual and potential challenger.

The United States and the Non-Russian Republics: A Neorealist Explanation of CTR

If the US was in a dominant bargaining position with regard to Russia, then the relationship was even more one-sided with the non-Russian republics. While these new nations had long, proud histories, they were short on experience in governing themselves. This was especially true in the issue-area of nuclear weapons. They were also economically fragile at best, chaotic at worst. Given the power imbalances, the US was in a position to dictate the terms of cooperation. However, while neorealism might have a relatively easy time explaining US leverage, there are difficulties when it comes to explaining why the US had the denuclearisation of the non-Russian nuclear inheritor states as a goal if the *primary objective* was the neorealist one of "balancing"

⁴⁷ *lbìd.*, p.4.

⁴⁶ Testimony of Perry in "U.S. Nuclear Policy", p.7.

⁴⁸ In official statements, National Missile Defense is primarily directed at emerging ballistic missile threats to the US such as Iran, North Korea and Iraq. For an overview of the debate see Michael O'Hanlon, "Star Wars Strikes Back", Foreign Affairs, Vol.78, No.6, November/December 1999, p.68-82. In June 2000, President Clinton addressed the Russian Duma and attempted to convince Russian legislators that the US missile defence program posed no threat. See "Clinton: Russia should not fear missile defense program", 4 June 2000 http://www.cnn.com/2000/WORLD/europe/06/05/clinton.europe/ Accessed 07/02/01.

Russia. For this reason, it should be noted that the neorealist "explanation" provided here is dissimilar to that presented by two of the most renowned neorealists, Kenneth Waltz and John Mearsheimer.

Kenneth Waltz argued in 1981 that:

Countries armed with conventional weapons go to war knowing that even in defeat their suffering will be limited. . . If countries armed with nuclear weapons go to war, they do so knowing that their suffering may be unlimited . . . Nuclear weapons make wars hard to start. These statements hold for small as for big nuclear powers. Because they do, the gradual spread of nuclear weapons is more to be welcomed than feared.⁴⁹

According to this logic, the best guaranter of Ukrainian security — a US national security interest — was the Ukrainian retention of nuclear weapons. In 1993 John Mearsheimer was very specific in advising that "as soon as it declared independence, Ukraine should have been quietly encouraged to fashion its own nuclear deterrent" 50, in order to balance against Russia. Significantly, this thinking was not limited to academic circles in the United States. Murat Laumulin, of the Kazakh Ministry of Foreign Affairs, suggested that it was reasonable for political leaders to consider nuclear weapons the best safeguard for Kazakhstan's security and he, like Mearsheimer, questioned the utility of security guarantees:

> One has to question whether these states really need American guarantees. Or do they need something more tangible, more effective maybe nuclear weapons?⁵¹

Yet United States policy toward the non-Russian nuclear inheritor states since 1991 was geared toward precisely the opposite objective and by the end of 1996 Ukraine, Kazakhstan and Belarus had returned all of the nuclear weapons that they had inherited. While this behaviour contradicts the counsel of Waltz and Mearsheimer, it does not mean it is impossible to construct a neorealist-type account of US policy in

⁴⁹ Kenneth Waltz, "More May Be Better", in Sagan and Waltz, The Spread of Nuclear Weapons: A Debate, p.7, 45. For a more recent statement of this argument see Waltz, "Structural Realism after the Cold War", p.36.

Mearsheimer, "The Case for a Ukrainian Nuclear Deterrent", p. 50.

⁵¹ Laumulin, "Kazakhstan's Nuclear Policy and the Control of Nuclear Weapons", in Quester (ed), The Nuclear Challenge in Russia and the New States of Eurasia, p.181, 192.

this area. The ex post facto neorealist argument developed (but, as will be explained, not entirely endorsed) in this thesis relies, in part, on the theoretical foundations provided in 1993 by Zachary Davis and Mearsheimer in 1990.⁵² Specifically, Davis observed that the "anarchic nature of world politics assures there will be continuing interest in nuclear weapons. Realism predicts states will organize to preserve the nuclear status quo."⁵³ Similarly, Mearsheimer argued (in contrast to his 1993 advice to US policymakers) that the nuclear powers would have several motives to resist nuclear proliferation in the wake of the Cold War:

The established nuclear powers will be reluctant to give the new nuclear powers technical help in building secure deterrents, because it runs against the grain of state behavior to transfer military power to others, and because of the fear that sensitive military technology could be turned against the donor state if that technology were further transferred to its adversaries. The nuclear powers will also be reluctant to undermine the legitimacy of the 1968 Nuclear Non-Proliferation Treaty by allowing any signatories to acquire nuclear weapons, since this could open the floodgates to the wider proliferation that they seek to avoid, even if they would otherwise favor very limited proliferation. For these reasons the nuclear powers are more likely to spend their energy trying to thwart the process of proliferation, rather than managing it."

It is these motivations — a determination to discourage nuclear proliferation beyond the borders of Russia (the NPT-recognized successor to the Soviet Union) in order to ensure that if hostilities flared nuclear weapons would not be a factor⁵⁵ and to minimize the risk of nuclear leakage — that provide the basis for a neorealist explanation of US policy toward the non-Russian nuclear inheritor states. Having

⁵² Zachary S. Davis, "The Realist Nuclear Regime", Security Studies, No. 2, Spring/Summer 1993, p.79-99 and John Mearsheimer, "Back to the Future: Instability in Europe After the Cold War", International Security, Vol. 15, No. 1, Summer 1990, p.5-56

Security, Vol. 15, No. 1, Summer 1990, p.5-56.

Solvis, "The Realist Nuclear Regime", p.94. "The threat of nuclear proliferation cannot always surmount the inherent limitations of collective action, but it does often bring into alignment an unusually broad array of interests. Regime capabilities are enlisted on a case-by-case basis according to the degree of alignment between the nonproliferation norm and the interests of powerful nations." *Ibid.*, p.93.

⁵⁴ Mearsheimer, "Back to the Future", p.39-40.

⁵⁵ See, for example, the memoirs of Secretary of State James A Baker, Baker, with Thomas M. DeFrank, *The Politics of Diplomacy: Revolution, War and Peace, 1989-1992* (New York: G.P. Putnam's Sons, 1995), p.658.

presented a neorealist case for US policy aimed at denuclearisation of the non-Russian nuclear inheritor states, it now remains to outline the unfolding of this policy.

The US was forced to confront quite different circumstances in each of the inheritor states. For example, with disputes between Ukraine and Russia over the Crimea and the disposition of the Black Sea Fleet, nuclear weapons on Ukrainian soil added a very dangerous ingredient to an already politically charged situation. This was exacerbated by official Ukrainian pronouncements of the desire to assume 'administrative control' over those weapons. While nuclear leakage — in terms of weapons, material and expertise being sold to, or stolen by, terrorists and rogue states — was a real danger, the possibility of nuclear weapons actually causing conflict or being used in conflict between Ukraine and Russia was acute. In Kazakhstan, the fear that nuclear weapons and material could be stolen or sold was tangible. While subsequently proved to be untrue, the rumour that Kazakhstan had sold nuclear weapons to Iran persisted for some time and resonated in the international community. While the effect, if any, on US policymakers is unclear, it is significant that the head of the US SSD team alluded to this story in Congressional testimony.⁵⁶ Belarus, much like Kazakhstan, was viewed primarily as a nuclear leakage problem, in terms of nuclear weapons or material being stolen or sold, as well as a likely transit point for nuclear material exiting Russia.

With these dynamics in mind, the US was determined to see all three states denuclearized.⁵⁷ While Ukraine, Kazakhstan and Belarus were pursuing a number of aims, including but not dominated by the 'nuclear issue', for the US, denuclearization was the overriding objective and all technical and financial assistance, economic aid and security guarantees were contingent on this. Observers have noted the perplexity and irritation in the inheritor states to US single-mindedness and inflexibility on this issue. According to former Deputy Assistant Secretary of Defense and Director for European Security Negotiations Sherman Garnett, and very much in concordance with the aforementioned analyses by Davis and Mearsheimer, Ukrainian officials were surprised at US tunnel vision on this issue:

Assistant to the Secretary of Defense, 1996 Cooperative Threat Reduction Program Plan (unclassified), (Washington, D.C.: Department of Defense, 1996), IV-13 - IV-17.

⁵⁶ See testimony of William Burns in "U.S. Plans and Programs Regarding Dismantling of Nuclear Weapons in the Former Soviet Union", *Hearing before the Committee on Foreign Relations*, United States Senate, One Hundred Second Congress, Second Session, July 27 1992, p.27.

Many Ukrainians assumed that the West would pursue a much less rigid policy toward Ukraine, recognizing the geopolitical value of Ukraine's independence and thereby lessening the pressure somewhat on nuclear matters. They were wrong.⁵⁸

Of greater concern for Ukraine was Mitchell Reiss's observation that by 1992, Ukraine "started to perceive that international, especially American interest, in Ukraine was almost wholly confined to nuclear matters; once these weapons were returned, Ukraine feared that it would find itself isolated and alone in a dangerous part of the world." Similarly, conventional wisdom in Belarus held that "the country was persuaded by the West to take actions that met the pragmatic security interests of the West, but that Belarus cannot otherwise expect charity from abroad." This pessimistic view of cooperation seemed to be strengthened with the US decision, explained in Chapter 4, to de-certify (make ineligible for aid) Belarus. The timing of de-certification was important. President Lukashenko was elected in July 1994 but the decision to de-certify was not taken until February 14, 1997; barely two months after Belarus had transferred the last of the SS-25 warheads and missiles back to Russia. John Lepingwell's observation rings true that "it often appears that the West notices these states only when they start reconsidering their nuclear disarmament pledges."

To facilitate its objective of denuclearising the three non-Russian nuclear inheritor states, the Nunn-Lugar program supplied technical goods and services for nuclear weapons withdrawals and dismantlement projects that Ukraine, Kazakhstan and Belarus had great difficulty providing indigenously. The US also provided economic incentives and security guarantees for these states to join the international community, which all three considered so important for the future and were a prerequisite for denuclearization. At first glance these US concessions may seem the antithesis of neorealist behaviour. However, the cost to the US was trifling compared with the result: Ukraine, Kazakhstan and Belarus all nuclear weapons-free. The relative gain for the US was enormous. By the end of 1996 the US had obligated just over \$306 million

⁵⁸ Garnett, "The Sources and Conduct of Ukrainian Nuclear Policy" in Quester (ed), *The Nuclear Challenge in Russia and the New States of Eurasia*, p.135.

⁵⁰ Reiss, Bridled Ambition, p.95.

⁶⁰ Vyachaslau Paznyak, "Nunn-Lugar Program Assessment: The Case of Belarus", in Shields and Potter (eds), Dismantling the Cold War, p.170.

⁶¹ John Lepingwell, "Introduction: The Problem of Former Soviet Nuclear Weapons", RFE/RL Research Report, Vol. 2, No. 8, 19 February 1993, p.2.

⁶² See, for example, Murat Laumulin, "Kazakhstan's Nuclear Policy and the Control of Nuclear Weapons", in Quester (ed), *The Nuclear Challenge in Russia and the New States of Eurasia*, p.192.

in funding to assist Ukraine out of a total notification of less than \$400 million for that country⁶³; a little more than \$110 million in obligations to Kazakhstan from slightly less than \$140 million in notifications⁶⁴; and less than \$77 million in obligations to Belarus from just over \$117 million in notifications.⁶⁵ The arrangement was made even sweeter for the US by the fact that the vast majority of contracts for this assistance went to US businesses. In addition, the security guarantees were politically, not legally, binding and cost the US very little in terms of real obligations should they be required. To take Ukraine as an example 66: the United States (as well as Russia, France and Great Britain) provided Ukraine with both positive and negative security assurances. The positive assurance pledged recourse to the United Nations Security Council should Ukraine be threatened or attacked by a nuclear-armed state. The negative assurance pledged that the US would not use or threaten to use nuclear weapons against Ukraine as long as Ukraine remained a non-nuclear party to the NPT and did not ally itself with a state attacking or threatening to attack the United States. Ukraine also received official confirmation from the US, Russia and Great Britain that each would "respect Ukraine's independence, sovereignty, and integrity within its existing borders. 67 For the US, the obligations were more style than substance. The negative assurance merely reiterated its NPT commitment and the positive assurance guaranteed very little beyond what was sure to occur anyway should a crisis unfold in the region. After all, it could hardly be in Washington's interests to look the other way in the event of a Russian invasion of Ukraine but it seems to be a rather large leap of faith to expect the US to assist Ukraine, in any meaningful military sense, should a shooting war crupt between Ukraine and Russia. 68

Department of Defense, Cooperative Threat Reduction Briefing Book, "CTR Funding Status—Ukraine", 14.07.97.

Department of Defense, Cooperative Threat Reduction Briefing Book, "CTR Funding Status-Kazakhstan", 07.07.97.

Operation of Defense, Cooperative Threat Reduction Briefing Book, "CTR Funding Status—Belarus", 07.07.97.

Ukraine has been chosen as the example here because, of the three non-Russian inheritor states, it possessed the greatest number of nuclear weapons, it shared the most adversarial relations with Russia and it insisted upon the most exacting security guarantees. At times Kazakhstan and, to a lesser extent Belarus, followed Ukraine's lead in negotiating the surrender of their nuclear weapons.

⁶⁷ Bruce Blair, "Russian Control of Nuclear Weapons", in Quester (ed), *The Nuclear Challenge in Russia and the New States of Eurasia*, p.82, fn.17.

Ohn Mearsheimer, in arguing that Ukraine should retain the nuclear weapons on its territory, made the point that Ukraine "cannot defend itself against a nuclear-armed Russia with conventional weapons, and no state, including the United States, is going to extend to it a meaningful security guarantee." John Mearsheimer, "The Case for a Ukrainian Nuclear Deterrent", Foreign Affairs, Vol.72, No.3, Summer 1993, p.50-1.

According to Kostyantyn Hryshchenko, for Ukraine, once the objective of denuclearisation had been embraced, the economic crisis gripping the country meant that "disarmament obligations could only be met with considerable financial, material, and technical assistance." Kazakhstan was also reliant on foreign assistance to fulfill its economic and military requirements although, in contrast to Ukraine, Russia provided Kazakhstan with considerable assistance to demilitarization and nuclear security efforts and ties with Russia concerning nuclear issues were strong. 70 Kasenov. Eleukenov and Laumulin asserted that "the linchpin of Kazakstan's demilitarization plans, in both the near and long term, is successful implementation of the CTR program."⁷¹ The US could also provide critical economic assistance. Kazakh officials realized that "the creation of a new nuclear state would alienate the international community, especially the United States, at a time when Kazakhstan desperately needed foreign assistance and investment."72 If any further incentive was required to convince the Kazakh leadership of the risk associated with nuclear retention, William Potter observed that Kazakh officials believed that any attempt to emulate Ukrainian reticence would ensure that Kazakhstan remained in US nuclear targeting plans.⁷³ Not only this, retaining nuclear weapons would also have led to political isolation, leaving Kazakhstan vulnerable to pressure from Russia and China. 4 Belarus, like Ukraine and Kazakhstan, could not deliver on its denuclearisation commitments without outside support. While the SS-25s Belarus inherited were transferred to Russia to be redeployed⁷⁵, the US provided critical nuclear infrastructure, MPC&A, export control, and 'brain drain' assistance that Belarus could not provide itself. According to Vyachasłau Paznyak:

⁶⁰ Kostyantyn Hryshchenko, "Reducing the Nuclear Threat through Joint Efforts: The View from Ukraine", in Shields and Potter (eds), *Dismantling the Cold War*, p.155.

72 Reiss, Bridled Ambition, p.142.

74 lbid.

Oumirserik Kasenov, Dastan Eleukenov and Murat Laumulin, "Implementing the CTR Program in Kazakstan", in Shields and Potter (eds), *Dismantling the Cold War*, p.207. For a description of the 'nuclear assets' located in Kazakhstan, which illustrates why ties with Russia are strong, see William Potter, with Eve Cohen and Edward Kayukov, *Nuclear Profiles of the Soviet Successor States*, Monograph No. 1, Program for Nonproliferation Studies, Monterey Institute of International Studies, May 1993, p.16-32.

Kasenov, Eleukenov and Laumulin, "Implementing the CTR Program in Kazakstan", in Shields and Potter (eds), Dismantling the Cold War, p.207.

⁷³ Potter, "The Politics of Nuclear Renunciation", p.39.

Belarus's almost non-existent bargaining power was graphically illustrated by Russia's ability to accelerate the removal of tactical nuclear weapons from that country without Belarusian consent, or even knowledge, prompting Mitchell Reiss to observe: "Minsk's public irritation was less than an empty threat and demonstrated how little ability Belarus actually had to influence this issue." Reiss, *Bridled Ambition*, p.131-2.

Economically, the [CTR] program also provides critical technical assistance at a time when financial resources are too scarce to meet all of the demilitarization obligations that Belarus has taken on. . . Cooperation with the United States provides one of the few means at the disposal of these [ministerial and subministerial] working-level bureaucracies to accomplish the complex military-technical tasks for which they are now responsible.⁷⁶

The US was in a very strong position to manipulate assistance to all three states. Washington could withhold technical and financial assistance as well as security guarantees indefinitely, in order to extract the denuclearisation commitments that it wanted. In the case of Ukraine, the US position was enhanced further because Washington was also an 'agreement facilitator' between Ukraine and Russia. The US was perceived as a force for moderation in a highly charged bilateral relationship. The Mitchell Reiss observed, "a Ukraine more certain of its ties to the United States was more willing to return the nuclear warheads to Russia. Pledges began to turn into deeds."

The United States also dictated the type and form of assistance to reach the recipients. Provision was made to ensure that critical transport, storage and dismantlement activities could be undertaken — to overcome problems associated with nuclear leakage — but not on a scale that would enhance Ukrainian, Kazakh or Belarusian economic or military potential in any meaningful way. This was one important reason why CTR relief was provided by way of goods and services, rather than cash grants that could be siphoned off for other purposes. In the interests of maintaining regional stability, the US was keen to make certain that CTR helped to remove nuclear weapons from the military calculus of the non-Russian inheritor states. From the US perspective, this was a situation that had the potential to dramatically destabilize the region had the status quo ante in the wake of the collapse of the USSR been allowed to remain.

78 Reiss, Bridled Ambition, p.125.

⁷⁶ Vyachaslau Paznyak, "Nunn-Lugar Program: The Case of Belarus", in Shields and Potter (eds), Dismantling the Cold War, p.169.

⁷⁷ Garnett, "The Sources and Conduct of Ukrainian Nuclear Policy" in Quester (ed), *The Nuclear Challenge in Russia and the New States of Eurasia*, p.144.

Ultimately, a neorealist explanation of cooperation between the US and the non-Russian nuclear inheritor states over the denuclearisation of the latter can be made, but this requires a degree of modification that contradicts some of the highly publicized views of key neorealists. After all, this was not what was predicted by Waltz and Mearsheimer. In order to fit the events, part of the neorealist script needs to be revised. According to the neorealist model presented here, Washington determined that three new nuclear-armed states, in addition to Russia, was not in US interests and was able to define the scope and level of assistance provided to achieve its nuclear rollback objective. For the US, denuclearising the non-Russian states would significantly reduce the potential for nuclear leakage and would maintain the nuclear status quo of NPT-recognized nuclear powers. In order to avoid becoming 'pariah states', Ukraine, Kazakhstan and Belarus surrendered the nuclear weapons on their territory. None of the three could afford the economic, political or military pressure that the US (and other states, most importantly Russia) was willing and able to bring to bear should they choose the nuclear option. Waltz argued that cooperation between states is difficult because states are concerned about relative gain and dependency. On a neorealist reading of both concerns, the US decision to cooperate was fully justified. While the three recipients did benefit from assistance provided by the US and received compensation for the value of fissile material in the warheads they returned (this compensation came from Russia), the relative gain for the US was enormous, and at an incredibly cheap price — in the order of \$657 million in notified funds and \$493 million in obligations as at the end of 1996 and security guarantees that were less than onerous in their obligations. 79 The US made enormous relative gains because it held all of the cards. 80 Neorealists certainly would not be surprised that, given such reward, US assistance was proffered.

⁷⁰ Funding figures are derived from Department of Defense, Cooperative Threat Reduction Briefing Book, "CTR Funding Status—Ukraine", 14.07.97; "CTR Funding Status—Kazakhstan", 07.07.97; and "CTR Funding Status—Belarus", 07.07.97.

⁸⁰ Chapter 3 discusses the difficulties the non-Russian inheritor states faced in trying to develop viable indigenous nuclear arsenals.

Part 2

Neoliberal institutionalism

Neoliberal institutionalists share the neorealist view that anarchy (in the sense of no central authority to arbitrate disputes between states) characterizes the international environment, that sovereignty is held by states as paramount and that ultimately states "pursue self-interested goals, which are defined at least partially in terms of relative power and autonomy."81 It should be noted that neo-realists and institutionalists not only share some basic assumptions, but that according to Robert Keohane, in comparing neoliberal institutionalism and neorealism, "we must understand that neoliberal institutionalism is not simply an alternative to neorealism, but, in fact, claims to subsume it."82 Keohane has stated: "much of my own work has deliberately adopted Realist assumptions of egoism, as well as rationality, in order to demonstrate that there are possibilities for cooperation even on Realist premises."83 As discussed in Part 4, the distinction between neoliberal institutionalism and neorealism in theory does not necessarily translate into practice, as the CTR case study demonstrates. However, theoretically, the neoliberal paradigm, "purports to explain why states eschew independent decision making" and "bind themselves to mutually beneficial courses of action"84. In other words, neoliberals and neorealists disagree about the likelihood of states to act upon the opportunities to reduce conflict through cooperative measures.85

According to neoliberals, a great deal of international politics is *institutionalized*: "much behavior is recognized by participants as reflecting established rules, norms, and conventions, and its meaning is interpreted in light of these understandings." Thus, "sustained cooperation is possible under some fairly well defined conditions. . .

⁸¹ Robert Keohane, Joseph Nye and Stanley Hoffmann (eds), *After the Cold War: International Institutions and State Strategies in Europe*, 1989-1991 (Cambridge, MA: Harvard University Press, 1993), p.5.

⁸² Robert Keohane, International Institutions and State Power: Essays in International Relations Theory (Boulder, CO: Westview Press, 1989), p.15.

⁸³ Keohane, "Empathy in International Relations", in Jane Mansbridge (ed), *Beyond Self-Interest* (Chicago: University of Chicago Press, 1990) p.227, quoted in Peter Katzenstein (ed), *The Culture of National Security* (New York: Columbia University Press, 1996), p.15.

Arthur Stein, Why Nations Cooperate: Circumstance and Choice in International Relations (Ithaca: Cornell University Press, 1990), p.28; Kenneth Oye, "Explaining Cooperation Under Anarchy: Hypotheses and Strategies", in Oye (ed), Cooperation Under Anarchy (New Jersey: Princeton University Press, 1986), p.2.

p.2.

St. Robert Jervis, "Realism, Neoliberalism, and Cooperation: Understanding the Debate", *International Security*, Vol. 24, No. 1 Summer 1999, p.47.

Keohane, International Institutions and State Power, p.1.

Such cooperation is not the antithesis of conflict but [sometimes] constitutes a process for the management of conflict."87 States will sometimes choose to cooperate when the individualistic pursuit of goals leads to undesired outcomes, through the "artful arrangement of policies", enabling the attainment of absolute gains. 88 This outcome has become more likely with the rise of global interdependence, which has expanded the number of issue-areas in which states have an interest in cooperating.

Neoliberal institutionalists consider 'regimes' to occupy an important and necessary place in cooperative international relations. 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."89 Put simply, regimes facilitate agreements, and 'rules of the game' engender obligations for all members. 90 Principles and norms are the defining characteristics of regimes and serve the two-fold function of prescribing orthodox behaviour and proscribing deviant behaviour, while rules and decision-making procedures, consistent with the principles and norms, enable regimes to function in practice.91 Therefore, rules and decision-making procedures may change or be modified without transforming the regimes themselves but as soon as the principles and norms change, the regimes have been altered or weakened.

Regimes are useful and attractive to states if they can establish legal liability, increase the quantity and quality of information available to states and reduce transaction costs between states. 92 Regimes also have the effect of incorporating the norm of reciprocity, which both de-legitimizes defection and makes it costly.93 In game theory vernacular, regimes are appealing to states when the individualistic

⁸⁷ Keohane, Nye and Hoffmann (eds), After the Cold War, p.4-5. Cooperation implies that "the actions of separate individuals or organizations — which are not in pre-existent harmony — be brought into conformity with one another through a policy of negotiation. . . Cooperation occurs when actors adjust their behavior to the actual or anticipated preferences of others, through a process of policy coordination." Robert Keohane, After Hegemony: Cooperation and Discord in the World Political Economy (New Jersey: Princeton University Press, 1984), p.51.

ss Jervis, "Realism, Neoliberalism, and Cooperation: Understanding the Debate", p.48.

⁸⁴ Stephen Krasner, "Structural causes and regime consequences: regimes as intervening variables", in Krasner (ed), International Regimes, p.2.

⁹⁰ Ibid., p.3.

⁹¹ Donald Puchala and Raymond Hopkins, "International regimes: lessons from inductive analysis", in *Ibid.*,

p.62-3. "The demand for international regimes", in *Ibid.*, p.154. See also Jervis, "Realism, Neoliberalism, and Cooperation: Understanding the Debate", p.51.

Robert Axelrod and Robert Keohane, "Achieving Cooperation Under Anarchy: Strategies and Institutions", World Politics, 38, October 1985, p.250.

"pursuit of self-interest leads to a solution that is not Pareto-optimal." According to Robert Keohane, the necessary condition required for regime formation is that sufficient complementary or common interests exist so that agreements benefiting all essential regime members can be made. 95

In the specific context of security regimes, Robert Jervis has set out four conditions that must be met for cooperation to occur. Firstly, the great powers, who set the rules of the game, must want it. Secondly, states must blieve that others share the value of cooperation and mutual security. Thirdly, if one more states believe defection to be expedient, a security regime cannot be formed. Fourthly, war must be seen as costly. The benefits of cooperation must outweigh the perceived benefits of war.

Once established, a regime can alter the way a state pursues its security by easing transaction costs and providing more and better information. Keohane has argued that agreements that are "impossible to make under conditions of high uncertainty may become feasible when uncertainty has been reduced." Reducing uncertainty can also alleviate problems associated with relative gain by allowing intentions to be made clearer. Linkage is also seen as an important source of regime adherence. When a state is faced with the question of whether or not to adhere to a regime, "the net benefits of doing so must outweigh the net costs of the effects of this action on other international regimes."

This is not to say that regimes are rigid structures that, once formed, exist independently of the preferences of the regime members. The rules of international

[&]quot;4 Robert Jervis, "Security regimes", in *Ibid.*, p.174. 'Pareto-optimal' refers to a situation where nobody "could be made better off without someone being made worse off." Roger Scruton, *A Dictionary of Political Thought* (London: MacMillan, 1982), p.343.

Keohane, "The demand for international regimes", in *Ibid.*, p.152. Keohane distinguishes between cooperation and harmony, the latter referring to a "situation in which actors' policies (pursued in their own self-interest without regard for others) automatically facilitate the attainment of others' goals." Keohane, After Hegemony, p.51. Emphasis in original. See also Helen Milner, *Interests*, *Institutions*, and *Information: Domestic Politics and International Relations* (Princeton, NJ: Princeton University Press, 1997), p.7-9; and Richard Ned Lebow, *The Art of Bargaining* (Baltimore: Johns Hopkins University Press, 1996), p.10.

This is not to say that weaker members of regimes, with limited national capabilities, cannot use regimes as a source of power and influence. For example, Melvyn Krauss has accused the Europeans of doing this to the US within NATO. See Melvyn Krauss, How NATO Weakens The West (New York: Simon and Schuster, 1986), p.17-28.

¹⁷ Jervis, "Security regimes", in Krasner (ed), International Regimes, p.176-78.

⁹⁸ Keohane, After Hegemony, p.245.

See Keohane and Martin, "The Promise of Institutionalist Theory", *International Security*, Vol. 20, No. 1, Summer 1995, p.45.

¹⁰⁰ Keohane, After Hegemony, p.104.

By reducing uncertainty in international relations, regimes may allow states to re-define their interests and pursue cooperative policies that they otherwise would be unwilling and/or unable to choose. By underestimating the extent to which states share mutual interests, neorealists underestimate the ability of states to enter into mutually beneficial cooperative relationships. Neorealists also underestimate the extent to which regimes can facilitate and modify state behaviour, despite the structural condition of anarchy.

CTR as a Regime

Neoliberals might argue that CTR is a perfect example of the rejection of individualistic policies in order to attain absolute gains within the framework of an international regime. While there is no legal liability in any strict sense, CTR has made enormous progress in increasing the quantity and quality of information available as well as reducing transaction costs and enhancing predictability.

Neoliberals would concede that, since the collapse of the Soviet Union, the US-Russian relationship and the US-Ukrainian / Belarusian / Kazakhstani relationships have exhibited an uneven distribution of capabilities. This does not mean that CTR is any less of a cooperative venture. CTR is a novel approach to the management of a problem, in which all countries have a vital stake. All countries have an interest in preventing nuclear leakage precisely because of interdependence. Transnational crime, terrorism, environmental damage, as well as the non-proliferation norm, all make nuclear leakage a shared concern. It is this commonality of interest that led to the employment of a regime to facilitate "secure and equitable agreements" rather than to the pursuit of the same goal individually. Nuclear leakage is a problem that cannot be combated by states pursuing individual agendas. It requires cooperation and policy coordination to be effective. For example, during the April 19-20 1996 Moscow 'Nuclear' Summit, a "Programme for Preventing and Combating Illicit Trafficking in Nuclear Materials" was established. It was designed to increase inter-

¹⁰² Jervis, "Realism, Neoliberalism, and Cooperation: Understanding the Debate", p.50.

Keohane, "The demand for international regimes", in Krasner (ed), International Regimes, p.147.

state cooperation in areas such as national intelligence, customs and law enforcement.¹⁰³ The concept was based on the realization that separately, states could not effectively deal with the problem.

CTR qualifies as a regime. To reiterate, Stephan Krasner has defined a regime as a set of "implicit or explicit principles, norms, rules and decision-making procedures around which actors' expectations converge in a given area of international relations." CTR principles and norms are that nuclear proliferation is dangerous and that it is in the interests of all states to help dismantle former Soviet nuclear weapons and to reduce the threat of proliferation and to advance joint US and Russian security objectives. ¹⁰⁵

The rules and decision-making procedures vary slightly from year to year, given legislative preferences and the realities of program implementation, but overall have remained quite consistent. They are, on the US side, that CTR is limited to cooperation between the United States and the nuclear successor states to the Soviet Union (Russia, Ukraine, Kazakhstan and Belarus) to:

(1) destroy nuclear weapons, chemical weapons, and other weapons, (2) transport, store, disable, and safeguard weapons in connection with their destruction, and (3) establish verifiable safeguards against the proliferation of such weapons.¹⁰⁶

On the FSU side, they are that the proposed recipient is:

(1) making a substantial investment of its resources for dismantling or destroying such weapons; (2) forgoing any military modernization program that exceeds legitimate defense requirements and forgoing the replacement of destroyed weapons of mass destruction; (3) forgoing any use of fissionable and other components of destroyed nuclear weapons in new nuclear weapons; (4) facilitating United States verification of weapons of mass destruction . . . (5) complying with all relevant arms

Craig Cerniello, "G-7, Russia Make Modest Progress During Nuclear Summit in Moscow", *Arms Control Today*, Vol. 26, No. 3, April 1996, p.19, 25.

Krasner, "Structural causes and regime consequences", in Krasner (ed), International Regimes, p.2.

