NONPROLIFERATION – CHALLENGES OLD AND NEW

by

Brad Roberts

The Counterproliferation Papers
Future Warfare Series No. 24
USAF Counterproliferation Center

Air University

Maxwell Air Force Base, Alabama

Nonproliferation - Challenges Old and New

Brad Roberts

August 2004

The Counterproliferation Papers Series was established by the USAF Counterproliferation Center to provide information and analysis to assist the understanding of the U.S. national security policy-makers and USAF officers to help them better prepare to counter the threat from weapons of mass destruction. Copies of No. 24 and previous papers in this series are available from the USAF Counterproliferation Center, 325 Chennault Circle, Maxwell AFB AL 36112-6427. The fax number is (334) 953-7530; phone (334) 953-7538.

Counterproliferation Paper No. 24 USAF Counterproliferation Center

Air University

Maxwell Air Force Base, Alabama 36112-6427

The internet address for the USAF Counterproliferation Center is: http://www.au.af.mil/au/awc/awcgate/awc-cps.htm

Contents

	Page
Disclaimer	ii
The Author	iii
I. Introduction	1
II. The "Strengthening" Agenda	2
III. The George W. Bush Administration	8
IV. Taking Stock 1990 – 2004	12
V. Looking to the Future	15
VI. The Next "Strengthening" Agenda	22
VII. Conclusions	25
Notes	27

Disclaimer

The views expressed in this publication are those of the author and do not reflect the official policy or position of the U.S. Government, Department of Defense, or the USAF Counterproliferation Center.

The Author

Dr. Brad Roberts is a member of the research staff of the Institute for Defense Analyses in Alexandria, Virginia, where he contributes to studies for the Office of the Secretary of Defense, DoD support agencies, and the joint military staff. His areas of expertise are NBC weapons counterproliferation, nonproliferation, and counterterrorism. He is also an adjunct professor at George Washington University, a member of DoD's Threat Reduction Advisory Committee, chairman of the research council of the Chemical and Biological Arms Control Institute, chairman of the Threat Reduction Program Review Committee for Los Alamos National Laboratory, and a member of the executive committee of the U.S. committee of the Council for Security Cooperation in Asia Pacific. He joined IDA in 1995, having served previously at the Center for Strategic and International Studies as a research fellow and as editor of The Washington Quarterly. Dr. Roberts has a Bachelor's degree from Stanford University, a Master's degree from the London School of Economics and Political Science, and a doctorate from Erasmus University, Rotterdam, The Netherlands.

Nonproliferation - Challenges Old and New

Brad Roberts

I. Introduction

Since the advent of the nuclear era in 1945, Americans and others have been debating whether or how it might be possible to prevent the proliferation of nuclear and other weapons of mass destruction (WMD). As each new proliferation challenge has emerged, debate about the shortcomings of the various policy tools for coping with proliferation has intensified. These debates have grown only more intense in the last ten to fifteen years. Despite such debates, American presidents have steered a fairly consistent course—promoting nonproliferation, innovating along the way, while also coping with its periodic failures.

The end of the Cold War seemed to make new things possible for nonproliferation, with the promise of even more cooperation between East and West on specific proliferation challenges. And the Persian Gulf War of 1990-91 seemed to make new things necessary, as the United States faced the first regional war under the shadow of weapons of mass destruction. First President George H.W. Bush and then President William Clinton committed the federal government to significant political efforts to strengthen the tools of nonproliferation policy.

At this juncture, a decade or so hence, it is useful to take stock. What was the "strengthening agenda" that they launched? How has thinking changed over three administrations—and in the wake of 9/11—about the means and ends of policy? More specifically, how has thinking about the balance between nonproliferation and counterproliferation evolved? How much progress has been made? Is there a future for nonproliferation? Where might national efforts most effectively be focused?¹

II. The "Strengthening" Agenda

The first Bush administration committed itself in the early 1990s to seek a strengthening of nonproliferation in various ways.² Early priority was given to conclusion and rapid entry into force of a global ban on chemical weapons. This was a Bush priority since his time as Vice President when he proposed a draft treaty in 1984 which resulted in conclusion of the Chemical Weapons Convention (CWC) in the very last days of the Reagan administration.

Anticipating the 1995 review conference of states parties to the Nuclear Non-Proliferation Treaty (NPT), the first Bush administration began to work for a decision to extend the treaty indefinitely. It also sought a strengthening of the safeguards system policed by the International Atomic Energy Agency (IAEA).³ The Bush administration sought to lead an effort to strengthen the Biological and Toxin Weapons Convention (BWC), with special focus on dealing with compliance challenges. Strengthening cooperation on export controls was also an administration priority, with focus on improved coordination in the ad hoc supplier groups such as the Australia Group and the Missile Technology Control Regime (MTCR).