The CTR mission also involved helping the former Soviet states to develop free market economies and fostering stability and democracy throughout the region. CTR-Mission, July 14 1999 http://www.ctr.osd.mit/01missn.htm Accessed 14/07/99.

¹⁰⁶ Public Law 102-228—Dec. 12, 1991, Sec. 212 (b).

control agreements; and (6) observing internationally recognized human rights, including the protection of minorities.¹⁰⁷

It also satisfies the four conditions (see above) Robert Jervis has determined must be met for cooperation to occur¹⁰⁸:

- 1. Both the US and the nuclear inheritor states wanted CTR. All states have been reasonably satisfied with how CTR has operated.
- 2. Both the US and the nuclear inheritor states have appreciated that CTR contributes to mutual security.
- 3. Neither the US nor the nuclear inheritor states have judged defection from CTR to be more valuable than adherence to CTR.
- 4. War, or in this case Cold War, is seen by all to be far more costly.

The United States and Russia: A Neoliberal Explanation of CTR

This explanation seeks to demonstrate how the CTR program developed as an example of both sides eschewing a degree of independent decision-making and entering a cooperative relationship. While CTR has not been negotiated between equal partners, no relationship ever is precisely equal. Richard Ned Lebow has shown that "resources in and of themselves rarely confer bargaining advantages. They need to be exploited if you want to create or reinforce other asymmetries." This is relevant to the development of the CTR program. To say that CTR is an example of the sort of cooperation predicted by neorealists is to fundamentally misunderstand the program and its effects. It also underestimates the degree of partnership that has evolved in this issue-area. As Robert Keohane has argued: "There is no logical or empirical reason why mutual interests in world politics should be limited to interests in combining forces against adversaries." CTR illustrates precisely this point. A number of statements by senior US and Russian officials have captured the essence of CTR, although it must be conceded that the neorealist - neoliberal distinction is highly ambiguous in several examples. This is symptomatic of the larger difficulty of

¹⁰⁷ Ibid., Sec. 211 (b).

tos Robert Jervis, "Security regimes", in Krasner (ed), International Regimes, p.176-78.

Ned Lebow, *The Art of Bargaining*, p.116-17. From a slightly different perspective, Leonard Schoppa has observed that changes in material power alone are sometimes not sufficient to shift bargaining outcomes, changes in social context are sometimes also required. See Schoppa, "The Social Context in Coercive International Bargaining", *International Organization*, Vol. 53, No. 2, Spring 1999, p.338-9.

¹¹⁰ Keohane, After Hegemony, p.62.

distinguishing between neorealist and neoliberal explanations of the CTR program as a whole. As the statements below reveal, there can be a fine line in this case study between unilateral US interests and mutual interests.

Colonel General Evgenii Maslin, then-Chief of the Nuclear Weapons (Twelfth) Main Directorate of the Russian Ministry of Defence, summed up the mutually beneficial relationship as follows:

We can fulfill our weapons dismantlement obligations, and we can do it alone. But if we did not have Nunn-Lugar, the process would take longer, and not be as safe.¹¹¹

Then-US Secretary of Defense William Perry testified before members of the Russian Duma on October 17, 1996:

I call our partnership "pragmatic" because it is rooted in self-interest. When I met with [Defence] Minister [Igor] Rodionov yesterday, I found that he and I deal with the same set of complex security problems. Each of us bears important responsibility for the defense and security of our countries. Both of us believe that our missile arsenals are too large and that reductions in nuclear missiles can increase our security. So while we seek to foster cooperation between Russia and the United States, we seek cooperation that is pragmatic and protects the interests of each of our countries.¹¹²

The (unclassified) 1996 CTR Program Plan explains:

"The creation of four new independent states (NIS) with nuclear weapons on their soil . . . coupled with the potential threat of the proliferation of thousands of nuclear weapons and tons of fissile material, presented new national security challenges and opportunities

Assistant to the Secretary of Defense, 1996 Cooperative Threat Reduction Program Plan (unclassified), II-4.

Haking the START II Debate to Moscow", Arms Control Today, Vol. 26, No. 8, October 1996, p.18.

for the United States in the area of cooperative approaches to threat reduction."113

Finally, as a result of testimony by MINATOM head Viktor Mikhailov and others,

a majority of the deputies [in the Russian Congress of People's Deputies] came to the conclusion that the CTR agreements did not compromise Russian national security and that the United States was motivated not by espionage but by, in the words of Foreign Affairs Committee Chairman Ambartsumov, 'reasonable self-interest'. 114

Here it is important to note that unqualified claims that the US dictated the terms of cooperation to an obliging Russia are simplistic and potentially misleading. When Undersecretary of State Bartholomew led the US SSD team to Moscow, Russian officials discussed their most urgent needs, which enabled US program coordinators to design the assistance accordingly. US policy has been to wait for Russia to ask for assistance. The US may offer to help in a specific area but will not 'push'. Warhead dismantlement is illustrative of this aspect of the relationship.

US policymakers made no secret of the fact that they were interested in warhead dismantlement but were not willing to stake the whole program on one issue. Rather, they allowed officials to ask for such assistance if and when they were ready. Similarly, the provision of housing has proven unpopular in the US. In Russia, Ukraine and Belarus, officers are forbidden by statute to be demobilized without being provided with housing. Despite domestic unpopularity, the US has persisted with housing projects because such cooperation is necessary to achieve CTR objectives.

CTR also focused on and encouraged collaborative efforts, many of which could be seen to favour Russia in the relative gains balance sheet. For example, US-Russian government-to-government and lab-to-lab relationships have resulted in material protection, control and accounting (MPC&A) upgrades at Russian nuclear sites to combat potential nuclear leakage. Defence conversion has been, somewhat

¹¹³ Ibid., I-1.

Orlov, "Perspectives of Russian Decision-makers and Problems of Implementation", in Shields and Potter (eds), *Dismantling The Cold War*, p.87.

¹³⁵ Department of Defense, "CTR Background Briefing", Washington, D.C., 13.3.98.

Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense, Cooperative Threat Reduction (Arlington, VA: Cooperative Threat Reduction Program Office, Department of Defense, April 1995), p.15.

haltingly, pursued. A number of very important projects involving the Russian weapons complex and US businesses have resulted, although the program has largely (but not totally) fallen victim to domestic US resistance. It is a similar vein, the Department of Energy's Initiatives for Proliferation Prevention (IPP) provides seed capital for joint ventures between former Soviet nuclear labs and US companies in the hope that these projects will become self-sustaining.

The Science and Technology Centers, designed "to prevent the proliferation of weapons expertise and technology by providing employment on peaceful civilian research projects for scientists and engineers formerly involved with weapons of mass destruction" have yielded immense benefits for both the US and Russia. This includes not only the reduced risk of a 'brain drain' to proliferation risk countries but has also facilitated the broadening of scientific knowledge through increased contacts between FSU scientists and their American and European counterparts. Just like scientific collaboration, US-Russian military-to-military contacts have increased the dialogue between the respective staffs and have contributed to increasing transparency in milita, doctrine and operations, thereby reducing misperceptions. 119

Washington and Moscow also agreed on the purchase, by the US, of 500 metric tons of HEU from dismantled Russian nuclear weapons. This had the combined effect of removing a large quantity of fissile material from the potential nuclear leakage equation and providing Russia with much-needed hard currency.¹²⁰

All of these projects, while in the interests of both the US and Russia, have required cooperative solutions to obtain the desired results; the absolute gains envisaged by neoliberals. US assistance in areas like fissile material storage and civilian employment for weapons scientists are potentially more valuable to Russia

U.S. Defense and Military-to-Military Contacts with the Former Soviet Union", in Allison et al (eds), Cooperative Denuclearization, CSIA Studies in International Security No. 2 (Cambridge, MA: Center for Science and International Affairs, Harvard University, 1993), p.163-75.

¹¹⁷ See, for example, Theodor Galdi, "The Nunn-Lugar Program for Soviet Weapons Dismantlement: Background and Implementation", CRS Report for Congress, 94-985F, Updated December 11 1995, p.7; Shields and Potter (eds), Dismantling the Cold War, p.52; Glenn Schweitzer, Moscow DMZ (New York: M.E. Sharpe, 1996), p.142.

Department of Defense, "US Assists Russia With Weapons Dismantlement And Weapons Security", News Release No. 163-95 — Office of Assistant Secretary of Defense (Public Affairs), April 3, 1995, p.2. ¹¹⁹On the initiation of the military-to-military program see Jean Callaghan, "History and Current State of

The US has assisted in the conversion of the three remaining Russian 'breeder' reactors to improve the safety of these reactors, which supply heat and electricity to the cities in which they are located and the nearby municipalities. This was also intended to facilitate the ending of plutonium production for weapons and to prevent any possible leakage of the estimated 1.5 tons of unsafeguarded, weapons-grade plutonium that military reactors produce each year. See Todd Perry, "Stemming Russia's Plutonium Tide: Cooperative Efforts To Convert Military Reactors", *The Nonproliferation Review*, Vol. 4, No. 2, Winter 1997, p.104.

than to the United States. Just as important for Russia, given the state of its economy and the aging condition of many of its strategic systems, Russian participation in the CTR regime and adherence to START I and II, ensure that the inevitable Russian nuclear build-down is reciprocated by the US.¹²¹

Also important is what CTR has *not* insisted on. 1991 Nunn-Lugar legislation directed the President to obtain reimbursement, for assistance provided, from the recipients. Despite the efforts of Congressman Solomon and several colleagues to enforce this provision, the majority of interested US policymakers understood that some compromise was a more effective method of achieving CTR objectives. Similarly, the requirement that CTR should "to the extent feasible, draw upon United States technology and United States technicians" in providing assistance became a particularly frictional issue when implementing CTR. In the interests of making CTR more efficient, the restriction was loosened in FY 1995 legislation. ¹²³

In all of these areas, the US and Russia have concluded that the unilateral pursuit of their objectives would lead to undesired outcomes. Rather than go down this road, both states have chosen policies of compromise and cooperation. Here neoliberal institutionalism provides a layer of explanation not provided by neorealism. The CTR regime institutionalizes behaviour, enabling sustained cooperation. These on-going, collaborative efforts significantly reduce transaction costs and generate detailed information, which reduces uncertainty. The institutionalized CTR umbrella has enabled the original Nunn-Lugar program to evolve into an elaborate web of responses to the threat of nuclear leakage. This has made the cost of non-adherence considerably greater. Without the regime, Washington and Moscow's efforts would have been uncoordinated, time-consuming, constantly hampered by bureaucratic impediments and much less effective. Self-interest is still a large motivating factor for US and Russian participation in CTR, as neoliberals and neorealists predict, but both states have shown a willingness to forego some independence in decision-making in order to deal more effectively with the nuclear leakage threat. Thus CTR facilitates and moderates their behaviour. CTR allows them to explore new ways of solving the problems they face.

In 1962, realist Arnold Wolfers stated:

¹²¹ The technical details of this argument have been analyzed by Alexei Arbatov, "Implications of the START II Treaty for US-Russian Relations", *The Henry L. Stimson Center*, Report No.9, October 1993, p.9-11.

¹²² Public Law 102-228—Dec. 12 1991, Sec. 212.

¹²³ Public Law 103-337—Oct. 5 1994, Sec. 1209.

In view of the extraordinary difficulties in devising such symmetrical accords [that assure equal advantage or equal disadvantage] on armaments — and in convincing both sides that the effects will indeed continue to prove symmetrical throughout the duration of an accord — it is not surprising that agreed measures of disarmament or arms control have materialized only in exceptional cases so far.¹²⁴

CTR was developed in exceptional circumstances. The resultant CTR process helped feed a far more cooperative relationship than neorealists would predict.

The United States and the Non-Russian Republics: A Neoliberal Explanation of CTR

As demonstrated in Part One, neorealist theory would predict that Washington's overwhelming political, economic and military superiority would confer upon the US a decisive advantage at the negotiating table with regard to the non-Russian inheritor states; an advantage that the US would have exploited. However, like Russia, Ukrainian, Kazakh and Belarusian officials were asked by their US counterparts to identify areas of potential assistance, then to provide detailed descriptions of the precise assistance required. The US SSD delegation took these detailed requirements statements back to Washington for consideration. 125 Rather than the US telling the non-Russian states what would be done, decision were made collaboratively, with both sides reserving the right to decline to provide or receive assistance considered inappropriate. For example, in response to a US draft agreement on CTR assistance, Ukrainian officials insisted on several amendments concerning more assistance and social welfare for retired Strategic Rocket Forces servicemen. Ukraine "was adamant in its refusal to allow the United States to place conditions on this assistance. . . The United States, for its part, demonstrated considerable flexibility", increasing the assistance package and temporarily de-linking START I ratification and NPT

¹²⁴ Arnold Wolfers, *Discord and Collaboration: Essays on International Politics* (Baltimore: Johns Hopkins University Press, 1962), p.30.

Report to the Senate Committee on Foreign Relations on Efforts to Facilitate the Safe and Secure Dismantlement of Former Soviet Nuclear Weapons by Major General William Burns, February 9 1993, in "Disposing of Plutonium in Russia", *Hearing before the Committee on Governmental Affairs*, Senate, One Hundred Third Congress, 1st Session, March 9 1993, p.45.

accession from CTR assistance. ¹²⁶ In addition to nuclear dismantlement assistance, Ukraine received security guarantees, economic assistance, the promise of US customers for Ukrainian space launch services, the facilitation of a tentative rapprochement with Russia and recognition by the international community.

The Nunn-Lugar program delivered assistance to the nuclear inheritor states in areas that benefited both sides but sometimes only indirectly the United States. For example, in Ukraine CTR helped to construct housing for demobilized Strategic Rocket Forces officers, convert former military facilities to peaceful purposes, provide employment for former Soviet nuclear weapons scientists and engineers, promote events designed to improve defence relations between the US and Ukraine and supply a training simulator to emance safety at civilian nuclear power plants. 127 In Kazakhstan, CTR assisted in sealing nuclear test tunnels at Semipalatinsk, converted former military facilities to peaceful purposes, provided employment to former Soviet nuclear weapons scientists and engineers, promoted defence contacts between Kazakhstan and the US to improve relations as well as purchased and removed 600kg of highly enriched uranium from an 'un-safeguarded' production facility. 128 In Belarus, CTR provided equipment to help restore the environment at a Strategic Rocket Forces (SRF) base, provided vocational training for demobilized junior SRF officers. constructed housing for senior SRF personnel, promoted defence contacts between Belarus and the US, provided employment for former Soviet nuclear scientists and engineers and converted former defence industries to peaceful purposes. 129 These projects have developed out of mutual interest and collaboration, not the singleminded pursuit of relative gain.

While the non-Russian states may have confronted acute difficulties using the nuclear weapons on their territory in military operations, the mere possession of these weapons conferred bargaining advantages. ¹³⁰ US bargaining reflected this as well as the perceived tight linkage between the non-Russian states on the issue of nuclear

¹²⁶ Hryshchenko, "Reducing the Nuclear Threat through Joint Efforts: The View from Ukraine", in Shields and Potter (eds), *Dismantling the Cold War*, p.155.

¹²⁷ CTR-Accomplishments, July 14 1999 < http://www.ctr.osd.mil/03accomp.htm Accessed 14/07/99.

¹²⁸ Ibid.

¹²⁹ Ibid.

This can be linked with the idea of existential deterrence. See Lawrence Freedman, "I Exist; Therefore I Deter", International Security, Vol. 13, No. 1, Summer 1988, p.177-95. Ironically, by 'playing up' the threat of nuclear leakage and irresponsible nuclear custodianship in the non-Russian states, Russian officials often achieved precisely the opposite of what they intended. As Mitchell Reiss has observed in relation to Ukraine: rather than forcing Ukraine to concede, "the more attention that was paid to Russian fears, the more leverage Ukraine gained for stronger security assurances and a larger financial compensation package." Reiss, Bridled Ambition, p.105.

renunciation. As previously mentioned, the Ukrainian bargaining position was buttressed by its possession of nuclear weapons¹³¹ and the very clear US desire to make certain Ukraine became nuclear weapons-free. As discussed below, the Ukrainian position was also strengthened by the US fear of a possible 'domino' effect should Ukraine choose to assume operational control of the nuclear weapons on its territory and defect from the emerging CTR regime. For the US, the most effective way to ensure this was to secure Ukrainian ratification of START I and accession to the NPT as a non-nuclear weapons state. 132 Rather than forcing Ukraine's hand, the US was willing to offer CTR incentives to encourage this accession. 133 Similarly, for Kazakh President Nursultan Nazarbayev, "nuclear weapons were a tool he could use to shape his country's relationship with Russia and the West, especially the United States,"134 Nazarbayev's nuclear policy, initially steering an ambiguous middle course between nuclear retention and nuclear renunciation, was intended to elicit "tangible benefits from Washington, with which it hoped to establish good relations."135 Although this policy was often met with a degree of anger and frustration, just as the comparable Ukrainian policy was received by the US136, Nazarbayev "was able to parlay a weak hand . . . [and he] adroitly negotiated the pace, terms, and price of their [nuclear weapons] return to extract maximum advantage." [37]

According to Sherman Garnett, in 1993 the Ukrainian Rada served as the 'bad cop' in the nuclear disarmament debate, increasing the executive branch's leverage in negotiations with the US and Russia. Garnett, "The Sources and Conduct of Ukrainian Nuclear Policy", in Quester (ed), *The Nuclear Challenge in Russia and the New States of Eurasia*, p.137.

For an interpretation of US support for the NPT that employs neoliberal-type arguments, see Joseph Nye, Bound To Lead: The Changing Nature of American Power (USA: BasicBooks, 1990), p.254-58. See also Nye, "Diplomatic Measures", in Robert Blackwill and Albert Carnesale (eds), New Nuclear Nations: Consequences for U.S. Policy (New York: Council on Foreign Relations Press, 1993), p.80-81; and Chafetz, "The End of the Cold War and the Future of Nuclear Proliferation", p.146. For the view that US non-proliferation policy exhibited liberal tendencies but was still largely determined by individualistic calculations of self-interest see Michael Brenner, "The Ideas of Progress and U.S. Nonproliferation Policy", in Emanuel Adler and Beverly Crawford (eds), Progress In Postwar International Relations (New York: Columbia University Press, 1991), p.174-200.

See, for example, Dunbar Lockwood, "Ukraine's Position Hardens Despite Some Positive Signs", Arms Control Today, Vol. 23, No. 7, September 1993, p.30.

¹³⁴ Reiss, Bridled Ambition, p. 138.

¹¹⁸ Ibid., p.149.

According to Kostyantyn Hryshchenko, the West viewed Ukraine's nuclear policy as "shameless bargaining" and accused Ukraine of "nearly derailing the nuclear disarmament process." Hryshchenko, "Reducing the Nuclear Threat through Joint Efforts: The View from Ukraine", in Shields and Potter (eds), Dismantling the Cold War, p.156.

¹¹⁷ Reiss, Bridled Ambition, p.150.

Thus the relationship between the US and the nuclear inheritor states was far from the one-sided US domination that neorealists would suggest. Both the US and the non-Russian states displayed a willingness to practice a large degree of policy coordination and evinced an understanding that the pursuit of individualistic policies would potentially lead to highly undesirable outcomes. Not only did this produce mutual gain in the area of denuclearisation, the recipients broadened US interests to include issues of regional stability. As Sherman Garnett has observed: "Ukraine sought to change the American perception of the problem from one of nuclear disarmament and nonproliferation to one of the stability of the emerging geopolitical environment in Eurasia. The United States has agreed to the linkage between nuclear disarmament and security . . ."

138 Put simply, Ukraine had something that the United States wanted. For the latter, it was more important "that the warheads be removed from Ukraine than it was to Ukraine that they be sent back to Russia."

139 For Ukraine, nuclear issues were subordinate to the larger question of strengthening statehood.

represented real Ukrainian negotiating leverage. Kravchuk and his government could exchange Ukrainian nuclear disarmament for real gains, including economic benefits and security guarantees. Of greater importance, however, is that the interest of the United States in nuclear disarmament could be used to draw Washington in on other economic and security problems.¹⁴¹

The Ukrainian government's policy has been described as "accommodationalist in aim (disarmament) but nationalist in implementation (for a price)." The US negotiating team cooperated, after an initial phase of attempted coercion, by working closely with Ukraine to demonstrate to Kiev that its interests lay

in Russia and the New States of Eurasia, p.146.

¹⁴¹ Ibid., p.136, See also p.125-6.

¹⁴² *Ibid.*, p.132.

¹³⁸ Garnett did add the qualifier that there was "a very real chance that the two states, not to mention Moscow, harbor different understandings of the nature of this linkage and the obligations it imposes." Garnett, "The Sources and Conduct of Ukrainian Nuclear Policy", in Quester (ed), *The Nuclear Challenge*

¹³⁹ Reiss, Bridled Ambition, p.123.
140 Garnett, "The Sources and Conduct of Ukrainian Nuclear Policy", in Quester (ed), The Nuclear Challenge in Russia and the New States of Eurasia, p.125.

in denuclearisation and greater integration with the West. As Mitchell Reiss observed, there were "limits to what Washington could achieve through pressure alone."

Similarly, the US desire for Kazakhstan to join the NPT was used as a lever by Kazakh officials to resolve "a wide range of issues concerning Kazakhstan's development as a member of the world community." This policy was effective. In return for NPT accession, Kazakhstan received a considerable aid package, assistance in dealing with the effects of nuclear testing and help in the development of a nuclear power industry. 146

Belarus was in a slightly different position to Ukraine and Kazakhstan, given that its commitment to denuclearisation was comparatively unambiguous. Belarus possessed less of the required resources to maintain the nuclear weapons on its territory than either Ukraine or Kazakhstan. Given the legacy of Chernobyl and the relatively warm relations it shared with Russia, Belarus also had the least incentive to fashion a nuclear deterrent. This is not to say that Belarus merely acquiesced to a US denuclearisation mandate. Rather, Belarus used CTR to facilitate the process that it had chosen to undertake in its own interests. As Mitchell Reiss has remarked, by providing "technical advice and, more important, economic assistance at key moments, the United States greased the tracks for a train that was already in motion." Similarly, William Potter has observed that, given Belarusian fears of economic and political reprisals from Russia and the West, the loss of Western economic and technical assistance and international isolation, combined with an absence of security threats and the force of international non-proliferation norms,

it was relatively easy for the United States to reinforce the Belarusian leadership's predisposition to uphold its international commitments and to take its place as member in good standing in the community of nations. ¹⁴⁸

Reiss, Bridled Ambition, p.106. See also William Potter, "The Politics of Nuclear Renunciation: The Cases of Belarus, Kazakhstan and Ukraine", The Henry L. Stimson Center Occasional Paper, No. 22, April 1995, p.23-4.

¹⁴⁴ Reiss, Bridled Ambition, p.124.

¹⁴⁵ Murat Laumulin, "Kazakhstan's Nuclear Policy and the Control of Nuclear Weapons", in Quester (ed), The Nuclear Challenge in Russia and the New States of Eurasia, p.193.

¹⁴⁶ Ibid.

¹⁴⁷ Reiss, Bridled Ambition, p.138.

¹⁴⁸ Potter, "The Politics of Nuclear Renunciation", p.34.

Yet the ease with which Belarus surrendered the nuclear weapons on its territory did not reduce the importance of that country to US denuclearisation policy regarding the non-Russian inheritors as a group, in fact quite the opposite. Stephen Walt's conception of the fear of a 'easeading' or 'domino' effect of regime defection is instructive in this case. 149 The US was very aware of the potential cascade effect that Ukrainian defection from the CTR regime might have. Kazakhstan, it seems, had decided to let Ukraine do the fighting on whether to retain the nuclear weapons on its territory and become a nuclear weapon state, and Kazakh officials paid close attention to both the decision Ukraine made and the reception this received in the US. 150 The US feared that Ukrainian nuclear retention would set a precedent that would encourage Kazakhstan (and possibly even Belarus) to follow suit, resulting in the unraveling of the entire denuclearisation process. In order to counter the perception that nuclear weapons retention might be beneficial, Washington chose to use Belarus as an example of the rewards that could be expected in return for explicit and tangible denuclearisation pledges and deeds. 151 US negotiators demonstrated that requests would be looked upon favourably and acted upon expeditiously, given Belarus's prompt and forthright adherence to START I and the NPT. 152 In March 1993, Secretary of State Warren Christopher pledged an additional \$65 million to Belarus's CTR assistance package to further facilitate denuclearisation efforts; six months later, in October, Christopher described Belarus as a "shining example to states around the region"; and in January 1994 President Clinton visited Belarus, at which time he pledged a further \$25 million to Belarus to aid safe and secure nuclear weapons dismantlement procedures. 153 In addition to the increases in assistance provided, the

149 Walt, The Origins of Alliances, p.45.

¹⁵² OTA-ISS-605, p.41.

This was one possible conclusion drawn by the Office of Technology Assessment to explain Kazakhstan's delay in ratifying the Lisbon Protocol (recognizing all four nuclear inheritor states as parties to START) and the NPT. OTA-ISS-605, p.53-4. Kazakhstan's behaviour corresponds to the principle of social proof, demonstrated when states "decide how best to adapt to an environment based on their observations of how other, more successful states adapt." Glen Chafetz, "The End of the Cold War and the Future of Nuclear Proliferation: An Alternative to the Neorealist Perspective", Security Studies, No. 2, Spring/Summer 1993, p.142.

thid., p.41. This is not to suggest that Belarus was oblivious to the conduct of its neighbours. For example, Valerii Tsepkalo observed, "relatively positively", that Ukraine had been "beating money out of the West with the help of a nuclear club." Quoted in Paznyak, "Belarusian Denuclearization Policy and the Control of Nuclear Weapons", in Quester (ed), The Nuclear Challenge in Russia and the New states of Eurasia, p.177, fn. 64.

Paznyak, "Nunn-Lugar Program Assessment: The Case of Belarus", in Shields and Potter (eds), Dismantling the Cold War, p.180 fn, 19, p.176-7 fn.15; Dunbar Lockwood, "Ukrainian Rada Ratifies START I, But Adds 13 Conditions for Approval", Arms Control Today, Vol. 23, No. 10, December 1993, p.26.

visits provided "symbolic demonstrations of American appreciation for Belarus's nonnuclear stance." The hope was that such rewards would further encourage Ukraine and Kazakhstan to denuclearise.

Despite a fair degree of politicking, Washington and Kiev, Almaty and Minsk perceived mutual interest in the safe and secure denuclearisation of the nuclear inheritor states and both were willing to cooperate in order to achieve this. Compromise, rather than the imposition of US preferences, was in the interests of all parties. This led to a broadening of the relationships between the US and the non-Russian states beyond the quite narrow objective of nuclear security.

Part 3

Constructivism

Neorealists and neoliberal institutionalists share a commitment to 'rationalism' and treat the identities and interests of agents as exogenously given. Put simply, "states begin with a portfolio of specific interests, *prior* to social interaction." Constructivists focus on ideas and interests and the profound effects that these have on national security. 156

Constructivists charge that neorealist theory is indeterminate: it cannot account for why one policy choice is selected over the range of other possible options or why a particular choice was made at a particular time. Similarly, while liberal theories "take the role of ideas in foreign policy seriously and emphasize that perceptions, knowledge, and values shape the state actors' responses to changing material conditions in the domestic and international environments", they fail to explain why particular choices are made and when. ¹⁵⁷ Constructivist Alexander Wendt has argued

John Hobson, The State and International Relations (Cambridge, UK: Cambridge University Press, 2000), p.145.

Reiss, Bridled Ambition, p.136. As an added "reward" for its behaviour, Belarusian security guarantees were provided by personally by President Clinton. This was unique amongst the non-Russian inheritor states. Laumulin, "Kazakhstan's Nuclear Policy and the Control of Nuclear Weapons", in Quester (ed), The Nuclear Challenge in Russia and the New states of Eurasia, p.192.

Alexander Wendt, "Anarchy is what states make of it: the social construction of power politics", *International Organization*, Vol.46, No.2, Spring 1992, p.391; Katzenstein (ed), *The Culture of National Security*, p.17.

Thomas Risse-Kappen, "Ideas Do Not Float Freely: Transnational Coalitions, Domestic Structures, and the End of the Cold War", in Richard Ned Lebow and Risse-Kappen (eds), *International Relations Theory and the End of the Cold War* (New York: Columbia University Press, 1995), p.189-92. Ted Hopf takes this

forcefully that neorealist and neoliberal conceptualizations of anarchy account for "disinterest in the institutional transformation of identities and interests . . ."¹⁵⁸ In contrast, Wendt seeks to demonstrate that "self-help and power politics do not follow either logically or causally from anarchy and that if today we find ourselves in a self-help world, this is due to process, not structure."¹⁵⁹ For constructivists, there is no 'logic' of anarchy, which is pivotal to neorealist and neoliberal theories. Rather, "anarchy is what states make of it". ¹⁶⁰ This is because structure is a "distribution of knowledge", the character of which is determined by the beliefs and expectations states share about each other and these expectations and beliefs are constituted largely by social rather than material structures. ¹⁶¹

For Wendt, constructivism has two principles. The first, linked with the concept of *subjectivity*, maintains that people act toward other objects and actors on the basis of meanings that those objects and actors have for them. This is why states act differently towards friends and enemies — the 'logic' of anarchy cannot distinguish between the two. 162 In support of this proposition, Wendt draws from Stephen Walt's book, *The Origins of Alliances*. Wendt claims that, by revising Kenneth Waltz's emphasis on power to a focus on threats, Walt concedes that threats are socially constructed. 163

International politics is not an autonomous sphere. States, therefore, cannot be treated simply as 'black boxes'. Rather, they are "an ensemble of normatively constituted practices by which a group of individuals forms a special type of political association." ¹⁶⁴

The second principle of Wendt's constructivism holds that "the meaning in terms of which action is organized arise out of interaction." Thus, conceptions of

further, arguing that by making interests a central variable, "constructivism explores not only how particular interests come to be, but also why many interests do not." Hopf, "The Promise of Constructivism in International Relations Theory", *International Security*, Vol. 23, No. 1, Summer 1998, p.175.

¹⁸⁸ Wendt, "Anarchy is what states make of it", p.394.

¹⁵⁰ Ibid.

¹⁶⁰ *Ibid.*, p.395. Nichons Onuf has described the realist perspective as follows: "the world exists independent of ourselves and the things within it await our naming." Nicholas Onuf, *World Of Our Making* (Columbia: University of South Carolina Press, 1989), p.37.

Alexander Wendt, Social Theory of International Politics (Cambridge, MA: Cambridge University Press, 1999), p.20.

¹⁶² Wendt, "Anarchy is what states make of it", p.397.

¹⁶³ Ibid., p.396.

Rey Koslowski and Friedrich Kratochwil, "Understanding Change in International Politics: The Soviet Empire's Demise and the International System", in Lebow and Risse-Kappen (eds), *International Relations Theory and the End of the Cold War*, p.158, 135.

¹⁶⁵ Wendt, "Anarchy is what states make of it", p.403.

one's self and of others are formed by interaction, by what others do. 166 Reciprocal interaction creates and instantiates "the relatively enduring social structures in terms of which we define our identities and interests." Put another way, identities and interests are constructed by shared ideas rather than given by nature. 168

This is why the institution of self-help is but one of many structures of identity and interest that might exist under anarchy. Wendt argues that structural theories assume too much by arguing that anarchy *forces* states to face a 'stag hunt' or 'security dilemma'. Such dilemmas result from interaction and identity formation. They are not exogenous to the interaction. In other words, security dilemmas are produced in and through 'situated activity'. 171

Wendt captures this relationship in his analysis of the 'agent-structure problem'. Humans and organizations are "purposeful actors whose actions help reproduce or transform the society in which they live", and "society is made up of social relationships, which structure the interactions between these purposeful actors." For Wendt, the self-help system endures because the practices of states have made it that way. "Changing the practices will change the intersubjective knowledge that constitutes the system." To illustrate this, Wendt has identified three ideal-type "cultures" of anarchy: Hobbesian, based on relations of enmity; Lockean, based on relations of rivalry; and Kantian, based on relations of friendship. The kinds of people who live there and the structure of their relationships (Hobbesian, Lockean or Kantian) are what gives anarchy its meaning.

¹⁶⁶ lbid., p.404.

¹⁶¹ Ibid., p.406.

¹⁶⁸ Wendt, Social Theory of International Politics, p.1.

⁴⁶⁹ Wendt, "Anarchy is what states make of it", p.399.

¹⁷⁰ Ibid., p.402. 'Stag hunt' is a mathematical game employed to reproduce (in simplified form) the incentives for states, presented with a potentially mutually beneficial outcome if all cooperate, to either cooperate or defect. See Jervis, "Cooperation under the Security Dilemma", in Art and Jervis, International Politics, p.86-89 and Kenneth Oye, "Explaining Cooperation Under Anarchy", in Oye (ed), Cooperation Under Anarchy, p.8-9. See also Axelrod and Keohane, "Achieving Cooperation Under Anarchy", p.229 and George Downs, David Rocke and Randolph Siverson, "Arms Races and Cooperation", World Politics, No. 38. October 1985, p.135. The 'security dilemma' describes a situation where "an increase in one state's security will automatically and inadvertently decrease that of others." Robert Jervis, The Meaning of the Nuclear Revolution (Ithaca: Cornell University Press, 1989, p.53. See also Andrew Butfoy, "Offence-Defence Theory and the Security Dilemma: The Problem with Marginalizing the Context", Contemporary Security Policy, Vol. 18, No. 3, December 1997, p.38-58.

Wendt, "Anarchy is what states make of it", p.407.

Alexander Wendt, "The agent-structure problem in international relations theory", *International Organization*, Vol. 41, No. 3, Summer 1987, p.337-8.

Wendt, "Anarchy is what states make of it", p.407.

¹⁷⁴ Wendt, Social Theory of International Politics, p.266-99.

¹²⁵ Ibid., p.309.

anarchy are internalized determines the difference they make.¹⁷⁶ Constructivists do not deny that material forces, as stressed by rationalist theories, matter. Rather they claim that how material forces matter depends on whether the states are friends or enemies and this is a function of shared ideas.¹⁷⁷

For the purposes of this thesis it is important to use the basic constructivist building blocks that Wendt provides but also to move beyond Wendt's 'systemic constructivism' (which posits that "international institutional structures constitute states as legitimate international actors and state practices in turn reproduce such structures." to a constructivism able to "explain fundamental changes in state identity and social structures." 'Holistic constructivists' such as Ruggie and Kratochwil, who focus on "how domestic and international social phenomena interact to determine the rules that structure international orders" provide a more compelling explanation of how and where change may occur.

Given the focus on ideas and interest formation, it is not surprising that constructivists devote much of their work to the inherent potential for change. As Koslowski and Kratochwil have observed, constructivists attach critical importance to "the way individuals adopt changed practices arising from new conceptions of identity and political community, thereby altering interactions among states, or, conversely, the way changed interactions among states alter practices among individuals." According to Ruggie, unit-level sources are the ultimate source of structural change in any social system. Systemic theory, by banishing these processes, "exogenizes the ultimate source of systemic change." Thus neorealism and neoliberal institutionalism contain a reproductive logic but not a transformational logic. For constructivists, this is the great weakness of structural theory and renders their methodology historically inaccurate and analytically misleading.

Constructivism offers "an account of how and where change may occur." Actors are not doomed to follow the self-fulfilling prophecy that is the neorealist paradigm. Waltz's neorealism, by ignoring the man-made and intentional context of

¹⁷⁶ Ibid., p.250,

¹⁷⁷ Ibid., p.24,

¹⁷⁸ Richard Price and Christian Reus-Smit, "Dangerous Liaisons? Critical International Theory and Constructivism", *European Journal of International Relations*, Vol.4 (3), 1998, p.268.
¹⁷⁹ *Ibid.*

¹⁸⁰ Ibid., p.269.

Koslowski and Kratochwil, "Understanding Change in International Politics", p.136.

¹⁸² John Gerard Ruggie, "Continuity and Transformation In The World Polity: Toward A Neorealist Synthesis", World Politics, 35, January 1982, p.285.

¹⁸³ Hopf, "The Promise of Constructivism in International Relations Theory", p.180.

action, cannot answer the basic question "of how states might consciously attempt to alter the conditions of action in a way that promotes peaceful change." 184

A case in point was the Cold War. US-Soviet competition was not dictated by bipolarity. Rather, it was the result of certain ideas and practices. For constructivists, the distribution of capabilities mattered "less than the incompatibility of particular conceptions of political community and their concomitant practices." Such conceptions are the basis for interests. Actors "define their interests in the process of defining situations." Sometimes situations are unprecedented and can result in confusion. Alexander Wendt summed up the confusion succinctly in 1992:

This seems to be happening today in the United States and the former Soviet Union: without the cold war's mutual attributions of threat and hostility to define their identities, these states seem unsure of what their 'interests' should be.¹⁸⁷

Peter Katzenstein has argued that participation in regimes is a way for states to enact or institutionalize their identities. ¹⁸⁸ He identifies the weakness in neoliberal regime theory in the fact that neoliberals claim merely that norms reflect interests. However, norms also constitute interests: "regimes are what those people whose activities constitute them think they are." ¹⁸⁹ Social change "engenders a process of self-reflection and political actions that are shaped by collectively held norms." ¹⁹⁰ This self-reflection does not occur in a vacuum. It is communicated to others and, as a result, new norms can emerge. Thus, state interests and strategies "are shaped by a

¹⁸⁴ David Dessler, "What's at stake in the agent-structure debate?", *International Organization*, Vol. 43, No. 3, Summer 1989, p.472-3. This does not mean that constructivists treat change and progress in international relations as synonymous; the concept of culture is analytically neutral between conflict and cooperation. See Wendt, *Social Theory of International Politics*, p.310, 314-5.

¹⁸⁵ Koslowski and Kratochwil, "Understanding Change in International Politics", p.143.

¹⁸⁶ Wendt, "Anarchy is what states make of it", p.398.

¹⁸⁷ Ibid., p.399.

Ronald Jepperson, Alex Wendt and Peter Katzenstein, "Norms, Identity, and Culture in National Security", in Katzenstein (ed), *The Culture of National Security*, p.62.

Onuf, World Of Our Making, p.145. It is important to note that Onu, disputes what he describes as the positivist claim, implicit in Kratochwil and Ruggie's work, that regimes are "objectively given". By arguing that "scholars typically [my emphasis] take 'given' to mean 'objectively given', Onuf assumes too much. Despite the methodological differences, Onuf, and Kratochwil and Ruggie, still arrive at the same conclusion concerning regimes.

Peter Katzenstein, "Introduction: Alternative Perspectives on National Security", in Katzenstein (ed), The Culture of National Security, p.20.

never-ending political process that generates publicly understood standards for action." ¹⁹¹

A Constructivist Explanation of CTR

This constructivist explanation seeks to show why CTR can be understood only as the result of certain ideas that prevailed during 1990 and 1991. These ideas and their acceptance were critical to the relationship between the US and the nuclear inheritor states, and explain why cooperation has occurred. The post-Cold War cooperative relationship that developed between the US and the states of the former Soviet Union confounded neorealist logic and brought into question neoliberal institutionalism's depth of analysis. By virtue of the fact that systemic theories leave aside "questions about the kinds of political leaders, social and economic institutions, and ideological commitments states may have" 192, a constructivist argument can be made that neorealism and neoliberalism are wholly inadequate in coming to terms with the changed US-FSU political relationship. The contrast between the Cold War and the post-Cold War relationship refutes the proposition that there was a 'functional logic' to the US-Soviet / nuclear inheritor states' relationship. This is why CTR should be seen not simply as an outgrowth of power relationships or of exogenously given interests, but rather, reflective of the intersubjective meanings the actors have for each other.

This process had begun in the final years of the Cold War. Richard Ned Lebow has argued that the US and the USSR repudiated the self-help system with the advent of Gorbachev, changing their relationship and, consequently, changing the character of the international system. ¹⁹³ Lebow continues:

Elite learning at the unit level had systemic consequences. Superpower success in escaping the security dilemma indicates that units are not always victims of some abstract, foreordained structure but instead intelligent, reflective actors who, by their coordinated behavior, can and have transcended the consequences of anarchy...¹⁹⁴

¹⁹¹ Ibid., p.21.

¹⁹² Waltz, Theory of International Politics, p.80.

Richard Ned Lebow, "The Long Peace, the End of the Cold War, and the Failure of Realism", in Lebow and Risse-Kappen (eds), *International Relations Theory and the End of the Cold War*, p.49.

CTR helped to 'institutionalize' the new relationship that had been formed between the US and the former Soviet states. Thus, CTR is not simply reflective of interests. Those interests are constituted by the ideas that generated CTR in the first place. ¹⁹⁵ CTR is an expression of what the US and the former Soviet states believe the relationship and themselves to be about.

While the end of the Cold War was accompanied by a power balance shift, the international structure remained essentially the same. This is why the cooperative relationship that developed between the US and the four nuclear inheritor states has proven problematic for systemic theories such as neoliberalism and, more particularly, neorealism. If the reasons for the changed relationship cannot be explained at a structural level alone, two questions arise. Firstly, what does the relationship suggest about the implications of anarchy for inter-state behaviour? Secondly, if structure cannot explain this change, or can only partly explain this, from where did the impetus for change emerge? Constructivism offers answers to these questions.

The constructivist argument maintains that the actions of the United States and the nuclear inheritor states continually produced and reproduced conceptions of "self" and "other" which reinforced the cooperative nature of the relationship. Self-help, along neorealist lines, was a choice all states could have made. However, it was a 'social construction' rather than an imperative of anarchy, and as such was only one of many possible choices. Instead of self-help, they chose cooperation. This was why pronouncements at the January 1994 Clinton-Yeltsin Summit that the US and Russia no longer considered each other enemies and the mutual de-targeting of nuclear weapons were not simply empty rhetoric and meaningless exercises in public relations. They reflected the cooperative relationship that had developed based on

¹⁹⁵ Wendt, Social Theory of International Politics, p.371.

¹⁹⁶ Ibid., p.36.

¹⁹⁷ Wendt, Social Theory of International Politics, p.249.

It is important to distinguish this constructivist argument from the technical reality of the de-targeting agreement. According to Bruce Blair, "the steps they [Clinton and Yeltsin] took to implement their pledge were entirely cosmetic and symbolic. Neither removed the wartime aim points from their missiles' portfolios of preprogrammed targets. . . The time required for this retargeting is a scant ten seconds." Bruce Blair, "Russian Nuclear Policy and the Status of Detargeting, Testimony Before the Subcommittee on Military Research and Development, U.S. House of Representatives Committee on National Security", March 13 1997 http://www.brook.edu/views/testimony/BLAIR/19970313.HTM Accessed 23/10/97. On more 'concrete' de-targeting measures see Bruce Blair and Sam Nunn, "From Nuclear Deterrence To Mutual Safety", The Washington Post, June 22 1997, p.8.

altered conceptions, or social structures, of the US-Russian association; what Wendt referred to as "distributions of ideas" or "stocks of knowledge". 199

Systemic phenomena played a role. Economically and militarily, Russia, Ukraine, Kazakhstan and Belarus had declined relative to the USSR, individually and collectively, while the United States appeared to have enhanced its position of economic, political, military and cultural ascendancy. However, these factors, so important for systemic theories, are not enough. Systemic theories do not (indeed cannot) explain why the US-Russian relationship became cooperative regarding nuclear arms control. Waltzian neorealists predict that the struggle for power is enduring. Systemic conditions did not change so radically. Similarly, Keohane's neoliberalism, by treating interests as 'exogenously given', cannot account for why the US-Russian relationship became cooperative when it did. Why the end of 1991? Why not 1985 or 1995? Systemic theories radically simplify the decision-making process. The post-Cold War cooperative relationship was not pre-determined, any more than the Cold War adversarial relationship was. The CTR program was the product of complex systemic and domestic phenomena that are not reducible to the functional logic that Waltz and Keohane espouse.

To argue that the US and the nuclear inheritor states cooperated due to unequal bargaining positions or as a result of exogenously given interests is to misrepresent CTR from the outset. Treating the US decision-making process as unitary (a 'billiard ball') is not sustainable. The Bush Administration was extremely reluctant to embark upon the nuclear threat reduction process, and only initially participated because of the intense pressure exerted by influential Congressmen. The question that systemic theories cannot answer is "why were these particular ideas about nuclear threat reduction ascendant at this particular time?"

Jeffrey Legro has offered important insights into how and when change may occur, providing support for the constructivist case in relation to CTR.²⁰⁰ He maintained that two stages were necessary for change. Firstly, social actors must concur, tacitly or explicitly, that the old ideational structure is inadequate, thus causing its collapse. Secondly, these actors must consolidate a replacement set of ideas, lest they return to the old orthodoxy by default. From this, Legro reasoned that change in collective ideas was more likely when events generated consequences that deviated

¹⁹⁹ Wendt, Social Theory of International Politics, p.249.

All information is taken from Jeffrey Legro, "Whence American Internationalism", *International Organization*, Vol. 54, No. 2, Spring 2000, p.254.

from social expectations, the consequences were starkly undesirable and a socially viable replacement idea existed. As was demonstrated in Chapter 4, these were precisely the conditions under which CTR was conceived. Viewed through a constructivist lens, and with the help of research on epistemic communities, the pervasiveness of CTR ideas can be explained.

Emanuel Adler, in his study of the evolution of the ABM Treaty, demonstrates how an epistemic arms control community²⁰¹ in the United States, predominantly drawn from Harvard and MIT, affected "international political processes and outcomes by binding present and future decision makers to a set of concepts and meanings that amount[ed] to a new interpretation of reality and also by becoming actors in the process of political selection of their own ideas."²⁰² The similarities with the evolution of the CTR program are unmistakable.

Political and economic turmoil in the then-Soviet Union during 1989 and 1990 had led a group of academics at Harvard University, people such as Ashton Carter and Graham Allison, to start thinking seriously about the possibility of what they termed "nuclear fission" the "danger that nuclear weapons, components of nuclear weapons, or intimate knowledge about nuclear weapons will fall into unauthorized hands through desertion or mutiny of military custodians, seizure by political groups or terrorists, sale, or smuggling." That Ashton Carter was thinking seriously about the potential consequences resulting from the degradation of Soviet nuclear command and control in 1990 and 1991 was hardly surprising given his work, since the early 1980s, on the critical role of command, control, communication and intelligence (C³I) in nuclear war and deterrence. ²⁰⁵

The fact that the epistemic community consisted of Harvard academics from the United States was important. Other epistemic communities would not necessarily have reproduced the same results. The CTR idea was distinctive to the epistemic

An epistemic community refers to a group or network "of specialists with recognized expertise in policy-relevant knowledge areas." Graham Evans and Jeffrey Newnham, *The Penguin Dictionary of International Relations* (London: Penguin Group, 1998), p.150.

Emanuel Adler, "The emergence of cooperation: national epistemic communities and the international evolution of the idea of nuclear arms control", *International Organization*, Vol.46, No.1, Winter 1992, p.106, 115.

²⁰³ Interview, 26 March 1998.

Kurt Campbell et al, Soviet Nuclear Fission: Control of the Nuclear Arsenal in a Disintegrating Soviet Union (CSIA Studies in International Security, Cambridge: Center for Science and International Affairs, Harvard University, 1991), p.ii.

²⁰⁵ See, for example, Ashton Carter, John Steinbruner and Charles Zraket (eds), *Managing Nuclear Operations* (Washington, D.C.: Brookings, 1987), esp. Chapters 7, 17 and 18; Kenneth Thompson (ed), *Ashton Carter On Arms Control* (Lanham: University Press of America, 1990), esp. p.165-222.

community that produced it. Expressing the same sentiment, although concerned with US institution-building during the Cold War, John Gerard Ruggie maintained:

to the extent it is possible to know such things, other great powers would have done it differently, so that the rhetoric is not *mere* rhetoric, but expresses differential policy preferences with real consequences.²⁰⁶

The CTR concept developed at Harvard University and germinated through the 'old boys network' contacts that the Harvard group had with Nunn, Lugar and Aspin. Not only did academics at Harvard complement and clarify the ideas that Nunn was expressing in 1990²⁰⁸, they became the architects of the nuclear threat reduction policy as it was being put into practice. For example, Ashton Carter drafted the original 1991 Nuclear Threat Reduction legislation and both Carter and Allison became Assistant Secretaries of Defense when Les Aspin was appointed Secretary of Defense at the beginning of Bill Clinton's first term. This continued under Aspin's successor, William Perry. Indeed, Assistant to the Secretary of Defense for Atomic Energy, Harold Smith, described CTR as Perry's "favorite program".

Policy-making was not only influenced by executive appointments. On occasion, Senators Nunn and Lugar negotiated directly with officials from the nuclear inheritor states. According to one Senate staffer who observed some of these negotiations, the Russians were confident that when Nunn and Lugar made an offer, they could deliver.²¹¹

The new conception of the US-Soviet / former Soviet relationship did not occur in an international vacuum, as constructivists acknowledge.²¹² As mentioned previously, events in the Soviet Union had indicated to some analysts that nuclear leakage could

²⁰⁶ John Gerard Ruggie, *Winning the Peace: America and World Order in the New Era* (New York: Columbia University Press, 1996), p.23. Emphasis in original.

²⁰⁷ Interview, Washington, D.C., 9 March 1998.

²⁰⁸ See Sam Nunn, "Assessing the Military Threats of the 1990s" (excerpts), Aviation Week and Space Technology, April 16, 1990, p.7; Sam Nunn, "Nunn1990: A New Military Strategy", CSIS Significant Issues Series, Vol. XII, No.5 (Washington, D.C.: Center for Strategic and International Studies, 1990), p.32.

There are a number of similarities between the CTR epistemic community and the arms control epistemic community during the Kennedy Administration. On the Kennedy epistemic community see Adler, "The emergence of cooperation", p.126.

²¹⁰ Statement of Smith in "U.S. Assistance Programs For Economic and Political Reform and Dismantling of Weapons of Mass Destruction in the NIS", *Hearing before the Committee on International Relations*, House of Representatives, One Hundred Fourth Congress, 1st Session, March 3 1995, p.12.

²¹¹ Interview with the author.

²¹² Wendt, Social Theory of International Politics, p.24.

occur. The nuclear threat reduction idea was then given a boost when the August coup revealed the potential stresses on the Soviet nuclear command and control system. The subsequent fracturing of the USSR into individual republics — four of which 'inherited' strategic nuclear weapons and fourteen of which 'inherited' tactical nuclear weapons, in addition to 'loose' fissile material and nuclear expertise spread all over Soviet territory — made the danger of nuclear leakage even more tangible. The solution to this problem, as proposed by the academics at Harvard and adopted by Nunn, Aspin and Lugar, was a quite radical departure from anything practiced during the Cold War. CTR is qualitatively and quantitatively different from previous arms control. Rather than setting limits on deployed nuclear weapons, it actually assists in the *elimination* of nuclear warheads, delivery vehicles, launchers, infrastructure and the conversion of defence industries.

As events became increasingly urgent during the second half of 1991, Nunn, Aspin, and Lugar's colleagues became receptive to changing international circumstances and new ideas about how the US-Soviet relationship might be managed began to emerge. In light of the previous forty-five years of hostility, the transition was remarkably smooth. In this case, domestic sources of change and international sources of change were mutually reinforcing.

Members of Congress became receptive to Nunn, Aspin and Lugar's entreaties for a variety of reasons. Firstly, briefings from Soviet officials and US intelligence painted an alarming picture of the potential for nuclear leakage, which had an affect on members of Congress. Secondly, Nunn and Aspin in particular were highly respected in Congress (and at the White House) for their expertise on nuclear matters and this was very important in influencing the majority of Congressmen and women, who had little understanding of, or interest in, nuclear weapons issues in particular and defence matters in general. Nunn had already demonstrated his interest in more cooperative approaches to 'threat reduction' with the Nuclear Risk Reduction Centers he and Senators Henry Jackson and John Warner proposed in 1982. Thirdly, Nunn and Aspin were not the only Congressmen with expertise and/or interest in nuclear weapons and the (former) Soviet Union. Influential and knowledgeable members of Congress like Joseph Biden, Claiborne Pell, Carl Levin, Strom Thurmond, John Warner, Pete Domenici, Richard Gephardt, Lee Hamilton, Dante Fascell and Stephen

²¹³ See, for example, Don Oberdorfer, "First Aid for Moscow: The Senate's Foreign Policy Rescue", *The Washington Post*, December 1 1991, p.C2.

²¹⁴ Barry Blechman (ed), *Preventing Nuclear War: A Realistic Approach* (Bloomington: Indiana University Press, 1985).

Solarz also shared not just an appreciation of the dangers of nuclear leakage but also an understanding that traditional diplomatic and arms control practices would be inadequate in these changed circumstances.²¹⁵

Similarly, systemic theory's treatment of states as decision-making 'black boxes' misleadingly simplifies the CTR program. The Bush Administration was decidedly reluctant to embrace or even support the Congressional initiative during 1991; Defense Secretary Cheney labeling it 'foolish' and Bush warning that an "instant sense of budgetary gratification" would be unwise when the needs were unclear and the US had "requirements that transcend[ed] historic concerns about the Soviet Union." The Administration had already demonstrated its attachment to the status quo by supporting Mikhail Gorbachev *after* it had become clear to many that power had shifted to the republics, and, in Russia, more specifically to Boris Yeltsin. 217

Emanuel Adler has asserted:

It was not necessarily the best-fitted ideas that were selected and turned into policies, however, but those which best fit the interests of policymakers and which passed the test of domestic politics.²¹⁸

Despite a reluctant Administration, CTR did "best fit the interests" of key members of Congress who were, effectively, policy-makers at the end of 1991. CTR also "passed the test of domestic politics", although it did take some determined selling to achieve this.

For all of the similarities between CTR and Adler's ABM Treaty study, the two differ in one very important respect, which is the *reason* for cooperation. Adler has described the ABM Treaty as an international regime based on 'practical association'. That is, "a relationship among those who are engaged in the pursuit of different and possibly incompatible purposes, and who are associated with one another . . . only in respecting certain restrictions on how each may pursue his own purposes." This regime of practical association contrasts with Adler's conception of an 'instrumental

²¹⁵ Sam Nunn and Richard Lugar, "The Nunn-Lugar Initiative: Cooperative Demilitarization of the Former Soviet Union", in Allan E. Goodman (ed), *The Diplomatic Record 1992-1993* (Boulder, CO: Westview Press, 1995), p.153.

²¹⁶ lbid., p.142.

²¹⁷ This view is shared by John Maynard. See Maynard, "Soviet Communism Collapsed on Its Own", in William Barbour and Carol Wekesser (eds), *The Breakup of the Soviet Union: Opposing Viewpoints* (San Diego, CA: Greenhaven Press, 1994), p.25.

Adler, "The emergence of cooperation", p.124.

²¹⁹ Ibid., p.144.

regime', which is, "two or more nation-states learned the same lessons and developed common political beliefs and goals and are acting together to achieve those goals." ²²⁰ CTR was grounded and functions much like Adler's notion of an instrumental regime.

The US and the nuclear inheritor states shared a common interest in the success of the CTR enterprise. All states shared a belief that nuclear leakage was possible and that this constituted a threat to each country as well as the international community more broadly. They shared the goals of CTR, namely reducing the danger that: "[nuclear] weapons might be diverted or used in an unauthorized manner; warheads and fissile materia's might be sold to countries or groups inimical to the United States [and the nuclear inheritor states]; and former Soviet weapons scientists and engineers might contribute to global proliferation." They also came to agree upon and institute some quite novel solutions to these problems.

In terms of the broader nuclear relationship between the United States and the nuclear inheritor states, CTR represents a fundamental change from the Cold War. In this sense CTR is fundamentally different from the ABM Treaty, which was a product of the Cold War. However, the origins of ABM and CTR have much in common. Adler has shown, in regard to the ABM Treaty, that the arms control epistemic community created vested interests in arms control; that this community "focused attention on cooperative phenomena and helped provide the superpowers with reasons why . . . it was important that they cooperate"; and that once these ideas became "embodied in domestic and international procedures and institutions, the domestic and international games were irrevocably changed."222 Similarly, Harvard academics and key Congressmen created and institutionalized the idea of Cooperative Threat Reduction. CTR enjoyed the benefits of being perceived as an innovative and effective solution to an urgent international problem as well as 'appropriate' at the level of US policy-making. The CTR epistemic community's contribution was to present an alternative to the conventional wisdom which effectively changed the "understanding of what it takes to advance one's power, influence, and wealth", which led to a change in national interests.²²³ The domestic attraction of CTR can, in no small part, also be attributed to Congressional will ness to fill the foreign policy-making void created

²²⁰ Ibid

Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense, Cooperative Threat Reduction, p.3.

Adler, "The emergence of copperation", p.141, 140.

Emanuel Adler, "Seasons of Peace: Progress in Postwar International Security", in Adler and Crawford (eds), Promess In Postwar International Relations, p.141.

by the Bush Administration in the lead-up to the 1992 election. Thus CTR was the product of a complex mix of international and domestic factors.

Part 4

Assessment

Parts One, Two and Three of this chapter offered very different ideas about how and why the CTR program operated. It is the purpose of this concluding section to consider which international relations theory or theories provide the most satisfactory explanation of CTR as it developed from the end of 1991 to the end of 1996. After briefly summarizing the key postulates of the three theories presented previously, the strengths and weaknesses of each will be identified to determine their explanatory power regarding the topic of this thesis.

The neorealist model presented here endeavours to demonstrate that CTR was essentially a product of the nuclear inheritor states' need for assistance, the ability of the United States to provide that assistance and its interests in doing so. In other words, CTR was a product of the application of superior US material power capabilities.²²⁴ Washington was in a very strong position to dictate the terms of the CTR program and almost all of the 'cooperating' was done by the nuclear inheritor states. This was why the CTR programs that received the greatest funding were the programs that directly reduced the threat to the United States, such as the destruction of missiles, bombers and silos. For neorealists, CTR was simply an expression of the prevailing balance of power and the pursuit of US interests. For the US, the CTR regime was a means to an end. It did not exert any independent influence, nor did it 're-define' US interests; it was an effective method for the US to achieve its goals. This is consistent with neorealist theory, which predicts that huge relative gains make strong states willing to 'cooperate' and weaker states are forced to accept the assistance they need on the terms that the stronger states offer. As Waltz has argued: "the placement of states in the international system accounts for a good deal of their behavior."225

Legro and Moravcsik, "Is Anybody Still a Realist?", p.55.
 Waltz, "The Emerging Structure of International Politics", p.44.

Although beyond the scope of this thesis, another potential neorealist strength is worth mentioning briefly. Many of the arguments used by CTR advocates to elicit support for the program expressed ideas that are shared by neorealist accounts of international relations and many of those opposed to CTR employed arguments to support their claims that also mirrored neorealist contentions. The aim of this chapter was to assess which of the three international relations theories provided the most reasonable explanation of CTR policy outcomes but equally interesting questions might be: which of the theories provides the most compelling reasons for members of Congress to either support or oppose CTR and how aware of the theoretical groundings upon which they were basing their decisions were those legislators?

However, four main criticisms may be leveled at the neorealist explanation of the CTR program provided here. Firstly, it overstates the degree to which the nuclear inheritor states did all the cooperating. CTR has not simply been a one-way street with the US dictating the terms of assistance and the recipients accepting whatever they were given. Washington showed on many occasions that it was willing to compromise in order to ensure the smooth running of the program; that is, Washington preferred to modify its policy preferences and coordinate its interests with the inheritor states in order to maintain CTR. This often resulted in absolute gains by both parties, or, in some cases, even more significant gains for the recipients relative to the US. This is not behaviour that sits comfortably with neorealist theory. It is at this level of analysis that neoliberal institutionalism potentially offers some important insights.

Secondly, and related to the first point, the neorealist argument that the US-Russian relationship has changed remarkably little since the collapse of the Soviet Union seems contrived. Kenneth Waltz's contention — "The theory explains why a certain similarity of behavior is expected from similarly situated states. The expected behavior is similar, not identical" — is not convincing. This is indicative of neorealism's inability to explain large-scale change in the international system. ²²⁷ CTR is only one example of the enormous change that has occurred since the Cold War. To argue that the relationship has changed very little is to fundamentally misunderstand the international situation.

Thirdly, neorealism is unable to account for the domestic influences, chiefly Congress, critical to a comprehensive understanding of the CTR program. As illustrated in Chapter 4, Congress has played an often decisive role in the development

²²⁶ Waltz, Theory of International Politics, p.121.

²²⁷ Wendt, Social Theory of International Politics, p.17.

and implementation of CTR that confounds neorealism's systemic logic. Kenneth Waltz has argued that "the theory does not tell us why state X made a certain move last Tuesday... A theory at one level of generality cannot answer questions about matters at a different level of generality... To explain the expected differences in national responses, a theory would have to show how the different internal structures of states affect their external policies and actions." However, this makes neorealism's explanation of CTR incomplete at best and inaccurate at worst.

Fourthly, prominent neorealist John Mearsheimer suggested that, in the security interests of both Washington and Kiev, Ukraine be encouraged to fashion a nuclear deterrent. That neorealist logic pointed to such a conclusion — a conclusion so contrary to the choices made by the US and Ukraine — says much about neorealism's predictive power.

The neoliberal paradigm provides a blurry alternative to the neorealist explanation, given that much of the evidence employed to support the neoliberal argument can — and has — been used to substantiate neorealist claims. For example, in Part 2, William Perry's talk of "pragmatic" partnership "rooted in self interest", during 1996 testimony to the Russian Duma, could just as easily be utilized in a neorealist explanation. Similarly, Russian Foreign Affairs Committee Chairman Ambartsumov's description of US CTR motivation as "reasonable self-interest" is compatible with neorealism. Having said this, neoliberalism does still present a distinct alternative to the neorealist explanation, at least as regards the first and second problems with neorealism identified above. Firstly, the neoliberal paradigm presents an account of how the CTR program has operated and why both the US and the nuclear inheritor states cooperated in order to safely and securely dismantle former Soviet nuclear weapons. It is the neoliberal observation that "on some security issues, states have substantial mutual interests that can be realized only through institutionalized cooperation" that has proven so germane to the CTR program.

 $\cdot \gamma$

²²⁸ Waltz, Theory of International Politics, p.121-2.

232 Keohane, International Institutions and State Power, p.14-15.

Wendt describes neoliberalism as a "partially competing theory" to neorealism and maintains that "neoliberalism concedes too much to necrealism a priori, reducing itself to the secondary status of cleaning up residual variance left unexplained by a primary theory." *Social Theory of International Politics*, p.3, 35. ²³⁰ "Taking the START II Debate to Moscow", *Arms Control Today*, Vol. 26, No. 8, October 1996, p.18.

Orlov, "Perspectives of Russian Decision-makers and Problems of Implementation", in Shields and Potter (eds), *Dismantling The Cold War*, p.87.