The first Bush administration also focused on a string of specific problem cases. It took steps to promote North Korea's compliance with its International Atomic Energy Agency and Nuclear Non-Proliferation Treaty obligations. To deal with rising concerns about Russian Biological and Toxin Weapons Convention compliance it promoted a trilateral inspection effort involving the U.S., U.K., and Russia. In regions of proliferation concern, it promoted various steps. In Latin America it promoted the strengthening of the nonproliferation regime, including the Mendoza Declaration outlawing chemical weapons there. In the Middle East it promoted the Arms Control and Regional Security (ACRS) process. It continued pressures on India and especially Pakistan. The administration also exploited the end of the Cold War to recast the military environment in Europe by using the agreement on Conventional Forces in Europe (CFE), the Vienna Confidence and Security Building Measures, and the Open Skies Treaty as tools for providing predictability and transparency.

At a more strategic level, the administration took the lead in mobilizing consensus among the permanent members of the United Nations Security Council to issue an unprecedented statement at the head-of-state level on weapons of mass destruction proliferation. In their January 1992 summit statement, they declared the proliferation of unconventional weapons to be a threat to international peace and security (code words for justifying the use of force under the UN Charter) and committed themselves to concerted follow-up actions to strengthen nonproliferation—with special though not sole focus on Iraq.⁴

The Clinton administration inherited this agenda and proposed no significant departures from it. An early priority was to secure ratification of the Chemical Weapons Convention and its rapid entry into force, though on this effort it stumbled badly, not least in the failure to anticipate deep-seated opposition to the treaty from within the Republican Party. Finally the treaty did enter into force with U.S. participation, but only after the administration acceded to a plan of the Senate Republican Committee for an overhaul and contraction of the federal arms control process (i.e., elimination of the Arms Control and Disarmament Agency).

The Clinton administration successfully brokered the 1995 decision of states parties to the Nuclear Non-Proliferation Treaty to extend the treaty indefinitely. This was a significant achievement in the face of the desire of many states to extend the treaty only for a fixed period of time and with certain explicit conditions. It was won in part on the promise to conclude and bring into force the Comprehensive Test Ban Treaty (CTBT). But this ultimately foundered in the U.S. Senate, in part because of limited senior level engagement and poor bureaucratic follow-up of the kind that bedeviled Chemical Weapons Convention ratification. Senate CTBT debate also revealed a wide chasm of thinking among American experts on the role of nuclear weapons in the post-Cold War environment. The efforts to strengthen the Biological and Toxin Weapons Convention continued under the Clinton administration. The technical exploration of means to strengthen verification launched by the Bush administration was redirected with formation of an ad hoc international group of experts to consider broader questions associated with strengthening compliance.⁵

The special processes on problem cases were carried forward and adapted by the Clinton administration. Achieving the denuclearization of

the non-Russian republics of the former Soviet Union was an especially important early nonproliferation success for the Clinton administration—especially in the case of Ukraine, where denuclearization was hard won. Working with Congressional leaders Sam Nunn and Richard Lugar, the administration also launched the Cooperative Threat Reduction (CTR) effort to address concerns about the so-called "loose nukes" and "brain drain" problems in the former Soviet Union (the threat that weapons, sensitive technologies or materials, and expertise might migrate from the former Soviet weapons complex to proliferators in the Middle East and elsewhere). Along the way, concern about the Russian biological warfare (BW) problem seemed to slip from the list of top priorities, in part because the trilateral inspection process had been stymied by the Russians.

The regional agenda also continued to receive high-level attention in the Clinton administration. Mounting crisis over North Korea led to near war and then adoption of the 1994 Agreed Framework, brokered by former President Jimmy Carter, which seemed to promise an avoidance of war on the bet that the Democratic People's Republic of Korea (DPRK) would not survive long enough in the post-Cold War environment to realize its nuclear weapons ambitions. Efforts to promote regional approaches to nuclear nonproliferation were frustrated by developments in both South Asia and the Middle East and by international division about how to deal with threats that had not taken clear shape.

On export control, the Clinton administration continued the effort to adapt Cold War mechanisms to post-Cold War realities. It promoted an expansion of membership in some of the ad hoc mechanisms (e.g., Australia Group). It led the effort to replace the Cold War vintage Coordinating Committee on Export Controls with the Wassenaar Agreement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies, a much looser mechanism, though also one seemingly better attuned to the requirements of an era of globalization. This, too, was much criticized by Senate Republicans, as an abandonment of the types of coercive measures that had served American interests well in the past.

With regard to the other major powers, the Clinton administration made some progress with Moscow in addressing the "loose nukes" problem, though less progress in preventing Russian nuclear and missile aid to others, especially Iran. The administration made more progress

with Beijing in drawing China into the global nonproliferation effort—including Chinese membership of the Nuclear Non-Proliferation Treaty and Chemical Weapons Convention and support for the objectives of the Australia Group and Missile Technology Control Regime—though China did not bring its export behaviors fully into alignment with Washington's preferences. And vis-à-vis the European allies, the Clinton administration suffered continued frustration in building common approaches to Iran, North Korea, and others. And on the Clinton watch, the United Nations Special Commission on Iraq (UNSCOM) enjoyed both its greatest successes and suffered its ultimate collapse as consensus on the Security Council about how to deal with Iraq finally dissolved.

The Clinton administration also addressed as an urgent priority the need to come to terms with the military planning requirements of proliferation. In doing so, they were directly following a line of thinking advanced earlier in the Pentagon under Secretary Richard Cheney. Throughout the Cold War, the challenges posed by the chemical, biological, and nuclear weapons of the Soviet Union were so daunting that any other challenge was simply a lesser-included problem. But with the collapse of the Soviet Union and following a decade (the 1980s) of rapid proliferation of chemical and, possibly also, biological weapons, U.S. military planners had to begin to think more seriously about the operational requirements of projecting power and prevailing against regional powers armed with weapons of mass destruction. The near-brush with Iraqi weapons of mass destruction in 1990-91 only confirmed this view.

Thus in the Cheney Pentagon the term "counterproliferation" was coined to encompass such efforts and a plan was developed to reorganize the Pentagon in a second Bush administration. Cheney's successor, Les Aspin, arrived from his former post as chairman of the House Armed Services Committee with a keen interest in this particular problem. Embracing the term counterproliferation and the intended reorganization, Aspin launched his Defense Counterproliferation Initiative on December 7, 1993, and with it a top-level effort to motivate the Services, Joint Staff, and regional commands to take seriously the challenges, especially of chemical and biological weapons. The term "counterproliferation" was used and misused in many different ways—to suggest an emphasis on counterforce attack operations or a rejection of nonproliferation or new nuclear missions—with the result that the Clinton National Security

Council brokered an agreement across the U.S. government about the means and ends of nonproliferation and counterproliferation. A key theme was that the two objectives are mutually supportive. Nonproliferation requires that the weapons proliferators might acquire not be useful, whether militarily or politically, for blackmailing the United States and others who are confronted with WMD-armed aggression. Counterproliferation is easier to achieve if the number of WMD-armed states is few and their capabilities are restrained by the lack of access to global markets, foreign expertise, and extensive testing.

Against this backdrop there were three further important developments in the decade after the Persian Gulf War. One was the rising concern about the proliferation of ballistic missiles. In the late 1980s, the Missile Technology Control Regime enjoyed its original success in stifling development of the Condor missile (a joint development program pursued by Egypt, Argentina, and others). As a result of cooperation by technology suppliers facilitated by the Missile Technology Control Regime, cooperation among Third World missile developers was sharply curtailed, and this fueled optimistic predictions about the future of missile nonproliferation. By the late 1990s, an entirely different view of missile proliferation had taken hold in Washington, in part through the prodding of the Commission on Ballistic Missile Proliferation chaired by Donald Rumsfeld, and in part through the emerging threat from North Korea and the unfolding nuclear and missile competition in South Asia. Washington policymakers became increasingly concerned about the convergence of nuclear and missile proliferation trends and the possibility that the United States might, sooner rather than later, come within range of emerging rogue ballistic missiles.

The second important development was the emergence of intensified domestic political debate about the tools of nonproliferation. In a certain sense, this reflected a return to normalcy in American politics. The notion that 'politics stops at the water's edge' held true through much of the Cold War but not in the decades since. In the 1990s, as the risks of nuclear Armageddon receded, it thus seemed natural to some national leaders to try to exploit divisions on foreign and defense policy issues for partisan gain. But to cast the history of this era as one marked by a return to partisanship in the debate about nonproliferation would be misleading, as the most intense debates about how to deal with proliferation challenges

seemed to unfold within the Republican Party rather than between the two major parties. This debate touched on many issues central to nonproliferation. On the utility of arms control, for example, former Congressman Newt Gingrich took aim at part of his own party in describing a "difference between those who rely on lawyers to defend America and those who rely on engineers and scientists" as he made his case for missile defense. On the virtues of multilateralism as opposed to unilateralism there was an equally intense debate among Republicans. The Clinton administration seemed increasingly unable to set its own agenda on nonproliferation and national policy and its strategy in the face of Republican opposition in the Congress. At the same time, the deeply divided Republicans were unable to agree on an alternative agenda.

The third important development was rising concern about the linkage between proliferation and terrorism. The 1993 truck bomb attack on the World Trade Center, the 1995 Oklahoma City bombing, the 1995 attack on the Tokyo subway with sarin nerve gas, and a dramatic spike in the number of anthrax hoaxes all contributed to new-found concern about whether and when terrorists might resort to weapons of mass destruction. This concern affected nonproliferation in a number of ways. It fueled the broader political attack on arms control and nonproliferation from the right wing of the Republican Party, on the argument that nonproliferation regimes have little relevance to the emerging terrorism threat.