Despite unequal power relations and the evident strength of the US negotiating position, a neoliberal contention that Washington did not dictate the terms of the CTR program and cooperated for mutual gain, can be sustained. A large degree of policy coordination has taken place in order to ensure that the program stayed on track. For example, the US desire to dismantle former Soviet nuclear warheads was obvious from the outset yet Russian officials made clear their opposition. Rather than push the issue and endanger other important CTR projects, Washington chose to fund projects that both sides agreed upon and waited to see if Russian officials would then soften their attitude to warhead dismantlement. Ultimately this proved satisfactory for both sides with the Fiscal Year 1999 CTR budget including money for nuclear warhead dismantlement.²³³ The 'buy American' section of the CTR legislation, which was such a headache for CTR advocates in the inheritor states in their efforts to win over skeptical colleagues, was loosened in 1995 to accommodate indigenous manufacturers who could often provide equipment cheaper and quicker. Although much of the work is contracted to American firms, more Russian, Ukrainian, Kazakh and Belarusian firms are becoming involved in the process. Despite the fact that the US was making huge relative gains by dismantling former Soviet nuclear weapons and providing domestic employment in the process, it was willing to surrender its stranglehold on these benefits in order to satisfy the concerns of the inheritor states that these terms were partial, time-consuming and expensive in the interests of the smooth running of the entire program. CTR assistance has also been used to fund projects that only benefit US interests indirectly. For example, the Arctic cleanup program and the environmental program 'Project Peace' in Belarus produce greater immediate benefits for the former Soviet states than they do for the US. These programs and others like them are borne of an understanding that CTR benefits both sides and the interests of each must be taken into account if the program is to run smoothly and effectively.

Robert Jervis observed that, for neoliberals, cooperation is more likely when large transactions can be divided into smaller ones, when transparency can be increased, when the gains from cheating and the costs of being cheated on are relatively low, when mutual cooperation can be more advantageous than mutual defection and when each side employs strategies of reciprocity and believes the interactions will continue over a extensive period of time.²³⁴ With the exception of the gains and costs (in this case quite high) associated with cheating, which makes CTR

²³⁴ Jervis, "Realism, Neoliberalism, and Cooperation: Understanding the Debate", p.52.

²³³ Nunn-Lugar funding for warhead dismantlement assistance should not be confused with direct US participation in the dismantling of Russian warheads.

that much more remarkable and only serves to strengthen the neoliberal argument, CTR delivered all that neoliberal institutionalists envisage. The CTR regime drastically reduced transaction costs, increased information and made cooperation a much simpler policy to implement.²³⁵ It also corrected some of the misperceptions on both sides, although neoliberals would concede that not all misperceptions can be overcome. The regime is also valuable in that it provides a degree of assurance that agreements, once entered into, will be honoured over an extended period of time. The common interests shared in averting nuclear leakage resulted in a robust regime that averted the eruption of some quite tense political situations, benefited all parties and allowed for the effective (thus far) control of the nuclear leakage problem. In this way it seems to be a remarkably good example of 'military liberalism' which holds that "a primary generator of mutual interests and cooperation among nations may now be military interdependencies. Further, these increased interdependencies are probably a significant facilitator of economic, as well as security, regimes." It is difficult to conceive of a better practical example of this phenomenon.

Neoliberals might suggest that neorealists not only underestimate the capacity of the US and the nuclear inheritor states to coordinate their behavior to realize mutual gain, they also underestimate the bargaining power of the recipients. Russian officials made clear that they could fulfill their dismantlement obligations alone if necessary. The non-Russian states could not afford this luxury but were equally aware that the physical possession of the nuclear weapons the US so clearly wanted returned to Russia bestowed upon them a great deal of short-term bargaining leverage. Paradoxically, the negotiating position of the nuclear inheritor states was strengthened by the impression, whether intended by officials or not, that nuclear security was worse than it actually was.

This is not the only underestimation neorealists make. While neorealists emphasize the emptiness of US security guarantees to the non-Russian states, neoliberals would consider this a much too narrow lens through which to view such

²³⁷ Ibid., p.129.

²³⁵ This is not to say that the provision of information has been perfect. See John Shields, "Conference Findings On The Nunn-Lugar Cooperative Threat Reduction Program: Donor and Recipient Country Perspectives" *The Nonproliferation Review*, Vol.3, No.1, Fall 1995.

According to Zacher and Matthew, 'military liberalism' makes two general arguments. Firstly, military technology and interdependencies are creating greater mutualities of interest in peace and cooperation. Secondly, a reduction in the threat of military violence facilitates international economic cooperation. Mark Zacher and Richard Matthew, "Liberal International Theory: Common Threads, Divergent Strands", in Charles Kegley (ed), Controversies in International Relations: Realism and the Neoliberal Challenge (New York: St Martin's Press, 1995), p.126.

declarations. The military aspect is but one (and not even the most important) calculus of the guarantees' worth. The US guarantees were a political statement of support for Ukrainian, Kazakh and Belarusian nationhood and incurred obligations irrespective of whether the US could deliver militarily, if required. To make open security guarantees in the knowledge that they cannot be kept is a very dangerous policy, given the precedent it would set if exposed. For the US, the guarantees, combined with similar guarantees from Russia, were a statement of shared beliefs amongst the parties and it was expected that these guarantees would be enough, in and of themselves, to deter the use of force.

However, in addition to the ambiguity separating the neorealist and neoliberal explanations of US cooperative behaviour, the neoliberal paradigm suffers from a weakness that also afflicts neorealism, namely its lack of focus on domestic variables. This means it is only capable of explaining part of the picture. A key weakness of systemic theories is revealed if it can be shown that interests are generated by more than systemic factors. This case study demonstrates that the CTR program cannot be fully grasped without an understanding of the fundamental role the US Congress and other domestic factors played in formulating what were the interests of the United States. Therefore, it is necessary to look beyond these systemic paradigms to a theory that takes into account the role of domestic and international factors.

The strength of the constructivist paradigm lies in its apparent ability to explain the creation of the CTR program and why the relationship between the United States and the nuclear inheritor states changed so fundamentally when it did. The cooperative relationship that has developed since 1991 cannot be understood without reference to the ideas that generated it. CTR was the result of the interaction between political and economic turmoil in the (former) Soviet Union and an epistemic community in the United States that not only framed a response, but also interacted with, and entered the policy-making community, to put its ideas into practice. By focusing on systemic conditions, to the exclusion of domestic variables and interests, neorealism and neoliberalism offer radically simplified explanations for the CTR program, which serve to obscure more than they explain.

These shared interests in Cooperative Threat Reduction were not 'exogenously given' as neoliberals would suggest. Rather, the interests were generated (or learned) by new ideas about the US / (former) Soviet relationship which was, in turn, reinforced and sustained by the interaction that resulted.²³⁸ The CTR epistemic community, by

²³⁸ Wendt, Social Theory of International Relations, p.327, 331.

formulating a solution to the nuclear leakage threat that was seen as in the interests of the United States and the nuclear inheritor states, and playing an active role in the US policy-making process, actually succeeded in coordinating behaviour according to common practices that structured and gave meaning to a changed international reality.²³⁹

Similarly, neorealism's understanding of the imperative of anarchy is flawed. The predominantly zero-sum game that characterized the Cold War was not dictated by anarchy. As Kosłowski and Kratochwil have observed, the US is "assessing security threats in a way that goes far beyond the distribution of capabilities and reaches deeper into the domestic politics of all the actors in the system . . . It stretches the imagination to explain the supportive behavior of the United States toward the [former] Soviet Union as 'balancing' in neorealist terms." The CTR program demonstrates that the relationship between the US and the former Soviet states is a function of inter-ubjective meanings privileged by shared ideas, rather than the structural condition of anarchy. These shared ideas form part of the social structure called culture and cultures "are self-fulfilling prophecies that tend to reproduce themselves." By disregarding the role of ideas and domestic influences, systemic theories ignore a critical aspect of the decision-making process, which ultimately leaves them unable to account for change. This is why they cannot adequately explain the CTR program.

On balance, a mixture of (tempered) neoliberalism and constructivism seem to come closest to accounting for the essence of the CTR program. Neoliberal theory presents a sound explanation of how the CTR regime enabled the United States and the nuclear inheritor states to define their preferences in terms of common interests and how the regime, once established, made cooperation more efficient, thereby making the whole CTR process more attractive. However, determining unambiguously whether CTR merely furthered established US interests, as neorealists contend, or actually changed preferences over outcomes, as neoliberals assert, has proven problematic. Constructivist theory seemingly overcomes the weakness inherent in

²³⁹ Adler, "The emergence of cooperation", p.104.

²⁴¹ Wendt, Social Theory of International Politics, p.309.

²⁴⁰ Koslowski and Kratochwil, "Understanding Change in International Politics", p.132-3, 131-2. Koslowski and Kratochwil's critique of neorealism seems right on the mark in relation to CTR. However, with regard to NATO expansion, the author finds this claim much more contentious. For a neorealist account of the dangers inherent in NATO expansion, particularly with regard to the alienation of Russia, see Waltz, "Structural Realism after the Cold War", p.22, 37.

systemic theories by providing an explanation of how domestic and international factors interact to presage change. If one accepts the neoliberal explanation of CTR outlined above, the interaction between unit-level and systemic factors is critical to the case study because the CTR program is radically different from any arms control or cooperative venture practiced during the Cold War and was initiated by a small number of Congressmen assisted by a group of academics at Harvard University. Thus constructivism provides the missing link between domestic and international politics and demonstrates how ideas, given the right systemic conditions, can generate interests. This is precisely what the CTR program from 1991 to 1996 was about. However, if one is persuaded by the neorealist argument, neoliberalism and constructivism only serve to obfuscate the real dynamics at play, namely the overwhelming power imbalance between the United States and nuclear inheritor states and the resultant ability of the United States to achieve its goals: denuclearise Ukraine, Kazakhstan and Belarus (irrespective of the preferences of these states), reduce the nuclear threat from Russia and minimize the danger of nuclear leakage.

Irrespective of which (if any) theoretical account one chooses to accept, the ex post facto explanations presented here provide somewhat 'loose' fits for the CTR case study. This demonstrates the difficulty theories of international relations confront when applied to specific cases. While this does not invalidate such theories, it does reveal their limitations.

Conclusion

At the outset, this thesis proposed to answer two questions. First, what role has Congress played in the development of Washington's CTR policies? Second, which of the three dominant strands of international relations theory has the most explanatory power regarding US CTR policies? In this conclusion, the answers to those questions will be recapitulated and some tentative observations about the implications of CTR for future Congressional forays into US nuclear weapons and arms control policy will be suggested. Before this, it is necessary to briefly reiterate what Cooperative Threat Reduction is and where it is going.

Cooperative Threat Reduction

In 1976 General Maxwell Taylor, former Chairman of the Joint Chiefs of Staff, lamented that it would be "a happy day if Congress and the general public would agree to regard national security in all its aspects as a form of insurance for which an annual premium must be paid, of a size related to the value of the assets protected." CTR—by assisting the Soviet nuclear inheritor states to safely and securely store and dismantle nuclear weapons—offers a unique opportunity for the United States government, Congress and public to see their 'insurance premiums' in action, at a fraction of the price envisaged by Taylor, and without requiring real-time footage of cruise missile strikes from CNN. CTR's premiums, annually less than one-fifth of one per cent of the defence budget and directly deductable through contracts for US business, offer huge payoffs, with results that are "tangible, observable, and even, in some cases, immediate." Happily for the late former Chairman, Congress has been the driving force behind this program.

Conceived in 1991 as a response to the potential leakage of nuclear weapons, materials and expertise from the former Soviet Union and initially focused "on the funding of short-term requirements", CTR steadily expanded since its inception. Its major achievement, within the parameters of the case study presented here, was the

¹ General Maxwell Taylor, *Precarious Security* (New York: W.W. Norton and Company, 1976), p.87-8.

² Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, Cooperative Threat Reduction (Arlington, VA: Cooperative Threat Reduction Program Office, Department of Defense, April 1995), p.1.

³ Jason Ellis, "Nunn-Lugar's Mid-Life Crisis", Survival, Vol. 39, No.1, Spring 1997, p.87.

denuclearisation of Ukraine, Kazakhstan and Belarus.⁴ The return to Russia of tactical and strategic nuclear warheads located in these countries was an urgent objective for the Nunn-Lugar program and its successful completion by the end of 1996 avoided "what would otherwise have been the biggest burst of proliferation in Atomic Age history."⁵

CTR Postscript

Since 1996, the end of the case study period, CTR has continued to pursue its core missions of safely and securely dismantling former Soviet nuclear weapons and related equipment and has also expanded into new areas. Some of the more significant accomplishments to date include assistance to Russia, Ukraine, Kazakhstan and Belarus to eliminate four hundred and twenty two ICBMs and three hundred and sixty seven ICBM silos; to deactivate five thousand three hundred and thirty five nuclear warheads; to eliminate eighty three bombers as well as four hundred and twenty five long-range air-launched cruise missiles; to destroy eighteen ballistic missiles submarines as well as one hundred and eighty four submarine-launched ballistic missiles; to provide more than one thousand houses and apartments for demobilized Strategic Rocket Forces officers and their families; to provide more than fifteen thousand scientists and engineers with civilian employment; to foster more than six hundred defence and military contacts between the US and the four inheritor states; to provide equipment and services to enhance security at nuclear weapons and materials storage sites; and to provide equipment and services to develop nuclear export controls.6

Observers have touted CTR as a model for US involvement in other current and future nuclear proliferation challenges. See, for example, Leon V. Sigal, *Disarming Strangers: Nuclear Diplomacy With North Korea* (Princeton, NJ: Princeton University Press, 1998), p.4. However, government officials and Congressional staffers interviewed for this thesis expressed the belief that while successful, CTR cannot simply be transplanted onto other proliferation cases. Interviews, Washington, D.C., March 5-13 1998.

Ashton Carter and William Perry, Preventive Defense: A New Security Strategy for America (Washington, D.C.: Brookings, 1999), p.76. In order to qualify for Nunn-Lugar assistance, Ukraine, Kazakhstan and Belarus were required to ratify START I and the NPT (as non-nuclear weapon states). In practice, however, the Ukrainian CTR umbrella agreement, providing the legal framework for assistance, was signed in October 1993 despite the fact that START I was ratified in February 1994 and the NPT acceded to in November 1994. Kazakhstan formally acceded to the NPT two months after the umbrella agreement was signed and Belarus ratified START I and the NPT one month after its umbrella agreement was signed.

⁶ All information is taken from Defense Threat Reduction Agency: Cooperative Threat Reduction Scorecard, February 15 2001 http://www.dtra.mil/ctr/ctr_score.html Accessed 22/06/01; CTR-Accomplishments, July 14 1993 http://www.ctr.osd.mil/03accomp.htm Accessed 14/07/99; and Department of Defense, Cooperative Threat Reduction Briefing Book, 'CTR Funding Status', 30.6.97.

In addition to increasing the number and scope of projects funded, in 1997 five new states joined the program.⁷ Although the provision of assistance was scheduled to end in 2001, CTR advocates have been busy laying the groundwork for an extension of the deadline. This effort was given a significant boost in June 1999 with the signing of a protocol between the US and the Russian Federation extending CTR through June 2006 and the signing of a protocol between the US and Ukraine extending CTR through to December 31 2006.⁸ Similarly, the Clinton Administration demonstrated the importance it attached to Nunn-Lugar activities by launching, in January 1999, the "Expanded Threat Reduction Initiative". This initiative was designed to highlight and expand existing programs, rather than create new programs.⁹

Despite these achievements, there is still much work to be done. ¹⁰ The process of securing 'loose' fissile material all over the former Soviet Union is considere the number one priority for CTR and related assistance in the coming years. In the case of Russia, the US Department of Energy had previously expected assistance to be complete by 2000:

By this time the Russian economic situation was supposed to pick up, and we were supposed to have basically solved the problem and be ready for a hand-off to the Russian side. But this is just not the case. Part of it is economic crises in Russia. Part of it is the fact that we found the problem is a lot bigger than we predicted in 1994. . . [W]e are now looking at 55 sites overall, but within those sites we keep discovering new buildings.¹¹

⁷ These states were Georgia, Krygystan, Moldova, Turkmenistan and Uzbekistan. Emphasis was placed on assisting these countries to improve border controls, safeguard material and technology related to weapons of mass destruction and to foster defence and military contacts. CTR-Program Objectives, July 14 1999 http://www.ctr.osd.mil/02object.htm Accessed 14/07/99.

⁸ US Department of Defense Press Release No. 307-99, "United States and Russia Extend Nunn-Lugar Cooperative Threat Reduction Agreement", reproduced in Programme for Promoting Nuclear Non-Proliferation, *PPNN Newsbrief*, No. 46, 2nd Quarter, 1999, p.30; Craig Cerniello, "U.S., Ukraine Extend CTR Program", *Arms Control Today*, Vol. 29, No. 5, July/August 1999, p.24.

[&]quot;William Hoehn, "Analysis of the Bush Administration's Fiscal Year 2002 Budget Requests for U.S.-Former Soviet Union Nuclear Security: Department of Energy Programs", April 18 2000 http://ransac.org/new-web-site/index.html Accessed 22/06/01.

Some of these problems are discussed in greater detail in Carter and Perry, *Preventive Defense*, p.77-82. Presentation of Rose Gottemoeller, Carnegie Endowment for International Peace, Project Proliferation Roundtable, April 18 2000 http://www.ceip.org/files/events/Gottemoeller42099.asp?p=8 Accessed 10/10/00.

Oleg Bukharin, Matthew Bunn and Kenneth Luongo projected that by the end of 2000, security and accounting upgrades would have been completed "for only one fifteenth of the nuclear material outside weapons in the former Soviet Union", of which 99% is located in Russia. The current Russian 'fissile material inventory' has been estimated at more than 1,000 metric tons of highly enriched uranium (HEU). 90% of which is U-235 equivalent, and more than 160 metric tons of plutonium. According to the authors:

Roughly half of this material has been fabricated into warhead components and is associated with deployed, reserve or retired intact nuclear weapons. Except for those awaiting dismantlement at Minatom facilities, these intact weapons are under the control of the Ministry of Defense. The rest, approximately 650 t (metric tons) of HEU and plutonium, is stored, processed, and used in more than 300 hundred buildings at over 50 sites operated by Minatom (warhead production, fuel cycle, and research facilities), the Navy (naval fuel storage facilities), and other institutions (research reactors, laboratories, and civilian nuclear icebreakers). These inventories are not static. Tens of tons of fissile materials are recovered annually from dismantled nuclear weapons. Russia also continues to separate one to three tons of weapon and reactor grade plutonium. Tens of tons of HEU is disposed of annually under the 1993 U.S.-Russian HEU agreement (81 tons as of spring 2000) and some HEU is used in reactor applications.¹⁴

Of comparable import to the fissile material problem, continuing to ensure that former Soviet weaponeers are not persuaded to sell their expertise to the highest bidder requires many more years of US assistance. The potential 'brain-drain' is reflective of a bigger problem in Russia, namely the economic crisis. Russia's economy appears to

¹² Bukharin, Bunn and Luongo, Renewing The Partnership: Recommendations for Accelerating Action to Secure Nuclear Material in the Former Soviet Union, Russian American Nuclear Security Advisory Council (RANSAC): Princeton University, Princeton NJ, August 2000, p.3. On the sites beyond Russian borders see Department of Energy, MPC&A Program: Strategic Plan (Washington, D.C.: Office of Arms Control and Disarmament, January 1998, p.10-11, 17.

¹³ Bukharin, Bunn and Luongo, Renewing The Partnership, p.6.

¹⁴ *Ibid.*, p.6-7. In relation to the dispute between DoE and the GAO as to the precise extent of MPC&A upgrades in the FSU, the authors remark: "It is clear, however, that any objective assessment would show that after six years of effort, the vast majority of the needed work remains to be done." *Ibid.*, p.11.

be improving only marginally.¹⁵ From a military perspective this is extremely worrying. Wages cannot always be paid and the safety of Russian nuclear facilities and nuclear weapons is still less than certain.¹⁶

Ironically, one of the greatest threats to efforts to resolve these outstanding problems is the same institution most responsible for the establishment of the assistance program: the United States Congress. Indeed, in what would be comic were its implications not so serious, the Congressional reaction to lax security practices at US nuclear facilities has the potential for that same institution to preside over the demise of one of the most effective threat reduction projects: the US-Russian lab-tolab collaborative program. Representative Jim Ryun (R-KS) introduced the Department of Energy Foreign Visitors Program Moratorium Act of 1999, Richard Shelby (R-AL) introduced similar legislation in the Senate. If passed into legislation, the moratorium would prohibit visits by scientists and officials from 'sensitive' nations to US nuclear labs. According to Toby Dalton, the US-Russian lab-to-lab programs "have been sustained by the ability of the United States to offer Russian scientists and officials access to unclassified areas at US laboratories. In return, US scientists have been able to visit and work in formerly secret areas of Russia's nuclear weapons complex."17 By restricting Russian access to US facilities, legislators run the risk of placing in jeopardy the CTR-related programs that work to prevent leakage from sensitive Russian nuclear sites.

The apparent trajectory of the George W. Bush Administration's nuclear nonproliferation thinking make the tendencies described above much more likely to manifest themselves into US policy, given the intention of the White House to cut back funding for Russian CTR and CTR-related programs.¹⁸ Maintaining CTR funding

¹⁵ See, for example, Lee Wolosky, "Putin's Plutocrat Problem", Foreign Affairs, Vol. 79, No.2, March / April 2000, p.18-31. For a discussion of the state of the Russian economy and a very "hands off" US response see Clifford Gaddy and Barry Ickes, "Russia's Virtual Economy", Foreign Affairs, Vol. 77, No.5, September / October 1998, p.53-67.

To give only one example of the depressed state of Russian nuclear forces: for almost three months from May 1998, the Russian navy could not put to sea a single operational SSBN. According to the International Institute for Strategic Studies, "[a]part from a brief stretch of around a week in 1996, this is the only prolonged period in which there has been no Russian SSBN at sea since the SSBN force became operational in 1960."International Institute for Strategic Studies, *The Military Balance*, 1998/99 (London: Oxford University Press, 1998), p.102.

¹⁷ Toby Dalton, "U.S.-Russia Programs Survive Kosovo, But Now Face Congressional Threat", Carnegie Endowment for International Peace, Non-Proliferation Project, Proliferation Brief, Vol. 2, No. 9, May 5 1999 http://www.ceip.org/files/Publications/ProliferationBrief209.asp?p=8 Accessed 10/10/00.

¹⁸ See "Newsbriefs: White House Budget Seeks Threat Reduction Cuts" *Arms Control Today*, Vol. 31, No. 4, May 2001, p.26; and Hoehn, Analysis of the Bush Administration's Fiscal Year 2002 Budget Requests for U.S.-Former Soviet Union Nuclear Security: Department of Energy Programs, April 18 2000 http://ransac.org/new-web-site/index.html Accessed 22/06/01.

Administration reportedly placing a higher priority on upgrading aging US nuclear-weapon plants than strengthening projects to avert potential nuclear leakage from Russia is an increasingly difficult proposition. ¹⁹ Understanding how Congress created and influenced CTR during the critical first five years of its life is a key to appreciating why maintaining the Nunn-Lugar budget today is more difficult than it once was.

Congress and CTR

Chapter I demonstrated that Congress's role in the development of US nuclear policy from 1945 to 1991 was predominantly reactive. In contrast to much of US nuclear policy during the Cold War, which originated in the White House, CTR was a program formulated and driven by a small number of influential senators. The Congressional influence can be explained by both circumstance and the personalities of the senators involved.

As highlighted in Chapter 2, the August 1991 coup seemed to confirm the fears of those concerned with the Soviet leadership's ability to exercise responsible command and control over its nuclear arsenal. However, with the end of the Cold War and an impending presidential election that would focus on domestic issues, the Bush Administration was unwilling to launch a major foreign assistance program. It was into this vacuum that senior Congressmen, Democrats and Republicans, worried by the prospect of nuclear leakage, stepped. The key players — men such as Sam Nunn, Richard Lugar, Les Aspin, John Warner, Strom Thurmond, Claiborne Pell and Joseph Biden — brought with them a wealth of experience in foreign affairs. Aspin and Nunn, in particular, were probably the foremost experts on defence policy in Congress. This impressive assemblage cast a long shadow on Capitol Hill. According to insiders, when Strom Thurmond "got on board", this "basically shut the coffin on big attacks on CTR in the Senate" and, in any case, no-one was willing to "go to the mat" with Congressmen of Nunn, Lugar and Aspin's stature on a program they had made their own.²⁰

The lack of partisan politicking within Congress as a whole during Nunn-Lugar's formative years was also facilitated by Democratic control of both Houses. Although this was good while it lasted, the backlash that followed on the heels of the

²⁰ Interviews, Washington, D.C., March 9, 13 1998.

¹⁹ Programme for Promoting Nuclear Nonproliferation, *PPNN Newsbrief*, No. 53, 1st Quarter, 2001, p.2.

'Republican revolution' in November 1994 was predictably severe, Similarly, a Democrat stranglehold over foreign policy appointments when Bill Clinton took office ensured an 'institutional divide'. There was very little effort to work with, or even consult, Republican members when the Clinton team was being assembled. When the Democrats lost control of both Houses, the Republicans were determined to 'hurt' Clinton; to give him a 'black eye' on foreign policy issues — a field the GOP had traditionally considered its own. Republicans had plenty of ammunition with which to attack Clinton, given a decidedly negative perception of the President's first term foreign policy performance. First term foreign policy performance.

This institutional divide was further exacerbated by the fact that, in general, Democrats and Republicans viewed the objectives and instruments of defence and nuclear proliferation very differently. Democrats, more specifically 'Clintonites', liked policies that included the word 'cooperation', so nuclear threat reduction was relatively easy to sell to a Democratic Congress. Many Republicans saw proliferation as a military, rather than diplomatic, problem. For this reason, while Republicans might have agreed with the core concepts of nuclear threat reduction, they often did not like the practice.²³

William Perry, one of the architects of the CTR program, has argued that Cooperative Threat Reduction builds on the core beliefs that underpinned the 1947 Marshall Plan, namely that "the United States must remain a global power and that the best security policy is one that prevents conflict." Indeed, this was not the only similarity between the post-Second World War period and the post-Cold War period. The promotion of Nunn-Lugar resembled the 'flamboyant rhetoric' that was included in the 1947 Truman Doctrine. Referring to this Presidential proclamation of containment in the wake of the Second World War, George Kennan remarked that "no policy and no concept [will] . . . stick in our government unless it can be drummed into

²¹ Interview, Washington, D.C., March 9, 1998. This motivation has also been attributed, in part, to the Senate's rejection of the Comprehensive Test Ban Treaty. See, for example, comments of Spurgeon Keeny and John Isaacs in "Damage Assessment: The Senate Rejection of the CTBT", *Arms Control Today*, Vol. 29, No. 6, September/October 1999, p.9, 12.

²² See, for example, Larry Berman and Emily Goldman, "Clinton's Foreign Policy at Midterm", in Colin Campbell and Bert Rockman (eds), *The Clinton Presidency: First Appraisals* (Chatham, N.J.: Chatham House Publishers, 1996), p.304-6.

²³ Interviews, Washington, D.C., March 5, 9, 1998.

²⁴ William Perry, "Defense in an Age of Hope", Foreign Affairs, Vol. 75, No.6, November/December 1996, p.66.

The description of the Truman Doctrine's "flamboyant rhetoric" is taken from Joseph Nye, "The Domestic Roots of American Policy", in Nye (ed), *The Making of America's Soviet Policy* (New Haven: Yale University Press, 1984), p.7.

the minds of a very large number of persons, including quite a few whose mental development has not advanced very far beyond the age which is said to be the criterion for the production of movies in Hollywood."²⁶ Kennan may well have concurred with William Potter and Kenneth Luongo, who hoped that the 1997 film *The Peacemaker* would generate sufficient public interest in the nuclear leakage problem to elicit an intensified government response.²⁷

While the description offered above may have been a little extreme, lack of understanding, largely resulting from lack of interest, has been one of the most enduring features of Congress's involvement in the CTR program. This was evident as early as November 1991 with the publication of *Soviet Nuclear Fission*. It was hoped that the study would be sufficiently alarming to energize apathetic Congressmen and galvanize Congress as a whole behind the nuclear threat reduction effort. However, this proved largely unsuccessful. Although it did have an impact on Congressmen sympathetic to the threat of nuclear leakage in the Soviet Union / FSU, for the majority of Congress, the Nunn-Lugar program remained poorly understood and of minimal interest anyway. Every year the Congressional Research Service received telephone calls from staffers asking, "How much money do we give to Russia?" Government and Congressional advocates mounted a dedicated campaign to explain that Nunn-Lugar did not provide cash grants²⁹, rather it provided contracts for goods and services, 94-95 % of which went to US business. Despite this effort, a large proportion of Congress remained ignorant of what CTR was and how it worked.

Many members of Congress continued to link nuclear threat reduction with foreign aid. This proved to be a particularly difficult criticism to combat, given traditional public and Congressional resistance to foreign aid programs. Conservative Wyoming Republican Senator Malcolm Wallop's observation, in late 1991, that he didn't know anybody in his state who would want to spend \$500 million on the Soviet

²⁶ Quoted in John Lewis Gaddis, Strategies of Containment (Oxford: Oxford University Press, 1982), p.52.

John Barry, "Reality Check", *The Bulletin*, October 7 1997, p.72. See also Opening Statement of Chairman Curt Weldon in "Nuclear Terrorism and Countermeasures", *Hearing before the Military Research and Development Subcommittee of the Committee on National Security*, House of Representatives, One Hundred Fifth Congress, 1st Session, October 1 1997, p.1-2.

²⁸ Interview, Washington, D.C., March 5, 1998.

The single exception to this was a payment of \$1.5 million after warheads had been transported from Ukraine to Russia. The US relationship with the Nuclear Weapons (Twelfth) Main Directorate of the Russian Ministry of Defence was not mature enough to allow for the US to negotiate directly with the rail company so the amount was paid after receipts from the rail company for the cost of shipping were given to the US. Department of Defense, CTR Background Briefing, Washington, D.C., March 13, 1998.

Interview with a Senate staffer, Washington, D.C., March 10, 1998.

Union for any reason³¹, captured the mood succinctly. It was precisely this misunderstanding that Les Aspin was trying to dispel by referring to Nunn-Lugar not as foreign aid but rather as "defense by other means", as was William Perry, who described CTR as 'preventive defense'.³² At an August 1995 conference of officials and technical experts from the nuclear inheritor states and the US, one participant observed that there was "something wrong" when Congressional leaders could vote down CTR spending and then argue that none of their cuts affected national security.³³ In 1996 the publication of *Avoiding Nuclear Anarchy* was still considered necessary to make the problem known. The thrust of the book was to stress that the USSR's security arrangements had been designed to thwart an intruder while the real problem, brought on by the political and economic situation in Russia, was of an insider smuggling material out. Although advance reviewers of the book warned that the material would antagonize the Russians, it was considered necessary to scare Congress into action.³⁴

Some of the blame for this state of affairs has been attributed to the Clinton Administration. Several close observers have argued that the Administration leadership failed to make CTR a *real* priority and this contributed to the lack of understanding in Congress. For example, former Vice-President Al Gore's preoccupation with the Gore-Chernomyrdin Commission was to the detriment of Cooperative Threat Reduction.³⁵

Lack of understanding has also been exacerbated by the huge turnover rate in Congress, particularly in the wake of the 1994 'Republican revolution'. The influx of new members dramatically shortened the time Congressmen had to familiarize themselves with the issues they were to confront. For some, this meant only a very currory look at the nuclear threat reduction program, but for many it was one issue

Ouoted in Phil Duncan (ed), Politics In America 1994: The 103rd Congress (Washington, D.C.: Congressional Quarterly Inc., 1993), p.1690.

³³ John Shields, "Conference Findings on the Nunn-Lugar Cooperative Threat Reduction Program: Donor and Recipient Country Perspectives", *The Nonproliferation* Review, Vol. 3, No. 1, Fall 1995, p.73.