The increasing focus of the United States on domestic preparedness also magnified concerns among friends, allies, and others that the United States was beginning to turn inward and thus away from the leadership role it had played in dealing with international problems. The rising concern about weapons of mass destruction terrorism also affected the counterproliferation effort in the sense that it became a serious distraction, by diverting fiscal, operational, and intellectual resources. Military counter-WMD assets, already stretched to the limit to deal with the planning and operational implications of regional adversaries armed with weapons of mass destruction, were shifted increasingly to deal with the domestic counter-terrorism mission.

Thus, through the 1990s there was both continued progress in the effort to strengthen nonproliferation and a mounting crisis of confidence in the overall regime. The continuity from Bush I to Clinton was striking. The architecture of the regime was developing further. Specific

challenges were being addressed. But at the same time, the efficacy of nonproliferation in delivering security came increasingly into question. The failures of nonproliferation in South Asia and the Middle East were sharp and compelling and of far more political and military interest than the successes in many other parts of the world. That crisis of confidence was felt acutely by small and medium powers around the world that had forsworn WMD in the global treaties, and they wondered increasingly about whether the bet they had made was a sound one. But it was also felt acutely by those Republicans that for a decade and more had fought the Bush/Clinton "strengthening" agendas.

III. The George W. Bush Administration

Given the diversity of opinion that emerged in preceding years, it is hardly surprising that the new Bush administration seemed in its first year or so to pursue an inconsistent nonproliferation policy.

At first there was a certain reactive quality to the Bush administration's policy—an effort to correct the many perceived deficiencies of the Clinton administration. In the words of William Schneider, a senior advisor to Secretary Rumsfeld in his capacity as chairman of the Defense Science Board, "the Clinton administration is fighting the proliferation of missiles and weapons of mass destruction with the tools of a bygone strategic era." He argued further that "the political constituency for...multilateral agreements is losing strength. Americans are less and less interested in arms control measures that have not in fact stopped the proliferation of these weapons and actually impede our own ability to provide security for ourselves and our allies in the face of that proliferation...the Clinton administration has enacted policies which have actually accelerated proliferation rather than retarding it." ¹⁰

This view led to early efforts to move away from the Agreed Framework with North Korea, to resurrect something like CoCom in the export control domain, to talk tougher to Russia and China about their continued trade with proliferators—and to deploy ballistic missile defenses as rapidly as possible.¹¹

Also, during this period, the administration gave serious consideration to the possibility of significantly curtailing the Cooperative Threat Reduction program with Moscow, on the arguments that its time had passed and that the Clinton administration had not figured out that the Cooperative Threat Reduction program was being exploited by the Russians to divert resources to purposes not intended by the United States. The reaction to eight years of Clinton policy also contributed to the decision to reject the package of measures designed to strengthen the Biological and Toxin Weapons Convention that had been the focus of international effort since the first Bush administration had helped set the process in motion a decade earlier. ¹²

At the same time, others in the administration seemed to be making contrary claims. Undersecretary of State for Arms Control and International Security, John Bolton, asserted that "our commitment to multilateral regimes to promote nonproliferation and international security never has been as strong as it is today." He voiced strong administration commitment to the Nuclear Non-Proliferation Treaty and pushed for increased funding for the IAEA. He also expressed support for the Chemical Weapons Convention and spearheaded an effort to eject the director of the Organization for the Prohibition of Chemical Weapons on the charge that he was ineffectual. But Bolton also resisted use of the challenge inspections provisions of the Chemical Weapons Convention to pursue allegations of noncompliance by Iran and others.

This ambiguity was partially caused by the institutional perspectives of persons from different departments. But it also reflected uncertainty in the administration about the value of both arms control and multilateralism more generally. Its opposition to bilateral arms control with Russia was evident from the start, with the desire to move away from the restraints embodied in the Anti-Ballistic Missile (ABM) Treaty but also the reluctance to negotiate any kind of successor to the Strategic Arms Reduction Treaty (START I). The opposition to bilateral arms control was often couched in language dismissive of arms control more generally, though some in the administration were careful to argue that the desire to move away from the Cold War strategic framework with Moscow did not also connote a desire to move away from multilateral arms control mechanisms for dealing with weapons of mass destruction proliferation.

Others seemed perfectly content to dismiss all arms control, both bilateral and multilateral, as a dangerous placebo that should be struck down and dismantled so that Americans are no longer fooled by the illusion of security these critics associate with negotiated measures. Moreover, for many in the administration, multilateralism was seen as something being promoted by those resentful of American power and wishing to compel American restraint.

Behind closed doors in the policy studies community in this period, it was not uncommon to hear some heretical ideas about nonproliferation offered by appointees or affiliates of the new administration. Some were willing to argue that the nonproliferation battle had been lost completely—that the nuclear jungle is here or just right around the corner, given the emergence of second-tier suppliers like North Korea as well as the continued proliferation behaviors of Moscow and Beijing, and that it's time to get over nonproliferation and to see it as a lost dream of the Cold War. Others were willing to argue that more proliferation may be perfectly acceptable to the United States—as it promises new friends and allies in the next major international competition. It was not uncommon to hear talk about the possibility of collapsing the global treaty regime, on the argument that we would then be free of the delusion that it protects us.

And then came 9/11, and with it the need to sort out the various opinions, impulses, and perspectives represented in the administration. For the President at least, the lessons of 9/11 as they bear on the proliferation question were clear enough. More proliferation is not tolerable. The threat posed by the crossroads of weapons of mass destruction technology and tyranny is clear and present and cannot be allowed to go further. Rather than acquiesce, the United States must pursue rollback. The Axis of Evil—his term of reference for "rogue states"—must be confronted and pacified now, with preventive wars of preemption if necessary, before they can pose imminent threats to America. Wars for regime removal are necessary because arms control has proven itself incapable of compelling their compliance with international norms. The national strategy to combat weapons of mass destruction was to be revitalized, and along with it the commitment to nonproliferation renewed and updated.

Such thinking was evident first and foremost in the *National Security Strategy* of 2002, and then in more detail in the *National Strategy to Combat Weapons of Mass Destruction* of late 2002. ¹⁶ In spring 2003, the Bush administration supplemented these strategies and the associated initiatives with an effort to promote enforcement of existing agreements with stronger international cooperation for interdiction of illegal

shipments—the so-called Proliferation Security Initiative.¹⁷ In February of 2004, the President also gave a wide-ranging address at National Defense University in which he gave strong endorsement to the principles and mechanisms of nonproliferation and proposed seven new steps to strengthen them.¹⁸ Readers of these documents who are also conversant with the proliferation-related developments over the last decade in the global landscape and in American politics cannot help but be struck by the essential continuity in national policy envisioned by the White House. The embrace of a broad strategy encompassing political and military and unilateral and multilateral measures echoes the thinking of the preceding Clinton and Bush administrations.

Indeed, the aspects of the strategy deemed most unprecedented by some opinion-makers, i.e., the emphasis on preemption and interdiction, can readily be found in the strategic logic of the 1993 Defense Counterproliferation Initiative. There is at least one striking disconnect between the two Bush administration documents: the logic of preemption elaborated so forcefully in the *National Security Strategy* can barely be found in the *National Strategy to Combat WMD*, even though the latter appeared months after the former. Moreover, there is also a striking silence about the risks of proliferation to friends and allies of the United States in contrast to the constant refrain about the risks of proliferation to enemies.

In addition, as part of his commitment to eliminate "gathering threats," the President took the nation to war in Iraq to expel Saddam Hussein from power. A year after the end of major combat operations, the legacy of this effort for nonproliferation remains uncertain and deeply debated. The Bush administration argued that regime removal was necessary to remove the imminent threat of Iraqi weapons of mass destruction, though as U.S. weapons of mass destruction inspector David Kay subsequently famously argued, "[W]e were almost all wrong," regarding the existence of such arms. The administration also apparently believed that only by beginning with an effort to democratize Iraq could the larger political transformation of the Middle East occur, with the apparent hope that this would contribute both to an easing of the terrorist threat and of weapons of mass destruction proliferation pressures. On the other hand, the exercise of unilateralism has proven deeply injurious to the will of others to cooperate with the U.S. in post-war Iraq.

For some observers, it has raised questions also about whether a more interventionist United States might generate additional proliferation pressures of its own.

Thus, in its fourth year, the Bush administration has undertaken some bold initiatives of its own while also drawing closely to key continuities in U.S. strategy vis-à-vis proliferation as it has been pursued for the last 15 years, and longer. The flirtation with heresies during its first year has given way to a concerted national strategy built around clearly defined presidential priorities and encompassing both nonproliferation and military measures.

IV. Taking Stock 1990-2004

What has this strategy accomplished over 15 years? How much progress has been made in strengthening nonproliferation in the period since the end of the Cold War and the Persian Gulf War?

The effort to strengthen the global treaty regimes has fallen far short of the expectations of a decade ago. Membership of the Nuclear Non-Proliferation Treaty has grown (especially with the addition of China, France, and Ukraine, among others) and the treaty has been extended indefinitely; but the effort to strengthen the safeguards system has moved only a few steps and the challenges of noncompliance by a handful of states remain acute. Both India and Pakistan have demonstrated their weapons and apparently continue to acquire additional capabilities.

The Chemical Weapons Convention was concluded and entered into force and is moving through the phase of its work focused on the destruction of declared stockpiles of chemical weapons and their production facilities; but it has yet to tackle the problems posed by suspicions of undeclared capabilities and to initiate the use of challenge inspections.

The effort to strengthen the Biological and Toxin Weapons Convention produced a package of verification and other measures; but these were rejected by the United States and were not warmly received by others concerned with their impact on the interests of biodefense and biotechnology.

The efforts to strengthen the supporting export control ad hoc coordinating mechanisms have produced some incremental measures; but with the growing importance of dual-use technologies in all of these areas (i.e., those with both civilian and military applications), such mechanisms seem to offer decreasing utility in the years ahead.