³² Perry's analogy ran as follows: "As preventative medicine creates the conditions that support health, making disease less likely and surgery unnecessary, so preventative defense creates the conditions that support peace, making war less likely and deterrence unnecessary." Perry, "Defense in an Age of Hope", p.65.

Interview, Cambridge, M.A., March 26, 1998.

Interview, Washington, D.C., March 13, 1998. However, the Gore-Chernomyrdin Commission did relate to CTR in that several programs complemented CTR activities. See Gore-Chernomyrdin Commission on Economic and Technological Cooperation, "Agreement between the Department of Energy of the United States of America and the Federal Nuclear and Radiation Safety Authority of the Russian Federation to Cooperate on National Protection, Control, and Accounting of Nuclear Materials", June 30 1995

http://www.eia.doc.gov/gorec/goe16.html Accessed 03/10/97.

among many more important ones and members simply did not have the time, even if they had the inclination, to get 'up to speed' on everything. It is at this point that the Congressional staff become critical. It is their job to inform their bosses of the issues. If the staff are not interested, and the Congressmen do not actually request information personally, the members will not be informed. This is why programs such as Nunn-Lugar, if not of direct interest, are simply ignored in large part. Of course these time-allocation decisions also apply to senior members. According to a staffer for one senior Senator, while nuclear threat reduction was a big issue for Nunn, Lugar and Domenici, it was relatively low on the list of priorities for everyone else.³⁶

In addition, most members of Congress did not understand the technicalities of the nuclear threat reduction program. Nunn-Lugar was originally intended to assist Russia to safely and securely transport tactical nuclear warheads from all over the FSU to Russia. The US initially considered the dispersal of tactical nuclear weapons to be one of the most urgent nuclear leakage problems in the wake of the collapse of the USSR. The fact that Russia actually retrieved these weapons before any assistance had been provided seems to have been totally lost on Congress.³⁷ Similarly, one of the core missions of CTR funding has been to assist in the destruction of strategic nuclear delivery vehicles, yet the Russian ability to destroy four hundred strategic launchers before US assistance even began to arrive seems not to have generated even a murmur in Congress. Advocates were right to emphasize that CTR funding assisted a process that the Russians were already undertaking, making it safer and faster. However, the fact that Russia was able to complete parts, or in the case of tactical weapons, all of specific nuclear threat reduction projects without US assistance was more a testament to lack of understanding of the workings and objectives of Nunn-Lugar than to a broad Congressional endorsement of the program's smooth running. In retrospect, this lack of understanding was a blessing in disguise. Greater understanding may have led to potentially damaging attacks on the program during its fragile formative years. It was already being attacked for not producing results or spending all of the money that Congress had appropriated and further criticism may have led to funding reductions.

Even for those who did understand how the program would work in practice, many shared 'massively wrong expectations' on CTR. Congress had a vision that

36 Interview, Washington, D.C., March 6, 1998.

Russia's ability to retrieve these weapons without US assistance did not signify that CTR was unimportant. Rather, the concern with former Soviet tactical nuclear weapons reflected what many (both Americans and Russians) perceived to be the most immediate threat. CTR's real strength was in providing assistance to ensure the safe dismantling and securing of strategic nuclear weapons and nuclear materials.

Russia would simply 'open its doors' to US officials who would 'wrap their arms around warheads', and members were genuinely surprised when this proved not to be the case at all.³⁸ Russia made very clear that it neither needed nor wanted US assistance in the warhead dismantlement process.³⁹ Most members of Congress did not have enough of a grasp on the program to make the subtle distinction between nuclear weapons and warheads, an understandable mistake given the ambiguous Nunn-Lugar legislation.⁴⁰

Though some of the Nunn-Lugar budget debates were bruising and the need to sell Nunn-Lugar to a largely uninformed and ambivalent Congress as good for US business was painfully repetitive, there was a great deal of truth in the argument that CTR was not big enough to attract the sustained opposition generated by some of the 'big-ticket' defence programs, such as ballistic missile defences and the B-2 bomber. In the words of one very close observer of Congress and CTR: "Nunn-Lugar is a debating point, not a vote-winner."

That CTR was not considered a vote-winner was, in part, a function of its dollar value. The relatively small price tag shielded Nunn-Lugar from the most acrimonious and often internecine Congressional attacks, but this came at a cost. The result of avoiding such controversy was the corresponding reduction in CTR bargaining power and effectiveness in the main target state. As Jonathan Clarke observed, "American aid . . . represents an insignificant proportion of the total Russian economy — certainly not enough to persuade the Russians to cancel lucrative contracts with Iran." Dissuading the Russian government from entering into defence contracts that conflict with US non-proliferation goals relied on greater incentives than CTR alone.

Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, Cooperative Threat Reduction, p.16.

³⁸ Interview, Washington, D.C., March 5, 1998.

⁴⁰ According to one official, the average member of Congress knows nothing about nuclear weapons. Most members did not get the distinction between weapons and warheads at the time and still do not. Interview, Washington, D.C., March 9, 1998. This belief in a general Congressional lack of understanding was shared by the vast majority of staffers interviewed.

The view that Nunn-Lugar has avoided much of the sustained opposition that has surrounded other programs because of the issue's salience for key Senators as well as the relatively small amount of money involved was confirmed in interviews conducted in Washington, D.C. on March 5, 1998 and at Harvard University in Cambridge, MA on March 25, 1998. However, one close observer argued that a line item of \$400 million annually was 'too large to ignore.' Interview, Harvard University, Cambridge, MA, March 26 1998.

⁴² Interview, Washington, D.C., March 5, 1998.

⁴³ Jonathan Clarke, "Leaders and Followers", Foreign Policy, Winter, 1995-96, p.47.

While the price tag may have been small, it was not too small to prevent a certain amount of pork-barreling. Despite an understandable reluctance on the part of Congressional staffers to discuss pork-barrel politics and very little discussion of the back-room deals in published sources⁴⁴, pork-barreling did occur and this was confirmed in interviews. With less 'wealth to spread around' than DoD's more expensive weapons programs⁴⁵, CTR's domestic appeal was always going to be limited, but this did not stop advocates promoting the pork-barrel aspect. Based on the Nunn-Lugar literature and interviews conducted by the author with Congressional staffers, it appears that the majority of Congressmen and women who understood and supported Nunn-Lugar were swayed more by the national security dimensions of the program than by the promise of CTR contracts in their electorate. Having said this, it is not particularly surprising that some of the most enthusiastic supporters of specific Nunn-Lugar projects represent the same districts that stand to benefit from the contracts that those projects generate.⁴⁶

Another factor working in favour of CTR was the politically adroit and practically sensible decision to involve several Departments beyond DoD in the program, including Energy, State, Commerce, Treasury, Justice, the CIA and the FBI. This built up institutional interests in CTR and granted Congress a wide jurisdiction over the various programs. 'Balkanisation', as the division of responsibility became known, was also welcomed by DoD and the Armed Services Committees, who refused to write cheques for other Departments. While small, these institutional interests were jealously guarded in an atmosphere of domestic priorities and pressure to reduce the defence budget. Indicative of this were proposals by the Department of Energy, and its leading spokesman Senator Pete Domenici, to carve out a contemporary role for DoE in the changing, and steadily shrinking, nuclear weapons industry.

⁴⁴ Ashton Carter makes reference to a deal Sam Nunn brokered to garner Congressional support for the 1991 legislation, but does not elaborate. Carter and Perry, *Preventive Defense*, p.72.

⁴⁵ For example, in 1992 the US Air Force planned to purchase 20 B-2 bombers at \$2.3 billion per plane. Robert Norris, "Nuclear Notebook: The Midas Touch", *The Bulletin of the Atomic Scientists*, December 1992, p.57.

⁴⁶ For example, in addition to the DoE labs located in the home state of Senators Domenici and Bingaman, mentioned in Chapter 4, Senator Ted Stevens of Alaska is one of the leading supporters of the Arctic Waste Clean-Up Project.

⁴⁷ Interview with a former senior DoD official, March 26, 1998.

For example, Department of Energy, MPC&A Program: Strategic Plan; Department of Energy, "Technology for Nonproliferation". Demonstration of Nonproliferation Technology for Congress, Washington, D.C., 11 March 1998; Senator Pete Domenici, "The Domenici Challenge", The Bulletin of the Atomic Scientists, Vol.54, No.2, March/April 1998, p.40-44.

International Relations Theory and CTR

As demonstrated in this thesis, CTR cannot be understood, except at a very superficial level, without an appreciation of the decisive role of Congress. This poses some very interesting questions for the study of inter-state behaviour and has implications beyond the empirical conclusions concerning Congress as an actor in US national security policy expounded below. Rather than summarizing Chapter 5 in its entirety, this section recapitulates the main weaknesses of neorealism and juxtaposes them with the strengths of the competing theories.

The Nunn-Lugar program embodied a significant change in the US-Russian nuclear relationship and this presents problems for neorealist theory. Robert Keohane has observed that Waltzian neorealism "does not point out 'new ways of seeing' international relations that point toward major novelties", and novel is a good description of CTR. A neorealist account of the CTR program is susceptible to three criticisms: reliance on a balance of power argument that overstates the degree to which the US dictated the terms of cooperation and the recipients acquiesced; a misreading of the US-Russian relationship since the collapse of the Soviet Union; and an inability, albeit by design, to account for the very important role played by the US Congress in shaping the CTR program. As mentioned earlier, another problem with neorealism (although falling outside the focus of this thesis) is that it fails to explain why the non-Russian nuclear inheritor states, in the interests of power balancing, abandoned nuclear weapons.

Focusing simply on policy outputs, neorealism's explanation of why the US and the nuclear inheritor states behaved as they did may be questioned. The contention, which fits into a neorealist mould, that all of the cooperation was done by the nuclear inheritor states and that the US could dictate the terms of that cooperation serves only to generalize — misleadingly — the essence of the CTR program and what it has achieved according to a neoliberal institutionalist reading. A neoliberal explanation would emphasize that the cooperative relationship between the US and the nuclear inheritor states of the former Soviet Union both assisted the nuclear threat reduction process and fed back to foster closer ties between officials of the US, Russia,

⁴⁰ Robert Keohane, "Theory of World Politics: Structural Realism and Beyond", in Keohane (ed), Neorealism and Its Critics (New York: Columbia University Press, 1986), p.175.

Belarus Kazakhstan and Ukraine. The US provided Nunn-Lugar assistance to the nuclear inheritor states that was, at times, far more valuable to the latter. For example, programs such as MPC&A, which strengthen security at fissile material storage sites, the Industrial Partnering Program (IPP)⁵⁰, which matches former Soviet nuclear weapons labs with US businesses to generate self-sustaining civilian projects and the science and technology centers, which employ former Soviet scientists and engineers on civilian projects. Equally, the process by which CTR projects were selected was consensual. For neoliberals, policy coordination, rather than US decree, most accurately explains CTR.

The challenge to neorealism runs deeper than just CTR, however. Waltz claims that "the quality of international life has remained much the same. States may seek reasonable and worthy ends, but they cannot figure out how to reach them." If one accepts the neoliberal institutionalist description of a CTR regime and the constructivist explanation of interests being constituted by new ideas about how to manage the nuclear leakage problem, one must concede that the relationship between the US and the nuclear inheritor states (the US and Russia in particular) has undergone significant change. In contrast to the Waltzian prediction offered above, the US and the nuclear inheritor states not only figured out how to reach worthy ends, they achieved those ends.

While the neorealist explanation of how CTR operated is problematic, it potentially offers some behavioural insights quite unanticipated by the author. Although beyond the scope of this thesis, neorealism seems to provide the signposts to an explanation of why many members of Congress chose to support or oppose the program. When extolling the virtues of CTR, supporters mentioned first and foremost the national security benefits, or relative gains, to the US. Senator Joseph Biden's declaration — "We are not assisting the Soviet Union. We are assisting ourselves." — was representative of a perception that many Congressional CTR supporters seemed to hold about the program and its virtues. CTR opponents constructed their arguments along very similar lines. ⁵³ It is unclear to what extent the *Dramatis*

⁵⁰ The Industrial Partnering Program was renamed the Initiatives for Proliferation Prevention Program in the spring of 1996.

⁵¹ Kenneth Waltz, Theory of International Politics (New York: Random House, 1979), p.110.

⁵² John Isaacs, "Bush whacked by Wofford win", *The Bulletin of the Atomic Scientists*, January/February 1992, p.4.

⁵³ For example, Representative Gerald Solomon's charge that the Russians were diverting Nunn-Lugar funds to nuclear weapons modernization programs. Jason Ellis and Todd Perry, "Nunn-Lugar's Unfinished Agenda", *Arms Control Today*, Vol. 27, No. 7, October 1997, p.19.

Personae were even aware of the theoretical motivations for their actions but, as Robert Keohane has observed, the "choice for practitioners is not between being influenced by theory or examining each case 'on its merits': it is rather between being aware of the theoretical basis for one's interpretation and action, and being unaware of it."⁵⁴ Of course it is impossible to claim that Congressmen and women were motivated by neorealist concerns with certainty because it would have been necessary to conduct very specific interviews with Congressmen and women and this was never part of the author's research agenda. The research does suggest, however, that the rationales for CTR decision-making amongst members of Congress is an avenue for further study.

Neorealism and neoliberal institutionalism's mutual weakness is their acknowledged inability to account for the influence of domestic factors, in this case Congress, which proved to be the driving force behind the CTR program. Given the central role ascribed to Congress in this thesis, a structural theory *necessarily* ignores an essential part of the story. It is at this level of analysis that constructivism can be of assistance. By emphasizing the importance of ideas in defining and instantiating interests, as well as the impact elites have on the formation of these, constructivists offer critical insights about how a small number of Congressmen crafted a program to address what they considered to be an urgent national security threat and why this program had such an impact on US policy.

Similarly, the particular ideas of Nunn, Aspin, Lugar, Carter and Perry, among others, were critical for the development of CTR. Other people would have advanced different ideas and the relationship between the US and the nuclear inheritor states would have been different to the case study analyzed in this thesis. Constructivism provides a persuasive explanation of how certain ideas, specifically the nuclear threat reduction program legislated in 1991, combined with systemic change to generate a new concept of interests, which altered US policy. This allows one to obtain a more complete picture of the CTR program by showing how domestic and systemic factors interact. It also explains why the US-FSU nuclear relationship changed so radically in

⁵⁴ Keohane, "Realism, Neorealism and the Study of World Politics", in Keohane (ed), *Neorealism and Its Critics*, p.4.

⁵⁶ See Jeffrey Legro, "Whence American Internationalism", *International Organization*, Vol. 54, No. 2, Spring 2000, p.254.

This would have required psycho-political interviews with Congressmen and women. Having said this, several staffers interviewed by the author responded in ways that strongly suggested the basis for supporting CTR was rooted in neorealist concerns, both in terms of disarming Russia and in securing relative gains for the US. For a highly interesting examination of related issues see Robert Jervis, *Perception and Misperception in International Politics* (Princeton, NJ: Princeton University Press, 1976), p.32-57.

1991, given the confluence of ideas, personalities and political events, rather than in 1981 or 2001.

Neoliberal institutionalism, albeit on a number of issues difficult to distinguish from neorealism, and constructivism, rather than being mutually exclusive theoretical approaches, actually complement each other.⁵⁷ They contribute different parts of the CTR story and together provide an explanation of how CTR came into being, why it was pursued by Washington and why the US, Russia, Ukraine, Belarus and Kazakhstan perceived it to be in their interests to participate in, and expand, the program from late 1991 to the end of 1996.

Congress, CTR and the Future?

CTR showed that a small number of Congressmen could, if sufficiently motivated, take the lead on a matter of US, indeed global, security in spite of an apathetic, even reluctant, executive branch. It is tempting to extrapolate from this case study and argue that CTR's success will generate a plethora of 'Nunn-Lugar-type' programs directed from Capitol Hill.⁵⁸ However, this reasoning must be heavily qualified. CTR was borne of some very distinct circumstances as well as some forceful personalities and relationships. Firstly, a superpower was in the process of collapsing. While great powers have risen and fallen, this was the first time it had happened to a state possessing 30,000 nuclear weapons. Secondly, the Bush Administration was coming under considerable pressure for an apparent neglect of domestic issues, particularly with the onset of recession, and its chances of re-election in 1992 were uncertain. Consequently, it showed little enthusiasm for what was considered a foreign aid program just when the 'peace dividend' was supposed to pay off. Thirdly, Les Aspin and Sam Nunn had been deeply involved in US military policy for years and had developed expertise in the area and were respected by Congress as well as by officials

⁵⁷ Robert Keohane made the link between neoliberal institutionalism and constructivism (his term was 'reflective' approaches) in "International Institutions: Two Approaches", in Keohane (ed), *International Institutions and State Power: Essays in International Relations Theory* (Boulder, CO: Westview Press, 1989), p.158-79.

On May 19 1999 Representative Benjamin Gilman announced the introduction of legislation to get "more for our money" regarding the 'Agreed Framework' to freeze and dismantle North Korea's nuclear weapons program. While Gilman's "North Korea Threat Reduction Act of 1999" resembled CTR, its provisions were far more onerous. See Global Beat: North Korea Threat Reduction Act of 1999, May 20 1999 http://www.nyu.edu/globalbeat/asia/napsnet052099.html Accessed 12/07/00.

in the nuclear inheritor states for their knowledge.⁵⁹ Fourthly, Nunn and Lugar had a close relationship with academics at Harvard University who had been studying possible 'nuclear devolution' in the Soviet Union. Fifthly, as it has evolved, the CTR program has become increasingly diverse. The Departments of Defense, Energy, State, Commerce, Treasury, Justice, the CIA and the FBI have all been involved in various aspects of threat reduction. This has given Congress a wide jurisdiction over CTR. It has also had the effect of strengthening support for the program, as more players have been able to board the CTR 'gravy train'. One of the most recent examples of this was Nunn-Lugar II. By involving US federal, state and local agencies, CTR has broadened its scope further domestically, and has given more agencies, as well as more Congressional committees, an interest in threat reduction. The confluence of these events generated an innovative and timely response to an urgent global security threat.

The impact of changing circumstances is already being felt. The retirement of Sam Nunn at the end of 1996 has resulted in the loss of CTR's most important and influential champion. Richard Lugar continues to assiduously promote CTR and is being ably assisted by Pete Domenici and others, but there has been no comparable lead in the House since Les Aspin's departure. A program so reliant on the efforts of a small number of key figures runs the 'Bismarckian' danger of being disregarded when these figures disappear from the scene. It is therefore essential that the CTR program maintain strong, respected and senior leadership in Congress if it is to survive.

CTR is also beginning to suffer from a lack of exposure. The program was originally a response to an urgent and tangible threat: 'loose nukes'. According to a State Department official, in the immediate years following the demise of the USSR there was material being found "everywhere" and there were "blockbuster" cases in the newspapers, making people conscious of the problem. In addition, these were the years of the big dismantlement projects, such as cutting up bombers and filling in silos. With time the threat has become diffuse and the achievements have become less tangible, resulting in a comparative decline in interest in CTR activities. It seems that lack of interest will be an enduring problem, particularly given more high-profile

⁵⁹ In April 1994 Nunn and Lugar volunteered to undertake a mission to North Korea to resolve the deadlock over that country's nascent nuclear program but were rebuffed by Pyongyang, Sigal, *Disarming Strangers*, p.111.

⁶⁰ Interview, Cambridge, M.A., March 25, 1998.

⁶¹ Interview, Washington, D.C., March 9 1998.

⁶² Interview, Washington, D.C., March 9, 1998.

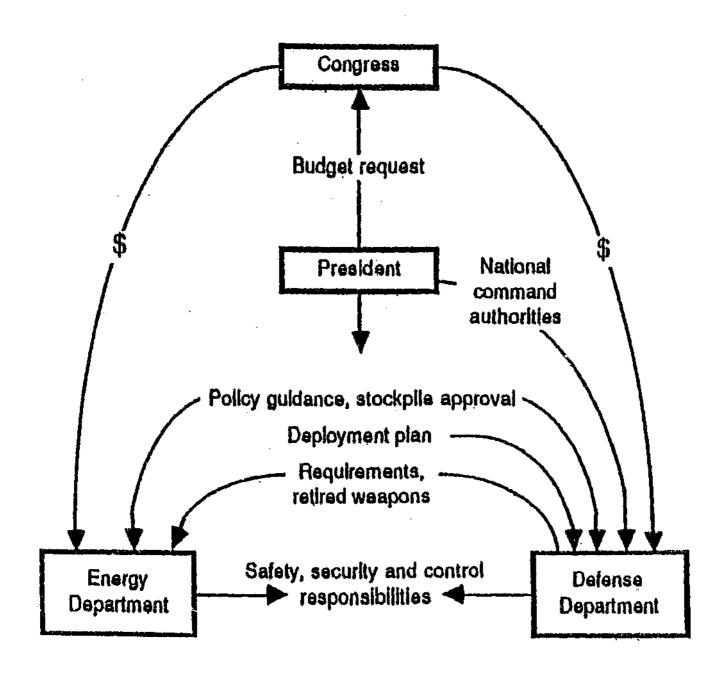
issues such as NATO expansion and NMD, unless a major nuclear leakage scare or event galvanizes Congress as a group.⁶³

Two conclusions seem apparent. Firstly, the case study demonstrates that, by choosing to ignore domestic variables and by stressing relative over absolute gain, the neorealist account of the 'cooperative threat reduction' choices made by the US is problematic. Neoliberalism, while analogously neglecting unit-level factors, provides a somewhat blurry alternative to neorealism in regard to the relative/absolute gain motivation and as such, offers a reasonable post facto explanation of the CTR program. Constructivism provides a compelling account of why new ideas about managing the nuclear relationship between the US and the nuclear inheritor states not only gained currency in US policy-making circles, but also came to constitute US interests. Secondly, Congress, or more specifically a small group of Senators and Representatives, have shown a capacity to take the lead on an issue of concern and this has provided further evidence that urgent and innovative responses to international relations problems are not the exclusive domain of the executive. Although the executive will continue to play the decisive role in formulating US, one can only hope that the Nunn-Lugar program provides an example for a future Congress to take the initiative once again when it considers the executive to be derelict in its duties. Unfortunately, the recent Congressional trend towards even greater parochialism does not bode well for the future.

The recent souring of US-Russian relations also has the potential to derail CTR, although Assistant Secretary of Defense for Strategy and Threat Reduction, Ted Warner, observed that DoD and MINATOM were able to "insulate the program quite thoroughly from any disturbance" caused by Kosovo. Dalton, "U.S.-Russian Programs Survive Kosovo, But Now Face Congressional Threat", Carnegie Endowment for International Peace, Non-Proliferation Project, Proliferation Brief, Vol. 2, No. 9, May 5 1999 http://www.ceip.org/files/Publications/ProliferationBrief209.asp?p=8 Accessed 10/10/00.

Appendix A

Congress, the Executive and Nuclear Weapons



Source: Donald R. Cotter, "Peacetime Operations: Safety and Security", in Ashton Carter, John Steinbruner and Charles Zraket (eds), Managing Nuclear Operations (Washington, D.C.: Brookings, 1987), p.24

Appendix B

"Soviet Nuclear Threat Reduction Act of 1991"

(a) FINDINGS — The Congress finds —

- (2) that the profound changes underway in the Soviet Union pose three types of danger to nuclear safety and stability, as follows: (A) ultimate disposition of nuclear weapons among the Soviet Union, its republics, and any successor entities that is not conducive to weapons safety or to international stability; (B) seizure, theft, sale, or use of nuclear weapons components; and (C) transfers of weapons, weapons components, or weapons know-how outside of the territory of the Soviet Union, its republics, and any successor entities, that contribute to world-wide proliferation; and
- (3) that it is in the national security interests of the United States (A) to facilitate on a priority basis the transportation, storage, safeguarding, and destruction of nuclear and other weapons in the Soviet Union, its republics, and any successor entities, and (B) to assist in the prevention of weapons proliferation.
- (b) EXCLUSIONS United States assistance in destroying nuclear and other weapons under this title may not be provided to the Soviet Union, any of its republics, or any successor entity unless the President certifies to the Congress that the proposed recipient is committed to —

(1) making a substantial investment of its resources for dismantling or

destroying such weapons;

(2) forgoing any military modernization program that exceeds legitimate

defense requirements and forgoing the replacement of destroyed weapons

of mass destruction;

(3) forgoing any use of fissionable and other components of destroyed

nuclear weapons in new nuclear weapons;

(4) facilitating United States verification of weapons destruction carried

out under section 212;

(5) complying with all relevant arms control agreements; and

(6) observing internationally recognized human rights, including the

protection of minorities.

Source: Public Law 102-228 - December 12, 1991, Section 211.

268

Appendix C

United States CTR Contractor List

Alabama	
Bill Harbert International	
Alaska	
AEROMAP	
Arizona	
Jensen Tools Inc.	
California	
Bechtel National Inc. Environmental Chemical Corporation G&C Equipment Great Pacific Equipment	Oracle Corporation Pacific Consol. Industries Ltd Smart Link Corporation
Conneticut	
International Executive Services Corporation	
Florida	
Pratt Enterprises Inc.	Protective Materials Company
Georgia	
American Housing Tech. Anderson 2000	Harris Waste Management
Illinois	
Ambus Inc. Amkus Inc.	Caterpillar

Indiana

Haggard and Stocking

Indianapolis Ind. Products

Louisiana

TSE International Inc.

Maryland

Allsafe Fire Equipment Inc.
Cintronix Microage

Computerized Management Systems

Digicon Corporation

Hewlett Packard International Tech Trading Inc.

Maryland Fire Equipment

Motorola Inc.

Norman Machine Tool

Pulsar

Scitech Services Inc. Thompson Publishing W.S. Jenks and Sons

Massachusetts

Arthur D. Little Inc.

Michigan

Michigan Drill Company

Riveer Company

Wyandotte Welding Supplies

Missouri

Lincoln Automotive

Nevada

NVOOEG&G Inc.

New Hampshire

Hearing Aids International

New Jersey

Allenhurst Industries Inc.

AT&T

New Mexico

Numerax

Southwest Safety Specialist

Video Techniques

New York

Byelocorp Scientific Inc.

North Carolina

Angus Fire Armour Corporation

Crouch Machinery

Ohio

Hennosey Industries

Morrison Knudeen

Oregon

Cascade Fire Equipment Company

Isolair Inc.

Pennsylvania

Grove North America

Hale Fire Pump Company

Hale Products Inc.

Kras

Western Electric Co. Inc.

South Carolina

International American Products

PPM Cranes

Tennessee

Double-Cola Company Scientific Ecology Group Spandeck Inc.

Texas

Austin Computer Systems

Dell Computing Corporation

Triple-S Dynamics

Industrial Air of Texas

Rockwell Int. - Collins Comm. Sys. Div.

Utah

Thiokol Corporation

Virginia

American Services for Eurasians

Atlantic Computing Services

Base Technologies

Belmont Power Equipment

Canon USA Inc.

Cost Management Systems

DSD Accounting Concepts

Federal Systems Group Inc. Government Micro Resources

Hago Company

Hughes Technical Services Company

Intelligent Decisions Inc.

McLean Rental

MCA Research Corporation

Meridian Corporation

Mega-Tech Inc.

Motorola Inc.

Potomac Tool and Drilling

Radian Inc.

Science Applications Int. Corp. Southern Police Equipment Co.

Titan Systems Inc.

Universal Systems and Technology

User Tech Association Inc.

Xerox Corporation

Washington

Northwest Research Associates Inc. Science Applications Int. Corp.

Battelle Pacific Northwest Labs

leecasting Inc.

Washington, D.C.

Allen and Assoc. International, LTD Lada International

Microcomp

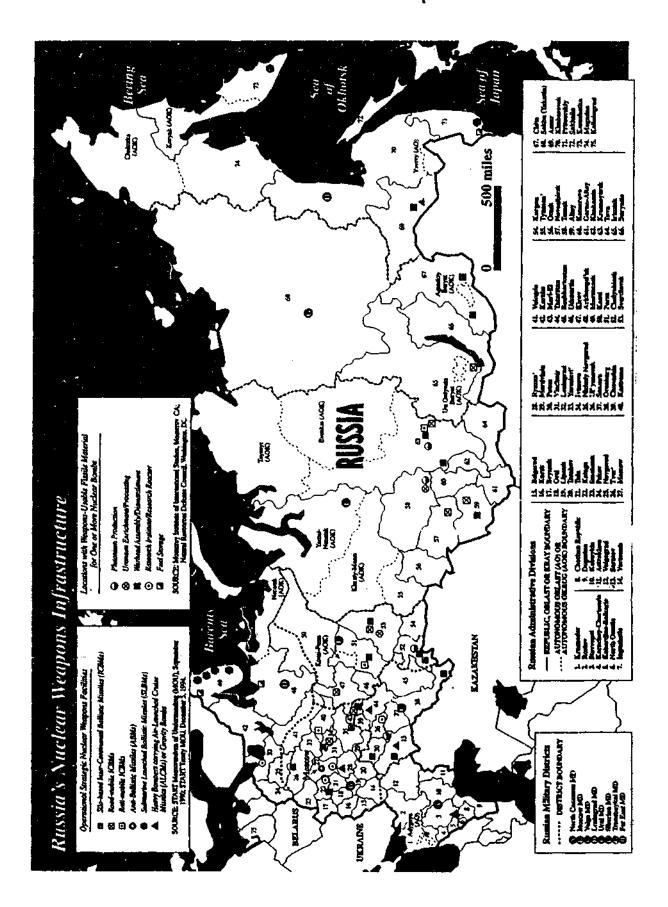
Wisconsin

Snap On Tools International

Source: Assistant to the Secretary of Defense, 1996 Cooperative Threat Reduction Program Plan (unclassified), (Washington, D.C.: Department of Defense, 1996), III-5.

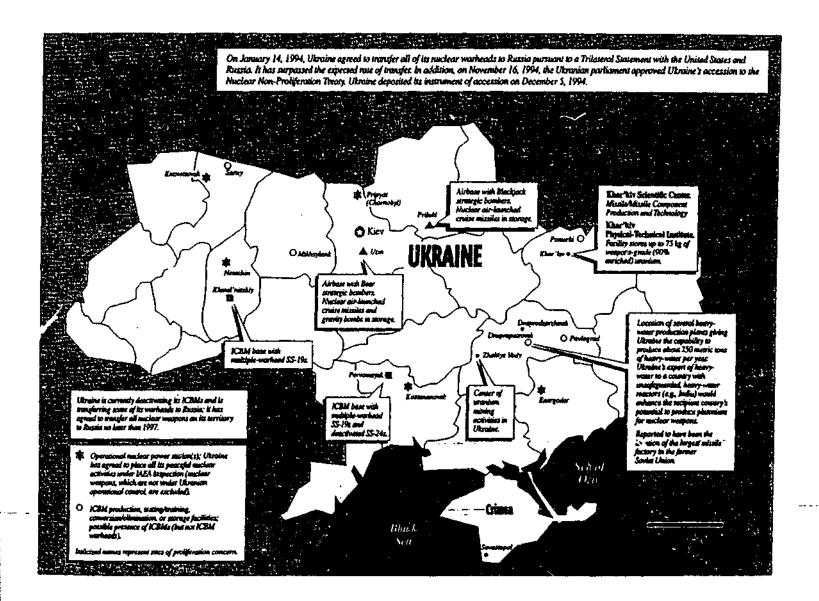
Appendix D

Nuclear Inheritor States Maps



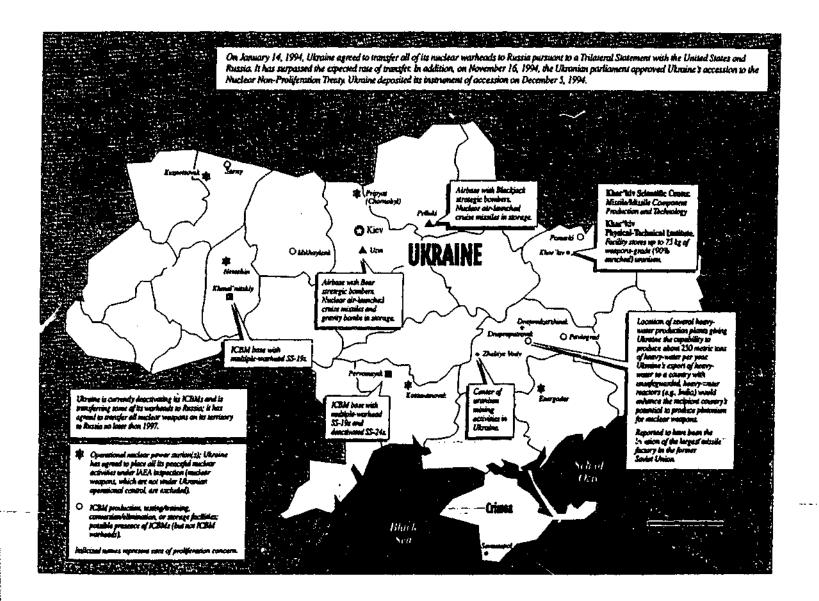
Source: Carnegie Endowment for International Peace and The Monterey Institute of International Studies, Nuclear Successor States of the Soviet Union: Nuclear Weapon and Sensitive Export Status Report, No. 3, July 1995, p.86.