The effort to address specific proliferation problems has generated various processes but few actual results. The long and tortuous process to address the North Korean nuclear problem has yet to result in restoration of North Korea's compliance with its Nuclear Non-Proliferation Treaty obligations (withdrawal from the treaty has not legitimized or legalized the activities that it pursued in violation of the treaty).

North Korea's program has been helped by the transfer of uranium enrichment technology and advice from the A.Q. Khan black market operation out of Pakistan. North Korean representatives have admitted to a significant uranium enrichment effort and claim to already possess atomic weapons. The DPRK has now withdrawn from the Nuclear Non-Proliferation Treaty and may now possess as many as seven nuclear weapons according to claims.

The process to turn back the Iranian nuclear weapons program has garnered some grudging support from Moscow and Beijing and elsewhere but has not so far resulted in cessation of the effort to build reprocessing capabilities. Indeed, Iran and North Korea are continuing to press toward nuclear weapons capabilities. They loom as the two most significant nuclear proliferation challenges and both promise to pose serious challenges in the immediate years ahead. Iranian and North Korean nuclear programs might well provoke similar programs in countries like Japan, the Republic of Korea, and interest in nuclear weapons in Saudi Arabia.

The process to pressure India and Pakistan to rollback their nuclear capabilities or, at least, to agree to some form of mutual, formal restraint has yet to result in such agreement. The Cooperative Threat Reduction program continues its work in the former Soviet Union; but the Russian biological warfare problem remains unaddressed, as do concerns about China's noncompliance with the Biological and Toxin Weapons Convention. As argued above, the Iraqi weapons of mass destruction problem has been resolved with the war to expel Saddam and the Ba'ath Party, though at the same time the failure (at this writing) to find evidence

of any such weapons seems likely to poison future U.S. efforts to build international coalitions against states and regimes with weapons of mass destruction ambitions. Fortunately, as of this writing, no state-developed weapons of mass destruction appear to have been acquired by terrorist groups by purchase or theft, or at least such acquisition has not yet resulted in weapons of mass destruction use.²⁰

The effort to strengthen the commitment of the major powers in their role as international security guarantors to deal with weapons of mass destruction proliferation has reached a crucial crossroads. On the one hand, the second Bush administration is clearly loath to pursue the agenda of the first Bush administration to utilize the UN Security Council as a venue for fashioning and demonstrating such commitment (on the general argument that deference to the Council is an infringement of U.S. sovereignty). Its willingness to proceed to war against Saddam without a clear Security Council mandate is testament to its antipathy to this mechanism and its unwillingness to defer to the concerns of the other major powers in the effort to reach agreement.

On the other hand, the Bush administration has worked diligently in bilateral as opposed to multilateral modes to elicit the support of Moscow and Beijing in dealing with the specific proliferation challenges of Iran and North Korea. The administration's rejection of the UN Security Council for these roles reinforces a general lack of U.S. leadership of the multilateral treaty regimes. The United States remains engaged but is not leading. Absent U.S. leadership, the effort to strengthen nonproliferation has faltered, not least because no other nation or group of nations can play that leadership role. This raises basic and profound questions about the future of efforts both in the United States and internationally to strengthen nonproliferation.

This stocktaking summary should look beyond the effort to strengthen nonproliferation to the broader question of the status of nonproliferation. Over the last decade, and despite all of the rising concern about proliferation, the number of nuclear-armed states or states deeply committed to achieving a nuclear capability has not grown. Indeed, over the last decade, the states that have abandoned nuclear weapons (Ukraine, Belarus, Kazakhstan, South Africa) or nuclear weapons capabilities (Argentina, Brazil, and Libya) outnumber the states that have moved forward (North Korea and Iran). Over the last decade India and Pakistan

became overt nuclear weapon states (though the tests they conducted in 1997 were clearly demonstration shots rather than developmental ones, aimed at revealing capabilities developed in preceding decades). The number of chemically-armed states has not increased and may well have decreased as the Chemical Weapons Convention has been implemented. The number of states understood to be seeking or possessing biological weapons jumped dramatically in the early 1990s but seems to have held steady since then. These rough statistics suggest that whatever the various shortcomings of the tools of nonproliferation—and the rising debate about the efficacy of those tools—nonproliferation has enjoyed some important successes.

V. Looking to the Future

Over the early decades of the nuclear era, a certain way of thinking about the weapons proliferation problem emerged and, despite various and sometimes intense debates, a significant measure of consensus emerged internationally and in the United States about the nature of the problem and what to do about it. In the period since the end of the Cold War, this consensus has given way to greater uncertainty and increasing division over the premises and principles of policy. Continuity of presidential commitment promises a measure of continuity in U.S. nonproliferation strategy. But it seems reasonable to anticipate an increasingly broad and deep debate about the fundamentals of proliferation and nonproliferation in the period ahead. In this author's view, that debate will revolve around the following core questions:

What is the problem? Writing more than four decades ago, Albert Wohlstetter provided a classic definition: "n plus one." By this definition, the proliferation problem equates with the next state in line desiring to acquire nuclear weapons. In the wake of 9/11 another view of the problem has taken hold in some quarters, to the effect that "the problem" is no longer proliferation to states but has become proliferation to non-state actors, even individual terrorists and criminal extortionists.

But these are both oversimplifications. Even in an era of rising concern about terrorist use of weapons of mass destruction, concern remains strong about the proliferation of nuclear weapons to additional

states—hence President Bush's commitment to rollback of the so-called Axis of Evil. And "n plus one" touches on only one facet of the state proliferation problem. It is useful to think of different types of state problems. The vast majority of states would greatly prefer not to have nuclear weapons and not to live in a world in which they are a customary tool of security and war. A tiny number of states appear deeply committed to acquiring nuclear weapons—and even among these high-risk proliferators it would seem that some are more committed to being seen to be moving toward having a future capability than to actually possessing Some larger number of states has forsworn nuclear such weapons. weapons on a contingent basis—they have the technical sophistication to acquire such weapons but abstain because of feared negative consequences of nuclearization (and because some viable alternatives exist, such as alliance with the United States).²² These states tend to develop latent capabilities as a hedge against a future breakdown in their security environment and the need to pursue an autonomous nuclear stance. In fact, many of them are "repentant nuclear powers" that have previously had nuclear ambitions but stopped short.²³

In this world, many types of proliferation are possible: by the "n plus one" country, by the hedging latent states, in subregions such as East Asia where these factors coalesce, and more globally if proliferation patterns in different subregions interact with one another. Between "n plus one" and a complete breakdown of the prevailing nuclear order are many conceivable interim states. For example, a wave of nuclearization by states in East Asia is conceivable as is a separate wave in the Middle East; if both were to occur, the results would likely be felt elsewhere—e.g., Central Asia and Europe. The larger forms of breakdown spanning multiple regions and involving large, developed countries would seem to require a catalytic event of some kind. For the hedging latent states, the single most important factor would seem to be the United States. If the United States somehow discredits itself as a security guarantor, then such states are likely to question whether the United States can be an effective steward of their interests. Ironically, it might be years after such a breakdown before it was recognized as having happened—as the latent states covertly turn their weapons potential into break-out capabilities.

What is winning (and is it possible)? One version of "winning" the nonproliferation battle is defined as preventing "n plus one," i.e., stopping

the next states desirous of nuclear weapons from achieving that ambition. This is an important, indeed central, definition of winning and it has sometimes proven possible to achieve. But as suggested above, there are other definitions of winning. One is ensuring that the latent hedgers do not choose to turn latent capabilities into overt ones, even in time of crisis. A variant of this is ensuring that the repentant powers do not turn recidivist.²⁴ Winning by this definition has obviously been possible, though the conditions of future success are unclear. Another definition of winning is ensuring that the large ranks of leaders of states opposed to nuclear weapons and hopeful of the future possibility of eliminating them from the affairs of states do not lose that hope and do not begin to think that they should invest in their own hedges against a future breakdown of the prevailing nuclear order. Winning here also looks promising but cannot be assumed. President Bush has reminded us of an important additional definition of "winning": rollback, i.e., restoration of the status quo ante (i.e., the pre-nuclear status).

Secretary Rumsfeld has argued that the number of nuclear-armed states could double over the next decade (without any indication of what categories and calculations led him to this number).²⁵ One version of "winning" is limiting the damage to just a doubling. Another version is ending up in a decade from now with even fewer nuclear-armed states—clearly the President's objective.

Consider for a moment the reverse question: What is losing? Losing means more than an incremental addition to the number of nuclear-armed states. It means rising fears of nuclear competition and war, as for example seen in South Asia since 1998. It means fears of the spillover effects from one subregion to another. More parochially, from a U.S. perspective, losing could mean also the partial eclipse of U.S. power. After all, if some of the "repentant" powers such as Japan or South Korea or Taiwan opt for nuclear weapons in reaction to some event(s) that has discredited the U.S. as a security guarantor, their decision to acquire nuclear weapons will reflect a loss of confidence in the United States and will signal an increased autonomy in their international relations. The United States may find them occasional willing partners in some U.S. initiative, but it seems less likely to be able to count on them as full allies in some new American project.

Moreover, the fact that they might have moved to nuclear status while under the cover of the U.S. nuclear umbrella would be interpreted by many international observers as a U.S. violation of the commitment under the Nuclear Non-Proliferation Treaty not to assist others to acquire nuclear weapons. If "winning" is possible, so too is "losing" as defined here, at a cost to U.S. political and security interests that is difficult to calculate.