Nuclear Inheritor States Maps



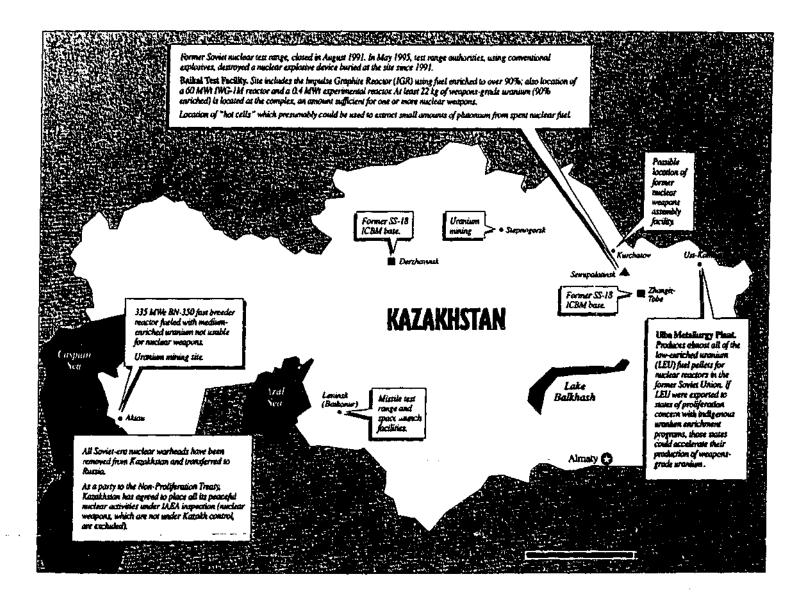
Source: Carnegie Endowment for International Peace and The Monterey Institute of International Studies, Nuclear Successor States of the Soviet Union: Nuclear Weapon and Sensitive Export Status Report, No. 3, July 1995, p.85.

Nuclear Inheritor States Maps



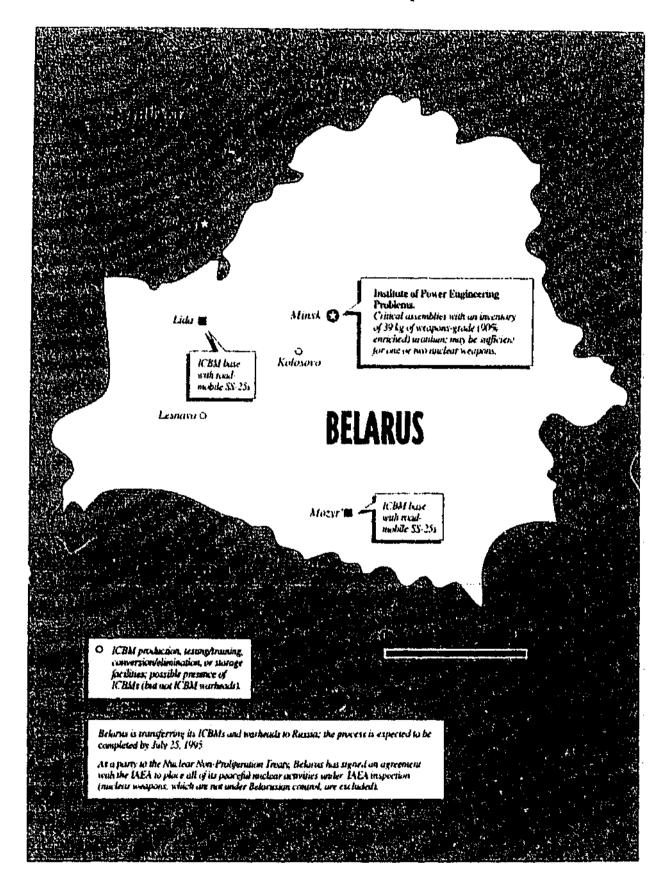
Source: Carnegie Endowment for International Peace and The Monterey Institute of International Studies, Nuclear Successor States of the Soviet Union: Nuclear Weapon and Sensitive Export Status Report, No. 3, July 1995, p.85.

Nuclear Inheritor States Maps



Source: Carnegie Endowment for International Peace and The Monterey Institute of International Studies, Nuclear Successor States of the Soviet Union: Nuclear Weapon and Sensitive Export Status Report, No. 3, July 1995, p.84.

Nuclear Inheritor States Maps



Source: Carnegie Endowment for International Peace and The Monterey Institute of International Studies, Nuclear Successor States of the Soviet Union: Nuclear Weapon and Sensitive Export Status Report, No. 3, July 1995, p.83.

Appendix E

Congressional Dramatis Personae

Republicans

THE PROPERTY OF THE PROPERTY O

Democrats

Senate

Hank Brown (R-Colo.) Sam Brownback (R-Kan.) Thad Cochran (R-Miss.) William Cohen (R-Maine) Alfonse D'Amato (R-N.Y.) Robert Dole (R-Kan.) Pete Domenici (R-N.M.) John Heinz (R-Pa.) Jesse Helms (R-N.C.) Trent Lott (R-Miss.) Richard Lugar (R-Ind.) John McCain (R-Ariz.) Connie Mack (R-Va.) Richard Shelby (R-AL) Gordon Smith (R-Ore.) Robert Smith (R-N.H.) Strom Thurmond (R-S.C.) Malcolm Wallop (R-Wyo.) John Warner (R-Va.)

Joseph Biden (D-Del.)
Jeff Bingaman (D-N.M.)
David Boren (D-Okla.)
Robert Byrd (D-W.Va.)
Alan Cranston (D-Calif.)
Jim Exon (D-Neb.)
John Glenn (D-Ohio)
Bob Kerrey (D-Neb.)
Patrick Leahy (D-Vt.)
Carl Levin (D-Mich.)
Sam Nunn (D-Ga.)
Claiborne Pell (D-R.I.)
Harris Wofford (D-Pa.)

House

Dick Armey (R-Texas)
William Broomfield (R-Mich.)
Bill Dickinson (R-Ala.)
Robert Dornan (R-Calif.)
Benjamin Gilman (R-N.Y.)
Newt Gingrich (R-Ga.)
John Kasich (R-Ohio)
Joseph McDade (R-Pa.)
Robert Michel (R-III.)
Dana Rohrabacher (R-Calif.)
Jim Ryun (R-KS)
Gerald Soloman (R-N.Y.)
Curt Weldon (R-Pa.)

Les Aspin (D-Wis.) Charles Bennett (D-Fla.) David Bonior (D-Mich.) Ron Dellums (D-Calif.) Dante Fascell (D-Fla.) Thomas Foley (D-Wash.) Barney Frank (D-Mass.) Richard Gephardt (D-Mo.) Lee Hamilton (D-Ind.) Harry Johnston (D-Fla.) Christopher Smith (R-N.J.) Thomas Lantos (D-Calif.) Edward Markey (D-Mass.) Robert Menendez (D-N.J.) John Murtha (D-Pa.) Stephen Solarz (D-N.Y.) John Spratt (D-S.C.)

Bibliography

Primary Sources

Department of Defense

Assistant to the Secretary of Defense, 1996 Cooperative Threat Reduction Program Plan (unclassified), Washington, D.C.: Department of Defense, 1996).

Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, *Cooperative Threat Reduction* (Arlington, VA: Cooperative Threat Reduction Program Office, Department of Defense, April 1995).

Department of Defense, "Nunn-Lugar Joint Venture Project Launched", News Release No. 696-94 – Office of Assistant Secretary of Defense (Public Affairs), December 14 1994.

Department of Defense, "Memorandum for Correspondents", Memorandum No. 034-M – Office of Assistant Secretary of Defense (Public Affairs), February 14 1995.

Department of Defense, "U.S. Assists Ukraine With Nuclear Weapons Dismantlement", News Release No. 164-95 – Office of Assistant Secretary of Defense (Public Affairs), April 1 1995.

Department of Defense, "U.S. Assists Russia With Weapons Dismantlement and Weapons Security", News Release No. 163-95 – Office of Assistant Secretary of Defense (Public Affairs), April 3 1995.

Department of Defense, Cooperative Threat Reduction Briefing Book, 20.06.97.

Department of Defense, Cooperative Threat Reduction, CTR FY 1998 and FY 1999 Funds, 25.02.98.

Department of Defense, "CTR Background Briefing", Washington, D.C.: 13.03.98.

William Perry, "Defense By Other Means – Remarks to the U.S.-Russian Business Council", *Defense Issues*, Department of Defense, March 29 1995.

Department of Energy

Department of Energy, MPC&A Program: Strategic Plan (Washington, D.C.: Office of Arms Control and Disarmament, January 1998).

Department of Energy, "Technology for Nonproliferation", Demonstration of Nonproliferation Technology for Congress, Washington, D.C., March 11 1998.

Congressional Hearings

"Confirmation of Atomic Energy Commission and General Manager", *Hearings* before the Senate Section of the Joint Committee on Atomic Energy, 80th Congress, 1st Session, January 27 1947.

"Fiscal Year 1973 Authorization for Military Procurement, Research and Development, Construction Authorization for the Safeguard ABM and Active Duty and Selected Reserve Strengths", *Hearing before the Committee on Armed Services*, Senate, 92nd Congress, 2nd Session on S. 3108, Part 2 of 6 Parts, Authorizations, February 15 1972.

"Military Implications of the Treaty on the Limitations of Anti-Ballistic Missile Systems and the Interim Agreement on Limitation of Strategic Offensive Arms", Hearings before the Committee on Armed Services, Senate, 92nd Congress, 2nd Session, June 6 1972.

"Agreements on Limitation of Strategic Offensive Weapons", *Hearings before the Committee on Foreign Relations*, House of Representatives, 92nd Congress, 2nd Session on Joint Resolutions, August 2 1972.

"Legislative Origins of the Truman Doctrine", *Hearings held in Executive Session before the Committee on Foreign Relations*, Senate, 80th Congress, 1st Session on S. 938, Executive Hearings held on March 13 1947, made public January 12 1973.

"Legislation on Foreign Relations with Explanatory Nows", Committee on Foreign Relations, Senate, Committee on Foreign Affairs, House of Representatives, Joint Committee Print, March 1973.

"Briefing on Counterforce Attacks", Hearing before the Subcommittee on Arms Control, International Law and Organization of the Committee on Foreign Relations, Senate, 93rd Congress, 2nd Session, September 11 1974.

"Hearings on H.R. 8390, Supplemental Authorization for Appropriations for Fiscal Year 1978 and Review of the State of U.S. Strategic Forces also Reprogramming Action Nos. FY 78-2 P/A, FY 78-3 P/A, and FY 78-4 P/A, Committee on Armed Services, House of Representatives, 95th Congress, 1st Session July 21 1977.

"Chronologies of Major Developments in Selected Areas of International Relations, January – May 1978", *International Relations Committee Print*, House of Representatives, 95th Congress, June 1978.

Hearings and Markup before the Committee on Foreign Relations and its Subcommittee on International Security and Scientific Affairs, House of Representatives, 96th Congress, 1st Session on H.R. 2774, March 6 1979.

Report to the Senate of the Select Committee on Intelligence, Covering the Period May 16 1977 – December 31 1978, Senate, 95th Congress, 1st Session, May 14 1979.

Department of Energy National Security and Military Applications of Nuclear Authority Act of 1980, House of Representatives, 96th Congress, 1st Session, May 15 1979.

"Briefing on SALT I Compliance", Hearing before the Committee on Foreign Relations, Senate, 96th Congress, 1st Session, September 25 1979.

"Principal Findings on the Capabilities of the United States to Monitor the SALT II Treaty", *Report of the Senate Select Committee on Intelligence*, Senate, 96th Congress, 1st Session, October 1979.

THE PARTY OF THE P

"The SALT II Treaty", *Hearings before the Committee on Foreign Relations*, Senate, 96th Congress, 1st Session on Ex. Y, 96-1, Part 6, Markup, November 9 1979.

"Inaccuracy of Department of Defense Weapons Acquisition Cost Estimates", *Ninth Report by the Committee on Government Operations*, House of Representatives, 96th Congress, 1st Session, November 15 1979.

"Chronologies of Major Developments in Selected Areas of Foreign Affairs: January – November 1979", *Foreign Affairs Committee Print*, House of Representatives, 96th Congress, December 1979.

"Congress and Foreign Policy – 1978", Committee on Foreign Affairs, House of Representatives, 95th Congress, 1979.

"Status of the MX Missile System", *Hearing before the Committee on Armed Services*, House of Representatives, 96th Congress, 2nd Session, May 1 1980.

"Reprogramming Action - Trident Submarine", Hearing before the Seapower and Strategic and Critical Materials Subcommittee of the Committee on Armed Services, House of Representatives, 96th Congress, 2nd Session, September 23 1980.

"Defense Procurement Policies and Procedures: Cost Management and Control", Hearings before the Special Panel on Defense Procurement Procedures of the

- Committee on Armed Services, 97th Congress, 1st Session, July 23, 28, 30, September 10, 18, 19, 21, 24, 25, 26, 27, October 7, 15, 20, 22, 27 and 28 1981.
- "Modernization of the U.S. Strategic Deterrent", *Hearings before the Committee on Armed Services*, Senate, 97th Congress, 1st Session, October 5, November 5 †981.
- "Review of Administration Initiatives on Strategic, Theater, and Conventional Arms Control", *Briefing of the Subcommittee on International Security and Scientific Affairs of the Committee on Foreign Relations*, House of Representatives, 97th Congress, 1st Session, November 20 1981.
- "Weapons Acquisition Policy and Procedures: Curbing Cost Growth", Report of the Special Panel on Defense Procurement Procedures of the Committee on Armed Services, House of Representatives, 97th Congress, 1st Session, February 12 1982.

The second designation of the second second

- "Overview of Nuclear Arms Control and Defense Strategy in NATO", Hearing before the Subcommittee on International Security and Scientific Affairs and on Europe and the Middle East of the Committee on Foreign Affairs, House of Representatives, 97th Congress, 2nd Session, February 23 1982.
- "Department of Defense Authorization Act, 1983", Report Submitted by Mr Price from the Armed Services Committee, together with Individual, Additional and Dissenting Views, House of Representatives, 97th Congress, 2nd Session, April 13 1982.
- "Calling for a Mutual and Verifiable Freeze on and Reduction in Nuclear Weapons and for Approval of the SALT II Agreement", Committee on Foreign Affairs, Report Submitted by Mr Zablocki together with Minority and Supplemental Views, House of Representatives, 97th Congress, 2nd Session. July 19 1982.
- "Department of Defense Authorization Act, 1983", Conference Report, House of Representatives, 97th Congress, 2nd Session, August 16 1982.
- "U.S. Arms Control and Disarmament Agency 1981 Annual Report", *Joint Committee Print*, 97th Congress, 2nd Session, October 15 1982.
- "The MX Missile and Associated Basing Decision", *Hearing before the Committee on Armed Services*, Senate, 97th Congress, 2nd Session, December 8 1982.
- "MX Missile Basing System and Related Issues", *Hearings before the Committee on Armed Services*, Senate, 98th Congress, 1st Session, April 18, 20, 21, 22, 26, May 3 1983.
- "Examination of Armed Services Policies and Procedures in the Procurement of Spare and Repair Parts, and the Pricing Thereof of These Items", *Hearings before the Investigations Subcommittee of the Committee on Armed Services*, House of

- Representatives, 98th Congress, 2nd Session, April 19, 20, May 25, June 9, July 13 and October 6 1983.
- "Department of Defense Authorization for Appropriations for Fiscal Year 1986", *Hearings before the Committee on Armed Services*, Senate, 99th Congress, 1st Session on S.674, February 4 1985.
- "The MX Missile and the Strategic Defense Initiative Their Implications on Arms Control Negotiations", *Hearings before the Defense Policy Panel of the Committee on Armed Services*, House of Representatives, 99th Congress, 1st Session, February 27 1985.

The second of th

- "Report of the Senate Arms Control Observer Group Delegation to the Opening of the Arms Control Negotiations with the Soviet Union in Geneva, Switzerland", Senate, 99th Congress, 1st Session, March 9-12 1985.
- "Review of Arms Control and Disarmament Activities", Hearings before the Special Panel on Arms Control and Disarmament of the Procurement and Military Nuclear Systems Subcommittee of the Committee on Armed Services, House of Representatives, 99th Congress 1st Session, September 10, 12, 18, 20, October 31, November 20, December 12 1985.
- "National Security: Message from the President of the United States", *House Document 99-230*, 99th Congress, 2nd Session, June 3 1986.
- "United States and Soviet Dismantlement and Strategic Force Projections: Communication from the President of the United States", *House Document 99-253*, 99th Congress, 2nd Session, August 5 1986.
- "Consideration of the Honorable John G. Tower to be Secretary of Defense", Report, together with Minority, Supplemental and Additional Views, *Committee on Armed Services*, 101st Congress, 1st Session, February 28 1989.
- "National Defense Authorization Act for Fiscal Years 1990-1991", Report of the Committee on Armed Services, House of Representatives on H.R. 2461 together with Additional and Dissenting Views, 101st Congress, 1st Session, July 1 1989.
- "National Defense Authorization Act for Fiscal Years 1990-1991", Report to Accompany S. 1352 together with Additional Views, Committee on Armed Services, Senate, 101st Congress, 1st Session, July 19 1989.
- "Roundtable Discussion On United States Soviet Relations And The Future of Arms Control", Hearing before the Subcommittee on Arms Control, International Security and Science, and on Europe and the Middle East of the Committee on Foreign Affairs, House of Representatives, 101st Congress, 1st Session, November 15 1989.

Hearings on National Defense Authorization Act for Fiscal Year 1991 – H.R. 4739 and Oversight of Previously Authorized Programs before the Committee on Armed Services, House of Representatives, 101st Congress, 2nd Session, Research, Development, Testing and Evaluation, "The Strategic Defense Initiative", April 4 1990,

"B-2 Bomber Program and B-2 Contract Management", *Hearing before the Committee on Armed Services*, Senate, 101st Congress, 2nd Session, October 11 1990.

"The START Treaty In A Changed World", Hearings before the Committee on Foreign Relations, Senate, 102nd Congress, 1st Session, September 19 1991.

"Command and Control of Soviet Nuclear Weapons: Dangers and Opportunities Atlaing From The August Revolution", *Hearing before the Subcommittee on European Affairs of the Committee on Foreign Relations*, Senate, 102nd Congress, 1st Session, September 24 1991.

"Potential Threats to American Security in the Post-Cold War Era", *Hearings before* the Defense Policy Panel of the Committee on Armed Services, House of Representatives, 102nd Congress, 1st Session, December 13 1991.

"Regional Threats and Defense Options for the 1990s", Hearings before the Defense Policy Panel and the Department of Energy Defense Nuclear Facilities Panel of the Committee on Armed Services, House of Representatives, 102nd Congress, 2nd Session, 26 March 1992.

"Legislation Authorizing Assistance To The Former Soviet Union", *Hearing before the Committee on Foreign Relations*, Senate, 102nd Congress, 2nd Session, April 9 1992.

Hearings on National Defense Authorization Act for Fiscal Year 1993 – H.R. 5006 and Oversight of Previously Authorized Programs before the Committee on Armed Services, House of Representatives, 102nd Congress, 2nd Session, Department of Energy Defense Nuclear Facilities Panel Hearings on Department of Energy Defense Programs, March 18, 30, 31, April 1, 6, 28 and 30 1992.

"U.S. Assistance To The New Independent States", Hearings before the Subcommittee on European Affairs of the Committee on Foreign Relations, Senate, 102nd Congress, 2nd Session, March 19, April 8 and 9, May 5, 6 and 14 1992.

"U.S. Plans and Programs Regarding Dismantling of Nuclear Weapons in the Former Soviet Union", *Hearing before the Committee on Foreign Relations*, Senate, 102nd Congress, 2nd Session, July 27 1992.

"Military Implications of START 1 and START II", Hearings before the Committee on Armed Services, Senate, 102nd Congress, 2nd Session, July 28, 1992.

"Shaping Nuclear Policy for the 1990s: A Compendium of Views", Report of the Defense Policy Panel of the Committee on Armed Services, House of Representatives, 102nd Congress, 2nd Session, December 17 1992.

"Current Developments in the Former Soviet Union", Hearings before the Committee of Armed Services, Senate, 103rd Congress, 1st Session, February 3, 17, 24 and March 3 1993.

"Disposing of Plutonium in Russia", *Hearing before the Committee on Governmental Affairs*, Senate, 103rd Congress, 1st Session, March 9 1993.

"U.S. Policy on Ukrainian Security", *Hearing before the Subcommittee on European Affairs of the Committee on Foreign Relations*, Senate, 103rd Congress, 1st Session, June 24 1993.

"Fiscal Year 1994 Arms Control Impact Statements", *Joint Committee Print*, 103rd Congress, 1st Session, September 1993.

National Defense Authorization Act for Fiscal Year 1994, House of Representatives, 103rd Congress, 1st Session, November 1993.

"Challenges to U.S. Security in the 1990s", Hearing before the Subcommittee on International Security, International Organizations, and Human Rights of the Committee on Foreign Affairs, House of Representatives, 103rd Congress, 2nd Session, June 27 1994.

Senate Voting Record No. 201: Foreign Operations Appropriations, 1995 (Nuclear/Chemical Weapons Dismantling), Bill No.: H.R. 4426, Amendment No.: 2284, "Foreign Operations, Export Financing, and Related Programs Appropriations Act, 1995", 103rd Congress, 2nd Session, July 15 1994.

"U.S. Nuclear Policy", *Hearing before the Committee on Foreign Affairs*, House of Representatives, 103rd Congress, 2nd Session, October 5 1994.

"Worldwide Intelligence Review", *Hearing before the Select Committee on Intelligence*, Senate, 1st Session on Worldwide Intelligence Review, January 10 1995.

"Worldwide Threat to the United States" Hearing before the Committee on Armed Services, Senate, 104th Congress, 1st Session, January 17 1995.

"Intelligence Briefing on Smuggling of Nuclear Material and the Role of International Crime Organizations, and on the Proliferation of Cruise and Ballistic Missiles", Hearing before the Committee on Armed Services, Senate, 104th Congress, 1st Session, January 31 1995.

- "U.S. Assistance Programs for Economic and Political Reform and Dismantling of Weapons of Mass Destruction in the NIS", *Hearing before the Committee on International Relations*, House of Representatives, 104th Congress, 1st Session, March 3 1995.
- "Foreign Operations, Export Financing, and Related Programs Appropriations for Fiscal Year 1996", *Hearings before a Subcommittee of the Committee on Appropriations*, Senate, 104th Congress, 1st Session on H.R. 1868, May 18 1995.
- "Loose Nukes, Nuclear Smuggling, and the Fissile-Material Problem in Russia and the NIS", *Hearings before the Subcommittee on European Affairs of the Committee on Foreign Relations*, Senate, 104th Congress, 1st Session, August 22 1995.
- "tran and Proliferation: Is the U.S. Doing Enough? The Arming of Iran: Who Is Responsible? *Hearings before the Subcommittee on Near Eastern and South Asian Affairs of the Committee on Foreign Relations*, Senate, 105th Congress, 1st Session, April 24 1997.
- "Proliferation: Russian Case Studies", Hearing before the Subcommittee on International Security, Proliferation, and Federal Services of the Committee on Governmental Affairs, Senate, 105th Congress, 1st Session, June 5 1997.
- "Bosnia: Status of Non-Compliance With The Dayton Accords", Hearing before the Subcommittee on European Affairs of the Committee on Foreign Relations, Senate 105th Congress, 1st Session, July 17 1997.
- "Nuclear Terrorism and Countermeasures", Hearing before the Military Research and Development Subcommittee of the Committee on National Security, House of Representatives, 105th Congress, 1st Session, October 1 1997.
- "The Proliferation Primer: A Majority Report of the Subcommittee on International Security, Proliferation, and Federal Services", *Committee on Governmental Affairs*, Senate, January 1998.
- "Current and Projected National Security Threats to the United States", *Hearing before the Select Committee on Intelligence*, Senate, 105th Congress, 2nd Session, January 28 1998.
- "Transnational Threats", Hearing before the Senate Armed Services Committee, March 5 1998 (hearing transcript).
- "Corruption in Russia", *Hearings before the Committee on Foreign Relations*, Senate, 106th Congress, 1st Session, September 23 and 30 1999.

Public Laws

"Soviet Nuclear Threat Reduction Act of 1991", PUBLIC LAW 102-228 - Dec.12, 1991.

"Former Soviet Union Demilitarization Act Of 1992", PUBLIC LAW 102-484 – Oct. 23, 1992.

"Cooperative Threat Reduction Act Of 1993", PUBLIC LAW 103-160 - Nov. 30, 1993.

"Cooperative Threat Reduction Act Of 1994", PUBLIC LAW 103-337 - Oct. 5, 1994.

"Cooperative Threat Reduction Act Of 1995", PUBLIC LAW 104-106, Feb. 10, 1996.

"Cooperative Threat Reduction Act Of 1996", PUBLIC LAW 104-201 - Sept. 23, 1996.

Congressional Research Service

Galdi, Theodor. "The Nunn-Lugar Program for Soviet Weapons Dismantlement: Background and Implementation", CRS Report for Congress, 94-985F, Updated December 11 1995.

Tarnoff, Curt. "The Former Soviet Union and U.S. Foreign Assistance in 1992", CRS Report for Congress, 93-907F, October 12 1993.

Woolf, Amy. "Nunn-Lugar Cooperative Threat Reduction Programs: Issues for Congress", CRS Report for Congress, 97-1027 F, December 1 1997.

Office of Technology Assessment

Office of Technology Assessment, *Proliferation and the Former Soviet Union*, OTA-ISS- 605 (Washington, D.C.: U.S. Government Printing Office, September 1994).

General Accounting Office

General Accounting Office, Weapons of Mass Destruction: Reducing the Threat from the Former Soviet Union, Report to Congressional Requesters, GAO/NSIAD-95-7, October 1994.

General Accounting Office, Weapons of Mass Destruction: Reducing the Threat from the Former Soviet Union, An Update, Report to Congressional Requesters, GAO/NSIAD-95-165, June 1995.

General Accounting Office, Nuclear Nonproliferation: Status of U.S. Efforts to Improve Nuclear Material Controls in Newly Independent States, Report to Congressional Requesters, GAO/NSIAD/RCED-96-89, March 1996.

General Accounting Office, Weapons of Mass Destruction: Status of the Cooperative Threat Reduction Program, Report to Congressional Requesters, GAO/NSIAD-96-222, September 1996.

General Accounting Office, Weapons of Mass Destruction: DOD Reporting on Cooperative Threat Reduction Assistance Has Improved, Report to Congressional Requesters, GAO/NSIAD-97-84, February 1997.

General Accounting Office, Cooperative Threat Reduction: Review of DOD's June 1997 Report on Assistance Provided, Report to Congressional Requesters, GAO/NSIAD-97-218, September 1997.

Secondary Sources

Books

Acheson, Dean. Present at the Creation (London: Hamish Hamilton, 1969).

Adelman, Kenneth. The Great Universal Embrace: Arms Summitry – A Skeptic's Account (New York: Simon and Schuster, 1989).

Adler, Emanuel and Beverley Crawford (eds). *Progress in Postwar International Relations* (New York: Columbia University Press, 1991).

Alibek, Ken and Stephen Handelman. *Biohazard* (London: Hutchison, 1999).

Allison, Graham. Essence of Decision: Explaining the Cuban Missile Crisis (USA: HarperCollins, 1971).

Allison, Graham, Ashton Carter, Steven Miller and Philip Zelikow (eds). *Cooperative Denuclearization: From Pledges to Deeds* (Cambridge, MA: Center for Science and International Affairs, Harvard University, 1993).

Allison, Graham, Owen Coté. Richard Falkenrath and Steven Miller. Avoiding Nuclear Anarchy: Containing the Threat of Loose Russian Nuclear Weapons and Fissile Material (Cambridge, MA: MIT Press, 1996).

Ambrose, Stephen. Rise To Globalism: American Foreign Policy Since 1938 5th rev. ed. (New York: Penguin, 1988).

Art, Robert and Robert Jervis (eds). *International Politics: Anarchy, Force, Political Economy, and Decision Making* 2nd ed. (USA: HarperCollins, 1985).

Baker, James A. with Thomas DeFrank. *The Politics of Diplomacy: Revolution, War and Peace*, 1989 – 1992 (New York: G.P. Putnam's Sons, 1995).

Ball, Desmond. Politics and Force Levels: The Strategic Missile Program of the Kennedy Administration (Berkeley: University of California Press, 1980).

Ball, Desmond and Jeffrey Richelson (eds). Strategic Nuclear Targeting (New York: Cornell University Press, 1986).

Barbour, William and Carol Wekesser (eds). *The Breakup of the Soviet Union: Opposing Viewpoints* (San Diego, CA: Greenhaven Press, 1994).

Berkowitz, Bruce. Calculated Risks (New York: Simon and Schuster, 1987).

Beschloss, Michael and Strobe Talbott. At The Highest Levels: The Inside Story of the End of the Cold War (Great Britain: Little, Brown and Co., 1993).

Blacker, Coit and Gloria Duffy (eds). *International Arms Control. Issues and Agreements* 2nd Ed. (Stanford: Stanford University Press, 1984).

Blackwill, Robert and Albert Carnesale (eds). New Nuclear Nations: Consequences for U.S. Policy (New York: Council on Foreign Relations, 1993).

Blair, Bruce. The Logic of Accidental Nuclear War (Washington, D.C.: Brookings, 1993).

Blechman, Barry. The Politics of National Security: Congress and U.S. Defense Policy (New York: Oxford University Press, 1990).

Blechman, Barry (ed). Preventing Nuclear War: A Realistic Approach (Bloomington: Indiana University Press, 1985).

Bobbitt, Philip, Lawrence Freedman and Gregory F. Treverton (eds). US Nuclear Strategy: A Reader (London: MacMillan, 1989).

Bohlen, Charles. Witness To History, 1929-1969 (London: Weidenfeld and Nicolson, 1973).

Bremmer, Ian and Ray Taras (eds). New States, New Politics: Building the Post-Soviet Nations (New York: Cambridge University Press, 1997).

Brennan, Donald (ed). Arms Control and Disarmament: American Views and Studies (London: Jonathan Cape, 1961).

Brodie, Bernard. Strategy In The Missile Age (Princeton: Princeton University Press, 1959).

Brown, Anthony Cave. *Operation: World War III* (London: Arms and Armour Press, 1979).

Brzezinski, Zbigniew. Power and Principle: Memoirs of the National Security Adviser, 1977-1981 (New York: Farrar, Straus, Giroux, 1983).

Brzezinski, Zbigniew with Richard Sincere, Marin Strmecki and Peter Wehner (eds). *Promise or Peril: The Strategic Defense Initiative* (Washington, D.C.: Ethics and Public Policy Center, 1986).

Bukharin, Oleg, Matthew Bunn and Kenneth Luongo. Renewing The Partnership: Recommendations for Accelerating Action to Secure Nuclear Material in the Former Soviet Union, Russian American Nuclear Security Advisory Council (RANSAC) (Princeton, NJ: Princeton University, August 2000).

Bull, Hedley. The Control of the Arms Race: Disarmament and Arms Control in the Missile Age, 2nd ed. (New York: Frederick A. Praeger, 1961).

Bundy, McGeorge. Danger and Survival: Choices About the Bomb in the First Fifty Years (Melbourne: Schwartz and Wilkinson, 1990).

Bunn, Matthew. Foundation For The Future: The ABM Treaty and National Security (Washington, D.C.: The Arms Control Association, 1990).

Burrows, William and Robert Windrem. Critical Mass: The Dangerous Race for Superweapons In A Fragmenting World (New York: Simon and Schuster, 1994).

Campbell, Colin and Bert Rockman (eds). *The Clinton Presidency: First Appraisals* (Chatham, NJ: Chatham House Publishers, 1996).

Campbell, Kurt, Ashton Carter, Steven Miller and Charles Zraket. Soviet Nuclear Fission: Control of the Nuclear Arsenal in a Disintegrating Soviet Union (Cambridge, MA: Center for Science and International Affairs, Harvard University, 1991).

Cannon, Lou. President Reagan: The Role of a Lifetime (New York: Simon and Schuster, 1991).

Carnesale, Albert and Richard Haass. Superpower Arms Control: Setting The Record Straight (Cambridge, MA: Ballinger, 1987).

Carr, Edward Hallett. The Twenty Years' Crisis, 1919-1939 (New York: Harper and Row, 1964).

Carter, Ashton, John Steinbruner and Charles Zraket (eds). *Managing Nuclear Operations* (Washington, D.C.: Brookings, 1987).

Carter, Ashton and William Perry. Preventive Defense: A New Security Strategy for America (Washington, D.C.: Brookings, 1999).

Carter, Jimmy. Keeping Faith: Memoirs of a President (New York: Bantam Books, 1982).

Christopher, Warren. In The Stream of History: Shaping Foreign Policy for a New Era (Stanford, CA: Stanford University Press, 1998).

Coates, James and Michael Killian. Heavy Losses: The Dangerous Decline of American Defense (New York: Penguin, 1985).

Cochran, Thomas, William Arkin and Milton Hoenig. Nuclear Weapons Databook - Volume 1: U.S. Nuclear Forces and Capabilities (Cambridge, MA: Ballinger, 1984).

Cockburn, Andrew and Leslie Cockburn. One Point Safe (New York: Doubleday, 1997).

Cole, Paul and William Taylor, Jr (eds). *The Nuclear Freeze Debate* (Boulder, CO: Westview Press, 1983).

Colton, Timothy and Robert Tucker (eds). *Patterns in Post-Soviet Leadership* (Boulder, CO: Westview Press, 1995).

Connell, Jon. The New Maginot Line (London: Secker and Warburg, 1986).

Daalder, Ivo. The Nature and Practice of Flexible Response: NATO Strategy and Theater Nuclear Forces Since 1967 (New York: Columbia University Press, 1991).

Dahl, Robert. Congress and American Foreign Policy (New York: W.W. Norton, 1964).

Dalgleish, D. Douglas and Larry Schweikart. *Trident* (Carbondale: Southern Illinois University Press, 1984).

Davidson, Roger H. (ed). *The Postreform Congress* (New York: St Martin's Press, 1992).

Davidson, Roger and Walter Oleszek (eds). Congress and Its Members, 3rd ed. (Washington, D.C.: Congressional Quarterly Inc., 1990).

Dobrynin, Anatoly. In Confidence: Moscow's Ambassador to America's Six Cold War Presidents (New York: Times Books, 1995).

Drummond, Roscoe and Gaston Coblentz. Duel At The Brink: John Foster Dulles' Command of American Power (London: Weidenfeld and Nicolson, 1961).

Duffy, Gloria, Gregory Dalton, Matthew State and Leo Sartori. Compliance and the Future of Arms Control (Cambridge, MA: Ballinger, 1988).

Dumbrell, John. *The Making of U.S. Foreign Policy* (Manchester: Manchester University Press, 1990).

Duncan, Phil (ed). *Politics in America: The 103rd Congress* (Washington, D.C.: Congressional Quarterly Inc., 1993).

Edwards, J. Superweapon: The Making of MX (New York: W.W. Norton, 1982).

Elletson, Harold. The General Against The Kremlin, Alexander Lebed: Power and Illusion (London: Little Brown and Co., 1998).

Enthoven, Alain C. and K. Wayne Smith. How Much Is Enough? Shaping The Defense Program, 1961-1969 (New York: Harper and Row, 1971).

Evangelista, Matthew. Innovation and the Arms Race: How the United States and the Soviet Union Develop New Military Technologies (Ithaca: Cornell University Press, 1988).

Evans, Graham and Jeffrey Newnham. *The Penguin Dictionary of International Relations* (London: Penguin Group, 1998).

Feaver, Peter Douglas. Guarding The Guardians: Civilian Control of Nuclear Weapons in the United States (Ithaca: Cornell University Press, 1992).

Fisher, Louis. Presidential War Power (Kansas: University Press of Kansas, 1995).

Fogelman, Edwin (ed). Hiroshima: The Decision To Use The A-Bomb (New York: Scribners, 1964).

Fosdick, Dorothy (ed). Henry M. Jackson and World Affairs: Selected Speeches, 1953-1983 (Seattle: University of Washington Press, 1990).

Freedman, Lawrence. U.S. Intelligence and the Soviet Strategic Threat (London: MacMillan, 1977).

Freedman, Lawrence. The Evolution of Nuclear Strategy (London: MacMillan, 1981).

Frye, Alton. A Responsible Congress: The Politics of National Security (New York: McGraw-Hill, 1975).

Gaddis, John Lewis. *The United States and the Origins of the Cold War, 1941-1947* (New York: Columbia University Press, 1972).

Gaddis, John Lewis. Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy (Oxford: Oxford University Press, 1982).

Garthoff, Raymond. Détente and Confrontation: American-Soviet Relations from Nixon to Reagan (Washington, D.C.: Brookings, 1985).

Gates, Robert. From The Shadows: The Ultimate Insider's Story of Five Presidents and How They Won the Cold War (New York: Simon and Schuster, 1996).

Gibson, James William. *The Perfect War: Technowar in Vietnam* (Boston: The Atlantic Monthly Press, 1986).

Gilpin, Robert. War and Change in World Politics (Cambridge, MA: Cambridge University Press, 1981).

Gingrich, Rep. Newt, Rep. Dick Armey and the House Republicans. Contract With America (New York: Republican National Committee, 1994).

Glynn, Patrick. Closing Pandora's Box: Arms Races, Arms Control, and the History of the Cold War (New York: BasicBooks, 1992).

Goldfischer, David. The Best Defense: Policy Alternatives for U.S. Nuclear Security from the 1950s to the 1980s (Ithaca: Cornell University Press, 1993).

Goodman, Allan E. (ed). *The Diplomatic Record* 1992 – 1993 (Boulder, CO: Westview Press, 1995).

Gray, Colin. House of Cards: Why Arms Control Must Fail (Ithaca: Cornell University Press, 1992).

Greenwood, Ted. Making the MIRV: A Study of Defense Decision Making (Cambridge, MA: Ballinger, 1975).

Gulley, Bill, with Mary Ellen Reese. *Breaking Cover* (New York: Simon and Schuster, 1980).

Halberstam, David. The Best and the Brightest (Greenwich, Conn: Fawcett Publications, 1969).

Halperin, Morton, with Priscilla Clapp and Arnold Kanter, *Bureaucratic Politics and Foreign Policy* (Washington, D.C.: Brookings, 1974).

Hampson, Fen. *Unguided Missiles: How America Buys Its Weapons* (New York: W.W. Norton and Co., 1989).

Hardin, Russell, John Mearsheimer, Gerald Dworkin and Robert Goodin (eds). *Nuclear Deterrence: Ethics and Strategy* (Chicago: University of Chicago Press, 1985).

Herken, Gregg. Counsels of War (New York: Oxford University Press, 1987).

Hill, Dilys, and Phil Williams (eds). The Bush Presidency: Triumphs and Adversities (New York: St Martins Press, 1994).

Hilsman, Roger. To Move A Nation (New York: Dell Publishing, 1964).

Hobson, John M. *The State and International Relations* (Cambridge, UK: Cambridge University Press, 2000).

Holland, Lauren, and Robert Hoover. *The MX Decision* (Boulder, CO: Westview Press, 1985).

Holloway, David. *The Soviet Union and the Arms Race*, 2nd ed. (New Haven: Yale University Press, 1984).

Hosking, Geoffrey. A History of the Soviet Union (London: Fontana, 1985).

Jackson, Senator Henry (ed). The Secretary of State and the Ambassador: Jackson Subcommittee Papers on the Conduct of American Foreign Policy (New York: Frederick A. Praeger, 1964).

Jackson, Senator Henry (ed). The National Security Council: Jackson Subcommittee Papers on Policy-Making at the Presidential Level (New York: Frederick A. Praeger, 1965).

Jastrow, Robert. How To Make Nuclear Weapons Obsolete (London: Sidgwick and Jackson, 1985).

Johnson, Richard. Shootdown: The Verdict on KAL 007 (London: Chatto and Windus, 1986).

Jordan, Amos, and William Taylor. American National Security: Policy and Process, Rev. Ed. (Baltimore: Johns Hopkins University Press, 1984).

Kahan, Jerome. Security in the Nuclear Age: Developing U.S. Strategic Arms Policy (Washington, D.C.: Brookings, 1975).

Kahn, Herman. On Thermonuclear War, 2nd ed. (Princeton, NJ: Princeton University Press, 1961).

Kaku, Michio, and Daniel Axelrod. To Win A Nuclear War (Boston: South End Press, 1987).

Kaplan, Fred The Wizards of Armageddon (New York: Simon and Schuster, 1983).

Katzenstein, Peter (ed). The Culture of National Security: Norms and Identity in World Politics (New York: Columbia University Press, 1996).

Kegley, Charles (ed). Controversies in International Relations: Realism and the Neoliberal Challenge (New York: St Martins Press, 1995).

Kegley, Charles, and Eugene Wittkopf. *American Foreign Policy: Pattern and Process*, 3rd ed. (London: MacMillan, 1987).

Kegley, Charles, and Eugene Wittkopf. *American Foreign Policy: Pattern and Process*, 5th ed. (New York: St Martin's Press, 1991).

Kennan, George F. American Diplomacy: 1900-1950 (London: Secker and Warburg, 1952).

Kennan, George F. Realities of American Foreign Policy (London: Oxford University Press, 1954).

Kennan, George F. Memoirs: 1925-1950 (Great Britain: Hutchinson and Co., 1968).

Kennedy, John F. *The Strategy of Peace*, edited by Allan Nevins (New York: Harper and Row, 1960).

Kennedy, Robert. Thirteen Days (London: MacMillan and Co., 1969).

Kenhane, Robert. After Hegemony: Cooperation and Discord in the World Political Economy (New Jersey: Pr. Leton University Press, 1984).

Keohane, Robert (ed). *Neorealism and Its Critics* (New York: Columbia University Press, 1986).

Keohane, Robert. International Institutions and State Power: Essays in International Relations Theory (Boulder, CO: Westview Press, 1989).

Keohane, Robert, Joseph Nye and Stanley Hoffmann (eds). *After The Cold War: International Institutions and State Strategies in Europe*. 1989-1991 (Cambridge, MA: Harvard University Press, 1993).

Kissinger, Henry. The White House Years (Sydney: Hodder and Stoughton, 1979).

Klepikova, Elena, and Vladimir Solovyov. Zhirinovsky: The Paradoxes of Russian Fascism (London: Viking, 1995).

Kotz, Nick. Wild Blue Yonder: Money, Politics, and the B-1 Bomber (Princeton, NJ: Princeton University Press, 1988)

Krasner, Stephen (ed). International Regimes (Ithaca: Cornell University Press, 1983).

Krauss, Melvyn. How NATO Weakens The West (New York: Simon and Schuster, 1986).

Krepon, Michael, and Mary Umberger (eds). *Verification and Compliance: A Problem-Solving Approach* (Cambridge, MA: Ballinger, 1988).

Landau, David. Kissinger: The Uses of Power (New York: Thomas Cromwell Company, 1972).

LaFeber, Walter. America, Russia, and the Cold War: 1945-1990, 6th ed. (New York: McGraw-Hill Inc., 1991).

Lebow, Richard Ned. *The Art of Bargaining* (Baltimore: Johns Hopkins University Press, 1996).

Lebow, Richard Ned, and Thomas Risse-Kappen (eds), *International Relations Theory and the End of the Cold War* (New York: Columbia University Press, 1995).

Lentini, Peter (ed). *Elections and Political Order in Russia* (Budapest: Central European University Press, 1995).

Lindsay, James. Congress and Nuclear Weapons (Baltimore: Johns Hopkins University Press, 1991).

Long, Franklin, Donald Hafner and Jeffrey Boutwell (eds). Weapons In Space (New York: W.W. Norton and Co., 1986).

Luongo, Kenneth, and W.Thomas Wander. *The Search for Security In Space* (Ithaca: Cornell University Press, 1989).

MccGwire, Michael. Perestroika and Soviet National Security (Washington, D.C.: Brookings, 1991).

McFarlane, Robert, and Zofia Smardz. Special Trust (New York: Cadell and Davies, 1994).

McNamara, Robert. The Essence of Security: Reflections in Office (Great Britain: Hodder and Stoughton, 1968).

Makhijani, Arjun, Howard Hu and Katherine Yih (eds). Nuclear Wastelands (Cambridge, MA: MIT Press, 1995).

Mann, Thomas (ed). A Question of Balance: The President, the Congress and Foreign Policy (Washington, D.C.: Brookings, 1990).

Midlarsky, Manus, John Vasquez and Peter Gladkov (eds). From Rivalry To Cooperation: Russian and American Perspectives on the Post-Cold War Era (New York; HarperCollins, 1994).

Millis, Walter (ed). The Forrestal Diaries (New York: The Viking Press, 1951).

Milner, Helen. Interests, Institutions, and Information: Domestic Politics and International Relations (Princeton, NJ: Princeton University Press, 1997).

Miller, John. Mikhail Gorbachev and the End of Soviet Power (New York: St Martins Press, 1993).

Mlyn, Eric. *The State, Society, and Limited Nuclear War* (New York: State University of New York Press, 1995).

Newhouse, John. Cold Dawn: The Story of SALT (New York: Holt, Rinehart and Winston, 1973).

Newhouse, John. War and Peace in the Nuclear Age (New York: Alfred A. Knopf, 1989).

Niskanen, William. Reaganomics (New York: Oxford University Press, 1988).

Nolan, Janne E. Guardians of the Arsenal: The Politics of Nuclear Strategy (USA: BasicBooks, 1989).

Nolan, Janne E.(ed). Global Engagement: Cooperation and Security in the 21st Century (Washington, D.C.: Brookings, 1994).

Nye, Joseph (ed). The Making of America's Soviet Policy (New Haven: Yale University Press, 1984).

O'Neill, Robert, and David Schwartz (eds). *Hedley Bull on Arms Control* (New York: St Martins Press, 1987).

Onuf, Nicholas. World of Our Making (Columbia: University of South Carolina Press, 1989).

Oye, Kenneth, Robert Lieber and Donald Rothchild (eds). Eagle Defiant: United States Foreign Policy in the 1980s (Boston: Little, Brown and Co., 1983).

Oye, Kenneth (ed). Cooperation Under Anarchy (New Jersey: Princeton University Press, 1986).

Peterson, Paul (ed). The President, The Congress, and the Making of Foreign Policy (Norman: Oklahoma University Press, 1994).

Platt, Alan. The U.S. Senate and Strategic Arms Policy (Boulder, CO: Westview Press, 1978).

Porro, Jeffrey, with Paul Doty, Carl Kaysen and Jack Ruina (eds). *The Nuclear Age Reader* (New York: Alfred A. Knopf, 1989).

Prados, John. The Soviet Estimate: U.S. Intelligence Analysis and Soviet Strategic Forces (Princeton: Princeton University Press, 1986).

Pratt, Erik. Selling Strategic Defense: Interests, Ideologies, and the Arms Race (Boulder, CO: Lynne Reinner Publishers, 1990).

Pressler, Sen. Larry. Star Wars: The Strategic Defense Initiative Debates in Congress (New York: Praeger, 1986).

Pringle, Peter, and William Arkin. SIOP: Nuclear war from the inside (London: Sphere Books, 1983).

Quester, George (ed). The Nuclear Challenge in Russia and the New States of Eurasia (New York: M.E. Sharpe, 1995).

Reiss, Mitchell. Bridled Ambition: Why Countries Constrain Their Nuclear Capabilities (Washington, D.C.: Woodrow Wilson Center Press, 1995).

Roberts, Brad (ed). Order and Disorder After The Cold War (Cambridge, MA: MIT Press, 1995).

Rosner, Jeremy. The New Tug-Of-War: Congress, the Executive Branch, and National Security (Washington, D.C.: Carnegie Endowment, 1995).

Ruggie, John Gerard. Winning The Peace: America and World Order in the New Era (New York: Columbia University Press, 1996).

Sagan, Scott. Moving Targets: Nuclear Strategy and National Security (Princeton: Princeton University Press, 1989).

Sagan, Scott. The Limits of Safety: Organizations, Accidents, and Nuclear Weapons (New Jersey: Princeton University Press, 1993).

Sanders, Gerry. Peddlers of Crisis: The Committee on the Present Danger and the Politics of Containment (Boston: South End Press, 1983).

Scheer, Robert. With Enough Shovels: Reagan, Bush and Nuclear War (New York: Vintage Books, 1983).

Schelling, Thomas. Arms and Influence (New Haven: Yale University Press, 1966).

Schelling, Thomas, and Morton Halperin. Strategy and Arms Control (Washington, D.C.; Twentieth Century Fund, 1985).

Schlesinger, Arthur M., Jr. A Thousand Days: John F. Kennedy in the White House (Boston: Hodder Miflin Company, 1965).

Schlesinger, Arthur M., Jr. *The Imperial Presidency* (Boston: Houghton Miflin Co., 1973).

Schulzinger, Robert. American Diplomacy in the Twentieth Century (New York: Oxford University Press, 1984).

Schwartz, David. NATO's Nuclear Dilemmas (Washington, D.C.: Brookings, 1983).

Schweitzer, Glenn. Moscow DMZ (New Jersey: M.E. Sharpe, 1996).

Scoville, Herbert. MX: Prescription for Disaster (Cambridge, MA: MIT Press, 1981).

Scruton, Roger. A Dictionary of Political Thought (London: MacMillan, 1982).

Shields, John, and William Potter (eds). Dismantling the Cold War: U.S. and NIS Perspectives on the Nunn-Lugar Cooperative Threat Reduction Program (Cambridge, MA: MIT Press, 1997).

Sigal, Leon. Fighting To A Finish: The Politics of War Termination in the United States and Japan, 1945 (Ithaca: Cornell University Press, 1988).

Sigal, Leon V. Disarming Strangers: Nuclear Diplomacy with North Korea (Princeton, NJ: Princeton University Press, 1998).

Smith, Gaddis. Morality, Reason, and Power: American Diplomacy in the Carter Years (New York: Hill and Wang, 1986).

Smith, Gerard. Doubletalk: The Story of SALT (New York: Doubleday and Co., 1980).

Smoke, Richard. National Security and the Nuclear Dilemma (New York: MacGraw-Hill, 1993).

Smyth, Henry DeWolf. Atomic Energy for Military Purposes: The Official Report on the Development of the Atomic Bomb under the Auspices of the United States Government, 1940-1945 (Princeton: Princeton University Press, 1945).

Sorensen, Theodore. Kennedy (London: Hodder and Stoughton, 1965).

Spanier, John, and Joseph Nogee (eds). Congress, the Presidency and American Foreign Policy (New York: Pergamon Press, 1981).

Spanier, John, and Eric Uslaner, American Foreign Policy Making and the Democratic Dilemmas, 6th ed. (New York: MacMillan, 1994).

Spector, Leonard. Going Nuclear (Cambridge, MA: Ballinger, 1987).

Spear, Joseph. *Presidents and the Press: The Nixon Legacy* (Cambridge, MA: MIT Press, 1984).

Stein, Arthur. Why Nations Cooperate: Circumstance and Choice in International Relations (Ithaca: Cornell University Press, 1990).

Talbott, Strobe. Endgame: The Inside Story of SALT II (New York: Harper and Row, 1979).

Talbott, Strobe. *The Russians and Reagan* (New York: Vintage Books, 1984).

Talbott, Strobe. Deadly Gambits: The Reagan Administration and the Stalemate in Nuclear Arms Control (London: Pan Books, 1985).

Talbott, Strobe. The Master of the Game: Paul Nitze and the Nuclear Peace (New York: Random House, 1989).

Taylor, General Maxwell. *Precarious Security* (New York: W.W. Norton and Co., 1976).

Thomas, Gordon, and Max Morgan-Witts. Ruin From The Air (London: Hamish Hamilton, 1977).

Thompson, Kenneth (ed). Ashton Carter On Arms Control (Lanham: University Press of America, 1990).

Thompson, Kenneth (ed). The Bush Presidency: Ten Intimate Perspectives of George Bush Part Two, (Lanham: University of Virginia, 1998).

Tolz, Vera, and Melanie Newton (eds). The USSR in 1991: A Record of Events (Boulder, CO: Westview Press, Radio Free Europe / Radio Liberty, 1993).

Trachtenberg, Marc. History and Strategy (Princeton: Princeton University Press, 1991).

Truman, Harry S. Years of Trial and Hope (New York: Hodder and Stoughton, 1956).

Ulam, Adam. The Rivals: America and Russia since World War Two (New York: Penguin Books, 1971).

Ulam, Adam. Expansion and Coexistence: Soviet Foreign Policy, 1917-1973, 2nd ed. (New York: Holt, Rinehart and Winston, Inc., 1974).

Ulam, Adam. Dangerous Relations: The Soviet Union in World Affairs, 1970-1982 (New York: Oxford University Press, 1983).

Vance, Cyrus. Hard Choices: Critical Years in America's Foreign Policy (New York: Simon and Schuster, 1983).

Vandenberg, Arthur, Jnr, with Joe Alex Morris. *The Private Papers of Senator Vandenberg* (Cambridge, MA: Houghton Mitlin Co., 1952).

Walt, Stephen. The Origins of Alliances (Ithaca: Cornell University Press, 1987).

Waltz, Kenneth. Man, the State and War: A Theoretical Analysis (New York: Columbia University Press, 1954).

Waltz, Kenneth. Theory of International Politics (New York: Random House, 1979).

Webber, Mark. The International Politics Of Russia and the Successor States (Manchester: Manchester University Press, 1996).

Weinberger, Caspar. Fighting For Peace (New York: Warner Books, 1990).

Wendt, Alexander. Social Theory of International Politics (Cambridge, MA: Cambridge University Press, 1999).

Wittkopf, Eugene. The Domestic Sources of American Foreign Policy: Insights and Evidence, 2nd ed. (New York: St Martin's Press, 1994).

Wolfe, Thomas. Soviet Power and Europe, 1945-1970 (Baltimore: Johns Hopkins University Press, 1970).

Wolfe, Thomas. The SALT Experience (Cambridge, MA: Ballinger, 1979).

Wolfers, Arnold. Discord and Collaboration: Essays on International Politics (Baltimore: Johns Hopkins University Press, 1962).

Woodward, Bob. The Commanders (New York: Simon and Schuster, 1991).

Yergin, Daniel. Shattered Peace: The Origins of the Cold War, rev. ed. (New York: Penguin, 1990).

Articles

Abrams, Herbert. "Human Reliability and Safety in the Handling of Nuclear Weapons", Science & Global Security, Vol. 2, 1991, p.325-49.

Abrams, Herbert and Daniel Pollak. "Security Issues in the Handling and Disposition of Fissionable Material", *Contemporary Security Policy*, Vol. 15, No. 3, December 1994, p.1-29.

Adler, Emanuel. "The emergence of cooperation: national epistemic communities and the international evolution of the idea of nuclear arms control", *International Organization*, Vol. 46, No. 1, Winter 1992, p.101-145.

Aspin, Les. "The Defense Budget and Foreign Policy: The Role of Congress", *Daedalus*, 104, Summer 1975, p.155-174.

Axelrod, Robert, and Robert Keohane, "Achieving Cooperation Under Anarchy: Strategies and Institutions", World Politics, 38, October 1985, p.254-226.

Ball, Desmond. "The MX Basing Decision", *Survival*, Vol. XXII, No. 2, March/April 1980, p.58-64.

Barry, John. "Reality Check", The Bulletin, October 7 1997, p.72.

Belyaninov, Kirill. "Nuclear nonsense, black-market bombs, and fissile flim-flam", *The Bulletin of the Atomic Scientists*, Vol. 50, No. 3, March/April 1994, p.44-50.

Bichsel, Amanda. "How the GOP Learned to Love the Bomb", *The Washington Monthly*, October 1995, p.26-30.

Blair, Bruce, and Sam Nunn. "From Nuclear Deterrence to Mutual Safety", *The Washington Post*, June 22 1997, p.8.

Bluth, Christoph. "Strategic Nuclear Weapons and US-Russian Relations: From Confrontation to Cooperative Denuclearization?", *Contemporary Security Policy*, Vol. 15, No. 1, April 1994, p.80-108.

Boese, Wade. "Russia Not In Compliance With CFE Flank Limits", Arms Control Today, Vol. 29, No. 5, July/August 1999, p.24.

Boulden, Laurie. "CIA, DIA Provide New Details on CW, BW Programs in Iran and Russia", *Arms Control Today*, Vol. 26, No. 6, August 1996, p.32-3.

Broad, William. "Guarding the Bomb: A Perfect Record But Can It Last?", *The New York Times*, January 29 1991, p.C1.

Brodie, Bernard. "The Development of Nuclear Strategy", *International Security*, Vol. 2, No. 4, Spring 1978, p.65-83.

Bukharin, Oleg. "Nuclear Safeguards and Security in the Former Soviet Union", Survival, Vol. 36, No. 4, Winter 1994-95, p.53-72.

Bukharin, Oleg. "The Future of Russia's Plutonium Cities", *International Security*, Vol. 21, No. 4, Spring 1997, p.126-158.

Bukharin, Oleg, Harold Feiverson and Marvin Miller. "A Cutoff In The Production Of Fissile Material", *International Security*, Vol. 19, No. 3, Winter 1994/95, p.167-202.

Bukharin, Oleg, and William Potter. "Potatoes were guarded better", *The Bulletin of the Atomic Scientists*, Vol. 51, No. 4, May/June 1995, p.46-50.

Bunn, Matthew, and Kosta Tsipis. "The Uncertainties of a Preemptive Nuclear Attack", *Scientific American*, Vol. 249, No. 5, November 1983, p.32-41.

Butfoy, Andrew. "Offence-Defence Theory and the Security Dilemma: The Problem with Marginalizing the Context", *Contemporary Security Policy*, Vol. 18, No. 3, December 1997, p.38-58.

Caldwell, Dan. "Permissive Action Links: A description and proposal", Survival, Vol. 29, May/June 1987, p.224-238.

Carter, Ashton, John Deutch and Philip Zelikow. "Catastrophic Terrorism", Foreign Affairs, Vol. 77, No. 6, November/December 1998, p.80-94.

Caskie, Susan. "Security Notes: Kazakstan, Totally Nuclear Free", *Transition*, 1 November 1996, p.62.

Cerniello, Craig. "G-7, Russia Make Modest Progress During Nuclear Summit in Moscow", Arms Control Today, Vol. 26, No. 3, April 1996, p.19.

Cerniello, Craig. "Ukraine Completes Final Transfer of Nuclear Warheads To Russia", Arms Control Today, Vol. 26, No. 4, May/June 1996, p.22.

Cerniello, Craig. "Senate Approves 'Nunn-Lugar II' To Counter Domestic WMD Threats" Arms Control Today, Vol. 26, No. 5, July 1996, p.28.

Cerniello, Craig. "Perry Urges Russian Lawmakers To Ratify START II, Move To START III", Arms Control Today, Vol. 26, No. 8, October 1996, p.27.

Cerniello, Craig. "Belarus Completes Transfer of Nuclear Warheads to Russia", Arms Control Today, Vol. 26, No. 9, November/December 1996, p.18.

Cerniello, Craig. "NATO Strikes Against Yugoslavia Cloud U.S.-Russian Arms Control" Arms Control Today, Vol. 29, No. 2, March 1999, p.27, 33.

Cerniello, Craig. "U.S., Ukraine Extend CTR Program", *Arms Control Today*, Vol. 29, No. 5, July/August 1999, p.24.

Clarke, Jonathan. "Leaders and Followers", Foreign Policy, Winter 1995-1996, p.37-51.

Copeland, Dale C. "The Constructivist Challenge to Structural Realism: A Review Essay", *International Security*, Vol. 25, No. 2, Fall 2000, p.187-212.

Daalder, Ivo, and Terry Terriff. "Nuclear Arms Control: Finishing the Cold War Agenda", Arms Control, Vol. 14, No. 1, April 1993, p.5-37.

Davis, Zashary. "The Realist Nuclear Regime", Security Studies, No. 2, Spring/Summer 1993, p.79-99.

Deni, John, and Dunbar Lockwood. "DOD Plans Call for More Transparency In Managing U.S-Russian Plutonium", *Arms Control Today*, Vol. 24, No. 3, April 1994, p.23.

Dessler, David. "What's at stake in the agent-structure debate?", *International Organization*, Vol. 43, No. 3, Summer 1989, p.441-473.

Diamond, Howard. "U.S. Sanctions Russian Entities For Iranian Dealings", Arms Control Today, Vol. 29, No. 1, January/February 1999, p.25.

Domenici, Senator Pete. "The Domenici Challenge", The Bulletin of the Atomic Scientists, Vol. 54, No. 2, March/April 1998, p.40-44.

Dowdy, Edward. "Technology centers for Russian scientists", *The Bulletin of the Atomic Scientists*, Vol. 48, No. 8, October 1992, p.46.

Downs, George, David Rocke and Randolph Siverson. "Arms races and Cooperation", World Politics, No. 38, October 1985, p.118-146.

Duffield, John S., Theo Farrell, Richard Price and Michael C. Desch. "Correspondence; Isms and Schisms: Culturalism versus Realism in Security Studies", *International Security*, Vol. 24, No. 1, Summer 1999, p.156-180.

Ellis, Jason. "Nunn-Lugar's Mid-Life Crisis", Survival, Vol. 39, No. 1, Spring 1997, p. 84-110.

Ellis, Jason, and Todd Perry. "Nunn-Lugar's Unfinished Agenda", Arms Control Today, Vol. 27, No. 7, October 1997, p.14-22.

Feaver, Peter. "Does Moscow Know Where Its Nukes Are?", *The Los Angeles Times*, Decmber 22 1990, p.37.

Feaver, Peter. "Command and Control in Emerging Nuclear Nations", *International Security*, Vol. 17, No. 3, Winter 1992/93, p.160-87.

Feaver, Peter, Gunther Hellman, Randall Schweller, Jeffrey Taliaferro, William Wohlforth, Jeffrey Legro and Andrew Moravcsik. "Correspondence: Brother Can You Spare a Paradigm? (Or Was Anybody Ever a Realist?)", *International Security*, Vol. 25, No. 1, Summer 2000, p.165-193.

Feinstein, Lee. "Russia Seeks U.S. Cooperation for Expanding Arms Sales", Arms Control Today, Vol. 23, No. 3, April 1993, p.24.

Flickner, Charles. "The Russian Aid Mess", *The National Interest*, Winter 1994/95, p. 13-18.

Freedman, Lawrence. "I Exist: Therefore I Deter", *International Security*, Vol. 13, No. 1, Summer 1988, p.177-95.

Gaddy, Clifford, and Barry Ickes. "Russia's Virtual Economy", *Foreign Affairs*, Vol. 77. No. 5, September/October 1998, p.53-67.

Goldanskii, Vitalii. "Russia's 'Red-Brown' Hawks", *The Bulletin of the Atomic Scientists*, Vol. 49, No. 5, June 1993, p.24-27.

Grieco, Joseph. "Anarchy and the Limits of Cooperation: A Realist Critique of the Newest Liberal Institutionalism", *International Organization*, Vol. 42, No. 3, Summer 1988, p.485-507.

Haggard, Stephan, and Beth A. Simmons. "Theories of international regimes", *International Organization*, Vol. 41, No. 3, Summer 1987, p.491-517.

Hopf, Ted. "The Promise of Constructivism in International Relations Theory", *International Security*, Vol. 23, No. 1, Summer 1998, p.171-200.

Isaacs, John. "B-2 or not B-2?" The Bulletin of the Atomic Scientists, Vol. 45, No. 7, September 1989, p.3.

Isaaes, John. "One MXed-up debate", *The Bulletin of the Atomic Scientists*, Vol. 45, No. 7, September 1989, p.4.

Isaacs, John. "This time, Congress speaks up", *The Bulletin of the Atomic Scientists*, Vol. 46, No. 4, May 1990, p.6.

Isaacs, John. "House in from the cold", *The Bulletin of the Atomic Scientists*, Vol. 46, No. 8, October 1990, p.4.

Isaacs, John. "Snatching defeat from the jaws of victory", *The Bulletin of the Atomic Scientists*, Vol. 47, No. 6, July/August 1991, p.3.

Isaacs, John. "Congress seizes Bush's weapons initiative", *The Bulletin of the Atomic Scientists*, Vol. 47, No. 9, November 1991, p.3-6.

Isaacs, John. "Bush whacked by Wofford win", *The Bulletin of the Atomic Scientists*, Vol. 48, No. 1, January/February 1992, p.3-6.

Jervis, Robert. "Realism, Neoliberalism, and Cooperation: Understanding the Debate", *International Security*, Vol. 24, No. 1, Summer 1999, p.42-63.

Kalyadin, Alexander, and Elina Kirichenko. "Nonproliferation After the New York Conference", *International Affairs (Moscow)*, No. 7, 1995, p.27-33.

Keohane, Robert, and Lisa Martin. "The Promise of Institutionalist Theory", *International Security*, Vol. 20, No. 1, Summer 1995, p.39-51.

Khripunov, Igor. "Minatom at the edge", *The Bulletin of the Atomic Scientists*, Vol. 55, No. 3, May/June 1999, p.56-61.

Kincade, William. "Nuclear Weapons in Ukraine: Hollow Threat, Wasting Asset", Arms Control Today, Vol. 23. No. 6, July/August 1993, p.13-18.

Kluger, Jeffrey. "The Last Countdown?", Time, No. 49, December 2 1996, p.70.

Kramer, Mark. "Warheads and chaos", *The National Interest*, No. 25, Fall 1991, p.94-97.

Kratochwil, Friedrich, and John Gerard Ruggie. "International Organization: a state of the art on an art of the state", *International Organization*, Vol. 40, No. 4, Autumn 1986, p.453-475.

Kydd, Andrew. "Trust, Reassurance, and Cooperation", *International Organization*, Vol. 54, No. 2, Spring 2000, p.325-57.

Lackey, Sue, "Russia violates bio-chem treaties", Jane's Intelligence Review, October 199, p.3.

Lee III, Rensselaer. "Post-Soviet Nuclear Trafficking: Myths, Half-Truths, and the Reality", Current History, Vol. 94, No. 594, October 1995, p.343-48.

Legro, Jeffrey. "Whence American Internationalism", *International Organization*, Vol. 54, No. 2, Spring 2000, p.253-89.

Legro, Jeffrey W. and Andrew Moravcsik. "Is Anybody Still a Realist?", *International Security*, Vol. 24, No. 2, Fall 1999, p.5-55.

Lenorovitz, Jeffrey. "MX Basing Mode Concepts Analyzed", Aviation Week and Space Technology, Vol. 107, November 1977, p.62-7.

Lentini, Peter. "Electoral Associations in the 1993 Elections to the Russian State Duma", *The Journal of Communist Studies and Transition Politics*, Vol. 10, No. 4, December 1994, p.1-36.

Lepingwell, John. "START II and the Politics of Arms Control in Russia", *International Security*, Vol. 20, No. 2, Fall 1995, p.63-91.

Lindsay, James. "Congress and Foreign Policy: Why the Hill Still Matters", *Political Science Quarterly*, Vol. 107, No. 4, Winter 1992-93, p.607-628.

Lockwood, Dunbar. "Commonwealth Agrees on Unified Nuclear Command" Arms Control Today, Vol. 22, No. 1, January/February 1992, p.39, 50.

Lockwood, Dunbar. "Belarus Ratifies START I Pact; Ukraine Remains Last Holdout", Arms Control Today, Vol. 23, No. 2, March 1993, p.20.

Lockwood, Dunbar. "GAO Study Outlines Obstacles To Soviet Warhead Dismantlement", Arms Control Today, Vol. 23, No. 3, April 1993, p.25.

Lockwood, Dunbar. "Clinton, Yeltsin Advance Arms Control at First Summit", Arms Control Today, Vol. 23, No. 4, May 1993, p.19.

Lockwood, Dunbar. "Russian Turmoil, Ukrainian Action Delay START 1 Implementation", Arms Control Today, Vol. 23, No. 4, May 1993, p.23.

Lockwood, Dunbar. "U.S. Security Aid Moves Slowly to Former Soviet States", Arms Control Today, Vol. 23, No. 6, July/August 1993, p.26.

Lockwood, Dunbar. "Dribbling Aid To Russia", *The Bulletin of the Atomic Scientists*, Vol. 49, No. 6, July/August 1993, p.39-42.

Lockwood, Dunbar. "Ukraine's Position 'Iardens Despite Some Positive Signs", Arms Control Today, Vol. 23, No. 7, September 1993, p.30.

Lockwood, Dunbar. "Russia, Ukraine Dispute Deal Over Warhead Withdrawals", *Arms Control Today*, Vol. 23, No. 9, November 1993, p.24.

Lockwood, Dunbar. "U.S., Kazakhstan Make Progress In SSD Talks; Ukraine Balks", *Arms Control Today*, Vol. 23, No. 9, November 1993, p.25.

Lockwood, Dunbar. "Ukrainian Rada Ratifies START I, But Adds 13 Conditions for Approval", Arms Control Today, Vol. 23, No. 10, December 1993, p.26.

Lockwood, Dunbar. "U.S. Reaches Understanding With Ukraine, Russia on Denuclearization", Arms Control Today, Vol. 24, No. 1, January/February 1994, p.19.

Lockwood, Dunbar. "Former Soviet Republics Clear Way for Nunn-Lugar Monies", *Arms Control Today*, Vol. 24, No. 1, January/February 1994, p.28.

Lockwood, Dunbar. "U.S., Russia Reach Agreement For Plutonium Site Inspections", *Arms Control Today*, Vol. 24, No. 3, April 1994, p.22.

Lockwood, Dunbar. "U.S.-Russian Talks on Nuclear Issues Find Progress Slow at Moscow Round", *Arms Control Today*, Vol. 25, No. 1, January/February 1995, p.26.

Lockwood, Dunbar. "U.S. Signs New Agreements Expanding 'Nunn-Lugar' Support", *Arms Control Today*, Vol. 25, No. 4, May 1995, p.27, 30.

Lockwood, Dunbar. "The Nunn-Lugar Program: No Time To Pull The Plug", Arms Control Today, Vol. 25, No. 5, June 1995, p.8-13.

Lockwood, Dunbar. "Presidents Place New Limits on Fissile Material Use", Arms Control Today, Vol. 25, No. 5, June 1995, p.21.

Lugar, Richard. "The Threat of Weapons of Mass Destruction: A US Response", *The Nonproliferation Review*, Vol. 6, No. 3, Spring-Summer 1999, p.51-56.

Mann, Jim. "China buys latest arms from Russia", The Age, July 14 1992, p. 8.

Mearsheimer, John. "The Case for a Ukrainian Nuclear Deterrent", Foreign Affairs, Vol. 72, No. 3, Summer 1993, p.50-66.

Mearsheimer, John. "The False Promises of International Institutions", *International Security*, Vol. 19, No. 3, Winter 1994/95, p.5-49.

Medeiros, Evan. "U.S., Russia Enhance Nuclear Security Cooperation During Washington Talks", *Arms Control Today*, Vol. 26, No. 1, February 1996, p.23.

Medeiros, Evan. "Gore-Chernomyrdin Commission Expands Nuclear Security Cooperation", Arms Control Today, Vol. 26, No. 5, July 1996, p.25.

Meyer, Stephen. "MAPS for the MX Missile", *The Bulletin of the Atomic Scientists*, Vol. 35, No. 6, June 1979, p.26-29.

Miller, Steven. "Western diplomacy and the Soviet nuclear legacy", *Survival*, Vol. 34, No. 3, Autumn 1992, p.3-27.

Miller, Steven. "The Case Against a Ukrainian Nuclear Deterrent", Foreign Affairs, Vol. 72, No. 3, Summer 1993, p.67-80.

Morrison, David. "ICBM Vulnerability", The Bulletin of the Atomic Scientists, Vol. 35, No. 9, November 1984, p.22-9.

Nazarkin, Yuri. "Russian and US Concessions Should Be Comparable", *International Affairs (Moscow)*, No. 8, 1995, p.9-17.

Nazarkin, Yuri, and Rodney Jones. "Moscow's START II Ratification: Problems and Perspectives", *Arms Control Today*, Vol. 25, No. 7, September 1995, p.8-14.

Newman, Andrew. "Cooperative Threat Reduction: 'Locking In' Tomorrow's Security", Contemporary Security Policy, Vol. 22, No. 1, April 2001.

Nitze, Paul. "Deterring Our Deterrent", Foreign Policy, No. 25, Winter 1976-1977, p.195-210.

Norris, Robert. "The Soviet Nuclear Archipelago", *Arms Control Today*, Vol. 22, No. 1, January/ February 1992, p.24-31.

Norris, Robert. "C.I.S. (Soviet) Strategic Nuclear Forces, End of 1991", *The Bulletin of the Atomic Scientists*, Vol. 48, No. 2, March 1992, p.49.

Norris, Robert. "Nuclear Notebook: The Midas Touch", The Bulletin of the Atomic Scientists, Vol. 48, No. 10, December 1992, p.57.

Norris, Robert, and William Arkin. "Where The Weapons Are", *The Bulletin of the Atomic Scientists*, Vol. 47, No. 9, November 1991, p.48-9.

Norris, Robert, and William Arkin. "NRDC Nuclear Notebook: Known Nuclear Tests Worldwide, 1945-1994", *The Bulletin of the Atomic Scientists*, Vol. 51, No. 4, May/June 1995, p.70.

Nunn, Sam. "Assessing the Military Threats of the 1990s" (excerpts), Aviation Week and Space Technology, April 16 1990, p.7.

Nunn, Sam, and Richard Lugar. "Dismantling the Soviet Arsenal", *The Washington Post*, November 22 1991, p.A-25.

Nystén-Haarala, Soili. "Does the Russian Constitution justify an offensive against Chechnia?", Central Asian Survey, Vol. 14, No. 2, 1995, p.311-17.

Oberdorfer, Don. "First Aid for Moscow: The Senate's Foreign Policy Rescue", *The Washington Post*, December 1 1991, p.C2.

O'Hanlon, Michael. "Star Wars Strikes Back", Foreign Affairs, Vol. 78, No. 6, November/December 1999, p.68-82.

Paine, Christopher. "MX: The Public Works Project of the 1980s", *The Bulletin of the Atomic Scientists*, Vol. 36, No. 2, February 1980, p.12-16.

Paine, Christopher. "MX: Too Dense for Congress", The Bulletin of the Atomic Scientists, Vol. 39, No. 2, February 1983, p.4-6.

Paine, Christopher, and Thomas Cochran. "So Little Time, So Many Weapons, So Much To Do", *The Bulletin of the Atomic Scientists*, Vol. 48, No. 1, January/February 1992, p.15-18.

Perry, Todd. "Stemming Russia's Plutonium Tide: Cooperative Efforts to Convert Military Reactors", *The Nonproliferation Review*, Vol. 4, No. 2, Winter 1997, p.104-114.

Perry, Todd. "Securing Russian Nuclear Materials: The Need for an Expanded US Response", *The Nonproliferation Review*, Vol. 6, No. 2, Winter 1999, p.84-97.

Perry, William. "Defense in an Age of Hope", Foreign Affairs, Vol. 75, No. 6, November/ December 1996, p.64-79.

Petersen, Paul. "The President's Dominance in Foreign Policy Making", *Political Science Quarterly*, Vol. 109, No. 2, Summer 1994, p.215-234.

Potter, William. "Exports and Experts: Proliferation Risks From the New Commonwealth", *Arms Control Today*, Vol. 22, No. 1, January/February 1992, p.32-37.

Potter, William. "Before the Deluge? Assessing the Threat of Nuclear Leakage From the Post-Soviet States", *Arms Control Today*, Vol. 25, No. 8, October 1995, p.9-16.

Potter, William, and Fred Wehling. "Sustainability: A Vital Component of Nuclear Material Security in Russia", *The Nonproliferation Review*, Vol. 7, No. 1, Spring 2000, p.82-95.

Price, Richard, and Christian Reus-Smit. "Dangerous Liaisons? Critical International Theory and Constructivism", *European Journal of International Relations*, Vol. 4 (3), 1998, p.259-294.

Quinn-Judge, Paul. "Yeltsin weighed nuclear strike on Ukraine, Soviet report says", *The Boston Globe*, October 25 1991, p.8.

Rimmington, Anthony. "Fragmentation or Proliferation? The Fate of the Soviet Union's Offensive Biological Weapons Programme", *Contemporary Security Policy*, Vol. 20, No. 1, April 1999, p.86-110.

Roberts, Brad. "From Nonproliferation to Antiproliferation", *International Security*, Vol. 18, No. 1, Summer 1993, p.139-73.

Rosenberg. David Alan. "A Smoking Radiating Ruin at the End of Two Hours: Documents on American Plans for Nuclear War with the Soviet Union, 1954-1955", *International Security*, Vol. 6, No. 3, Winter 1981/82, p.3-38.

Rosenberg, David Alan. "The Origins of Overkill: Nuclear Weapons and American Strategy, 1945-1960", *International Security*, Vol. 7, No. 4, Spring 1983, p.3-71.

Ross, Michael. "Trident II misfires in Congress", *The Bulletin of the Atomic Scientists*, Vol. 45, No. 10, December 1989, p.11.

Ruggie, John Gerard. "Continuity and Transformation In The World Polity: Toward a Neorealist Synthesis", World Politics, 35, January 1982, p.261-285.

Sagan, Scott. "The Perils of Proliferation: Organization Theory, Deterrence Theory, and the Spread of Nuclear Weapons", *International Security*, Vol. 18, No. 4, Spring 1994, p.66-107.

Schoppa, Leonard. "The Social Context in Coercive International Bargaining", *International Organization*, Vol. 53, No. 2, Spring 1999, p.307-42.

Shields, John. "Conference Findings on the Nunn-Lugar Cooperative Threat Reduction Program: Donor and Recipient Country Perspectives", *The Nonproliferation Review*, Vol. 3, No. 1, Fall 1995, p.66-75.

Sokolov, Oleg, and Yuri Klyukin. "Starting Off For A Secure Future", *International Affairs (Moscow)*, No. 3, March 1993, p.3-14.

Towell, Pat. "Bush's Plan To Cut Weapons May Spur Deeper Cuts", in Congressional Quarterly, Current American Government, Spring 1992, p.87-90.

Tyler, Patrick E. "Troubling Question: Whose Finger Was On Nuclear Trigger?", *The New York Times*, August 24 1991, p.9.

Walker, William. "Nuclear weapons and the former Soviet republics", *International Affairs*, Vol. 68, No. 2, 1992, p.255-277.

Waltz, Kenneth. "The Emerging Structure of International Politics", *International Security*, Vol. 18, No. 2, Fall 1993, p.44-79.

Waltz, Kenneth. "Structural Realism after the Cold War", *International Security*, Vol. 25, No. 1, Summer 2000, p.5-41.

Wendt, Alexander. "The agent-structure problem in international relations theory", *International Organization*, Vol. 41, No. 3, Summer 1987, p.335-370.

Wendt, Alexander. "Anarchy is what states make of it: the social construction of power politics", *International Organization*, Vol. 46, No. 2, Spring 1992, p.391-425.

Wohlforth, William. "Realism and the End of the Cold War", *International Security*, Vol. 19, No. 3, Winter 1994/95, p.91-129.

Wolfsthal, Jon. "Clinton, Yeltsin Advance Arms Control Agenda at First Summit", Arms Control Today, Vol. 23, No. 4, May 1993, p.26.

Wolfsthal, Jon. "Iran, Russia Sign Nuclear Deal Raising Proliferation Concerns", Arms Control Today, Vol. 25, No. 1, January/February 1995, p.21.

Wolosky, Lee. "Putin's Plutocrat Problem", Foreign Affairs, Vol. 79, No. 2, March/April 2000, p.18-31.

Yavlinsky, Grigory. "Russia's Phony Capitalism", Foreign Affairs, Vol. 77, No. 3, May/ June 1998, p.67-79.

Zarakhovich, Yuri. "Voting Against Freedom", Time, December 9 1996, p.54.

Articles without authorship ascribed

"In brief: nuclear underwear", *The Bulletin of the Atomic Scientists*, Vol. 52, No. 6, November/December 1996, p.7.

"CIA is shopping for old Soviet weapons: official", The Age, November 17 1992, p. 7.

"3 U.S. labs often lax in security", The Washington Times, November 1 1997, p.A2.

"Chronology of U.S.-Soviet-CIS Nuclear Relations", Arms Control Today, Vol. 24, No. 5, June 1994, p.33.

"Special Section: The Cox Report", Arms Control Today, Vol. 29, No. 3, April/May 1999, p.17-37.

"Damage Assessment: The Senate's Rejection of the CTBT", Arms Control Today, Vol. 29, No. 6, September/October 1999, p.9, 12.

"Factfile: U.S. Security Assistance to the Former Soviet Union", *Arms Control Today*, Vol. 26, No. 7, September 1996, p.25-6.

"Interview – William F. Burns: Dismantling the Cold War's Arsenal", *Arms Control Today*, Vol. 23, No. 7, September 1993, p.3-7.

"Moscow's secret base keeps US guessing", The Age, April 17 1996, p.9.

"Newsbriefs: Explosion at Russian Nuclear Plant", Arms Control Today, Vol. 23, No. 4, May 1993, p.27.

"Newsbriefs: Belarus Formally Accedes to NPT", Arms Control Today, Vol. 23, No. 7, September 1993, p.31.

"Newsbriefs", Arms Control Today, Vol. 25, No. 5, June 1995, p.33.

"Newsbriefs: First Shipment of Russian Uranium Arrives in U.S.", Arms Control Today, Vol. 25, No. 6, July/August 1995, p.27.

"Newsbriefs: Bulgaria, Slovakia Still Hold SS-23s", Arms Control Today, Vol. 27, No. 6, September 1997, p.33.

"Newsbriefs: U.S., Russia Sign 'Nuclear Cities' Agreement", Arms Control Today, Vol. 28, No. 7, October 1998, p.29.

"Newsbriefs: Defense Threat Reduction Agency Created", Arms Control Today, Vol. 28, No. 7, October 1998, p.29.

"Newsbriefs: Russia Admits CFE Violation" Arms Control Today, Vol. 29, No. 6, September/October 1999, p.38.

"Newsbriefs: White House Budget Seeks Threat Reduction Cuts", *Arms Control Today*, Vol. 31, No. 4, May 2001, p.26.

"Taking the START II Debate to Moscow", Arms Control Today, Vol. 26, No. 8, October 1996, p.18.

"Ukraine Chief Admits Arms-Transfer Error", The New York Times, May 8 1992, p.A9.

Working Papers, Occasional Papers, Conference Papers, Monographs, Reports and Surveys

American Institute of Aeronautics and Astronautics, *Theater Missile Defense: Systems and Issues – 1994* (Washington, D.C.: AIAA, 1994).

A:batov, Alexei. "Implications of the START II Treaty for U.S.-Russian Relations", *The Henry L. Stimson Center*, Report No. 9, October 1993.

Blair, Bruce. Global Zero Alert for Nuclear Forces, Brookings Occasional Papers (Washington, D.C.: Brookings, 1995).

Carnegie Endowment for International Peace and The Monterey Institute of International Studies, *Nuclear Successor States of the Soviet Union: Nuclear Weapon and Sensitive Export Status Report*, No. 1, May 1994; No. 2, December 1994; No. 3, July 1995; No. 4, May 1996.

Clark, Douglas L. "Uproar Over Nuclear Weapons", RFE/RL Research Report, Vol. 1, No. 13, 27 March 1992, p.51.

DeWing, Martin. "The Ukrainian Nuclear Arsenal: Problems of Command, Control, and Maintenance", Working Paper No. 3, Program for Nonproliferation Studies, Monterey Institute of International Studies, October 1993.

Fossato, Floriana. "Defense Officials Deny Lebed's Nuclear Suitcase Claims", *RFE/RL Newsline*, Vol. 1, No. 129, Part 1, 1 October 1997.

Global Organized Crime Project, *The Nuclear Black Market*, CSIS Task Force Report (Washington, D.C.: Center for Strategic and International Studies, 1996).

Goble, Paul. "The Roots of Russian-Iranian Rapprochment", *RFE/RL Newsline*, Vol. 3, No. 59, Part 1, 25 March 1999.

International Institute for Strategic Studies, *The Military Balance*, 1997/98 (London: Oxford University Press, 1997).

International Institute for Strategic Studies, *The Military Balance*, 1998/99 (London: Oxford University Press, 1998).

International Institute for Strategic Studies, *Strategic Survey: 1991-1992* (London: Brassey's 1992).

Kachalin, Vladimir. "Defense Industry Conversion In The Russian Federation", *The Harriman Institute Forum*, Vol. 6, No. 10, June 1993.

Kaplan, Fred. Dubious Specter: A Skeptical Look at the Soviet Nuclear Threat (Washington, D.C.: Institute for Policy Studies, 1980).

Kelly, Rich. "The Nunn-Lugar Act: A Wasteful and Dangerous Illusion", Foreign Policy Briefing, 39 (Washington, D.C.: The CATO Institute, March 18 1996).

Kuzio, Taras. "Nuclear Weapons and Military Policy In Independent Ukraine", *The Harriman Institute Forum*, Vol. 6, No. 9, May 1993.

Larrabee, F. Stephen., and Theodore W. Karasik. Foreign and Security Policy Decisionmaking Under Yeltsin, MR-831-OSD (Santa Monica, CA: RAND, 1997).

Lentini, Peter, and Troy McGrath. "The Rise of the Liberal Democratic Party and the 1993 Elections", *The Harriman Institute Forum*, Vol. 7, No. 6, February 1994.

Lepingwell, John. "Introduction: The Problem of Former Soviet Nuclear Weapons", *RFE/RL Research Report*, Vol. 2, No. 8, 19 February 1993, p.1-3.

Lepingwell, John. "Ukraine, Russia, and the Control of Nuclear Weapons", RFE/RL Research Report, Vol. 2, No. 8, 19 February 1993, p.4-20.

Nunn, Sam. "Nunn 1990: A New Military Strategy", CSIS Significant Issues Series, Vol. XII, No. 5 (Washington, D.C.: Center for Strategic and International Studies, 1990).

Potter, William, with Eve Cohen and Edward Kayukov. *Nuclear Profiles of the Soviet Successor States*, Monograph No. 1 (Monterey, CA: Monterey Institute of International Studies, Program for Nonproliferation Studies, May 1993).

Potter, William. "The Politics of Nuclear Renunciation: The Cases of Belarus, Kazakhstan and Ukraine", *The Henry L. Stimson Center Occasional Paper*, No. 22, April 1995.

Programme for Promoting Nuclear Nonproliferation, *PPNN Newsbrief*, No. 46, 2nd Quarter, 1999.

Programme for Promoting Nuclear Nonproliferation, *PPNN Newsbrief*, No. 53, 1st Quarter, 2001.

Sagan, Scott, and Kenneth Waltz, The Spread of Nuclear Weapons: A Debate (New York: W.W. Norton, 1995).

Sokov, Nikolai. "Russia's Approach to Deep Reductions of Nuclear Weapons: Opportunities and Problems", 2nd ed., *The Henry L. Stimson Center Occasional Paper*, No. 27, September 1997.

Spring, Baker. "The Defense Budget For Defense: Why Nunn-Lugar Money Should Go To The B-2", *Executive Memorandum* 424 (Washington, D.C.: The Heritage Foundation, August 1 1995).

Stockholm International Peace Research Institute (SIPRI), World Armaments and Disarmament: SIPRI Yearbook 1986 (Oxford: Oxford University Press, 1986).

Stockholm International Peace Research Institute (SIPRI), SIPRI Yearbook 1997: Armaments, Disarmament and International Security (Oxford: Oxford University Press, 1997).

Internet Sources

Bruce Blair, Russian Nuclear Policy and the Status of Detargeting, Testimony Before the Subcommittee on Military Research and Development, U.S. House of Representatives Committee on National Security, March 13 1997 http://www.brook.edu/views/testimony/BLAIR/19970313.htm Accessed 23/10/97.

Ashton Carter, The Nuclear Roundtable with Ashton Carter, Assistant Secretary of Defense for International Security Policy, The Stimson Center, November 16 1995 http://www.stimson.org/pub/stimson/rd-table/carter.htm Accessed 05/02/97.

Statement by J. Gilmore Childers, Orrick, Herrington and Sutcliffe LLP, New York City, New York and Henry J. DePippo, Nixon Hargrave Devans and Doyle, Rochester, New York, Before the Senate Judiciary Committee, Subcommittee on Technology, Terrorism, and Government Information, Hearing on "Foreign Terrorists in America: Five Years After the World Trade Center", February 24 1998 http://www.senate.gov/~judiciary/childers.htm Accessed 01/02/01.

Clinton: Russia should not fear missile defense program, June 6, 2000 http://www.cnn.com/2000/WORLD/europe/06/05/clinton.europe/ Accessed 07/02/01.

CTR Funding – Russia, July 14 1999 < http://www.etr.osd.mil/funding/fundrus.htm Accessed < 14/07/99.

CTR-Accomplis'sments, July 14 1999 http://www.ctr.osd.mil/03accomp.htm Accessed 14/07/99.

CTR-Program Objectives, July 14 1999 < http://www.ctr.osd.mil/02object.htm Accessed 14/07/99.

CTR-Mission, July 14 1999 http://www.ctr.osd.mil/01missn.htm Accessed 14/07/99.

Charles Curtis, The Nuclear Roundtable, Securing Fissile Material in the Former Soviet Union, Deputy Secretary of Energy Charles B. Curtis, February 28 1996 http://www.stimson.org/pub/stimson/rd-table/curtis.htm Accessed 10/04/97.

Toby Dalton, "U.S.-Russian Programs Survive Kosovo, But Now Face Congressional Threat", Carnegie Endowment for International Peace, Non-Proliferation Project, Proliferation Brief, Vol. 2, No. 9, May 5 1999

http://www.ceip.org/files/publications/ProliferationBrief209.asp?p=8 Accessed 10/10/00.

Defense Threat Reduction Agency: Cooperative Threat Reduction Scorecard, February 15 2001 http://www.dtra.mil/ctr/ctr_score.html Accessed 22/06/01.

Radio Free Europe / Radio Liberty excerpted from the <u>U.S. Department of State Human Rights Report 1996</u>, "Belarus: Human Rights" January 30 1997 http://www.rferl.org/bd/be/info/be-hr.html Accessed 25/09/97.

Global Beat: "North Korea Threat Reduction Act of 1999", May 20 1999 http://www.nyu.edu/globalbeat/asia/napsnet052099.html Accessed 12/07/00.

Gore-Chernomyrdin Commission on Economic and Technological Cooperation, "Agreement between the Department of Energy of the United States of America and the Federal Nuclear and Radiation Safety Authority of the Russian Federation to Cooperate on National Protection, Control and Accounting of Nuclear Materials", June 30 1995 http://www.eia.doe.gov/gorec/goc16.html Accessed 03/10/97.

Presentation of Rose Gottemoeller, Carnegie Endowment for International Peace, Project Proliferation Roundtable, April 20 1999
http://www.ceip.org/files/events/Gottemoeller42099.asp?p=8 Accessed 10/10/00.

William Hoehn "Analysis of the Bush Administration's Fiscal Year 2002 Budget Requests for U.S.-Former Soviet Union Nuclear Security: Department of Energy Programs", April 18 2001 http://www.ransac.org/new-web-site/index.html Accessed 22/06/01.

John Holum "Remarks of the Honorable John D. Holum, Director, U.S. Arms Control and Disarmament Agency", October 31 1995
http://www.csis.org/html/9holumsp.html Accessed 22/02/97.

Senator Bob Kerrey "Toward A New Nuclear Policy: Reducing the Threat to American Lives", Prepared Text – Speech to the Council on Foreign Relations, November 17 1998 http://www.foreignrelations.org/public/pubs/kerrey.html Accessed 16/02/99.

Prof. Viktor Mikhailov, Russian Federation Minister of Atomic Energy, "NATO's Expansion and Russia's Security", September 20 1996 http://www.stimson.org/pub/stimson/rd-table/vmikhail.htm Accessed 22/02/97.

Sam Nunn, The Nuclear Roundtable Background Document, Senator Sam Nunn, Statement at the Beginning of the Senate Permanent Subcommittee on Investigations, Hearings on Global Proliferation of Weapons of Mass Destruction and Illicit Trafficking of Nuclear Materials. March 13 1996 http://www.stimson.org/pub/stimson/rd-table/3nunn.htm Accessed 22/02/97.

Dr Nikolai Sokov, "Overview: An Assessment of the Draft Russian Military Doctrine", October 18 1999 http://cns.miis.edu/pubs/reports/sokov.htm Accessed 25/10/99.

State Dept. Archive Site, HyperText Version of the START II Treaty http://www.state.gov/www/global/arms/starthtm/start2/st2intal.html Accessed 08/05/01.

J. Michael Waller, "Author's Rebuttal to the Department of State", published in *Demokratizatsiya*, Vol. 5, No. 1, Winter 1997 < http://afpc.org/issues.dos9.htm Accessed 14/07/99.

The White House, Office of the Press Secretary, Press Release, "Joint Statement on Parameters on Future Reductions in Nuclear Forces", March 21 1997 http://www.usis.usemb.se/press/baltic/FUTURE-REDUCTIONS-FACTS.htm Accessed 10/07/97.

1995 State of the Union Address, January 24 1995 http://www.washingtonpost.com/wp-srv/politics/special/states/docs/sou95.htm Accessed 07/02/01.