Winning remains possible and should not be abandoned even in the face of setbacks on the "n plus one" challenge. In concluding its *National Strategy to Combat WMD*, the Bush White House has argued as follows: "The requirements to prevent, deter, defend against, and respond to today's WMD threats are complex and challenging. But they are not daunting. We can and will succeed in the tasks laid out in this strategy; we have no other choices."²⁷

What policy tools work best for nonproliferation? Especially in recent years there has been a strong debate about whether political or military tools are better suited to deal with the proliferation problem. This question is a red herring. Different tools are suited to different challenges. Dissuading and deterring potential proliferators is best done with military capabilities that promise them defeat in war and successful rollback of one or two of the high-risk proliferators; such military prowess ought to have some positive impact on the thinking of other potential proliferators. Dissuasion and deterrence can be reinforced by political measures that promise exposure and punishment of illicit activities especially in the case of those states that pursue weapons not for purposes of national survival but for purposes of aggression and coercion.

On the other hand, assuring the repentant powers and other allies and friends of the United States that they remain secure without nuclear weapons is best done with political instruments—alliances, security guarantees, legal regimes, and other mechanisms for international security cooperation. "Best for what?" is the right answer to the question posed above. The glaring present shortcomings of treaty regimes in ensuring compliance by especially willful malefactors do not make them irrelevant to the other facets of the proliferation challenge—to reassuring the latent states and to facilitating international cooperation to deal with those other than the aggressive cheaters.

Are multilateral approaches a help or a hindrance? The traditional nonproliferation community has seen such approaches as the sine qua non

of nonproliferation.²⁸ Some in the Bush administration have given a strong endorsement to multilateralism, while others have attacked it as a form of restraint on the exercise of American power.²⁹

Multilateral approaches to proliferation encompass the specific treaty regimes, the ad hoc supporting mechanisms, and the international institutions such as the United Nations. The drawbacks to such approaches are numerous and well known. Multilateral approaches are often reduced to the lowest common denominator, and what is possible often substitutes for what is necessary. Over the last decade multilateral approaches have been conspicuously ineffective at securing compliance by states such as Iraq and North Korea with self-accepted treaty obligations. And as the case of the UN Security Council debate on military action against Iraq suggests, multilateral approaches sometimes constrain American power. For all of the debate about the proper balance between unilateral and multilateral approaches, few in America would argue that unilateral action is never justifiable. The question for Americans then must be: what can multilateralism add beyond unilateralism?

Excessive unilateralism comes with its own costs: it suggests to many foreign observers that the global problem today is posed not by rogue regional challengers but by an unpredictable America that has put itself above the law in its pursuit of hegemony.³⁰ This may induce a new wave of proliferation, as others react to the increasing unpredictability of American power or arm themselves in fear of U.S. intervention.³¹ Especially as the United States pursues an ambitious war against terror of global reach and as it confronts Iraq, North Korea, and potentially other WMD-armed regional powers, it has a strong interest in dampening fears that it will widen the war beyond the scope necessary to these ends and in refuting the argument that a rogue America is the new international security problem. Anchoring its actions in the legitimizing frameworks of multilateralism can help secure this interest.

Secretary Rumsfeld has argued that proliferation "is not a problem that individual nations can handle by themselves...We face three intersecting dangers today: the growing arsenal of rogue, failed or failing states; the exponential growth in trade among these states in WMD-related materials, technologies, and delivery capabilities; and the relationship between these state and terrorist networks that are seeking to obtain chemical and biological and nuclear material. If we are to deal with these

new dangers, we need new tools of international cooperation, including new authorities to prevent—and, if necessary, interdict—the import, the export, and the transshipment of weapons of mass destruction, ballistic missiles, and WMD-related materials from and between and to terrorist states."³² He goes on to identify strengthening and reforming the institutions of multilateral action as a top priority.

Do norms matter? Underlying the debate about political measures and multilateral institutions is a debate about nonproliferation norms. Are they relevant to success in meeting the proliferation challenge?

Nonproliferation norms lack the coercive power of other tools of policy. The fact that they are not universally adhered to is what causes them to exist —behaviors exist that people find intolerable. But the importance of such norms is growing, not declining, in an era in which high-leverage technology is diffusing from states to non-state organizations and even individuals. Views of right and wrong help to shape the behavior of individuals and organizations whose behaviors cannot be policed effectively all or any of the time.

U.S. policymakers tend to talk about the virtues of creating nonproliferation norms. But with rare exception, norms are not promulgated. They exist, as derived from human experience of things people consider wrong. The word itself derives from the Latin for a carpenter's set-square. "The set-square tells the carpenter what a rightangle is 'expected and required' to be...An international norm defines 'expected and required' behavior in the society of states. The existence of a norm, at any level, does not imply permanence, still less divine edict."33 Norms are an unreliable basis for persuading the malefactor to improve his behavior, because he sees his behavior as required and warranted by his circumstance. But without norms, no behavior is right or wrong, and thus no behavior can be punished. Norms are more reliable for promoting cooperation to deal with the malefactor than in affecting its behavior directly. In the current international climate of unipolarity, whenever the United States fails to explain its uses of powers in terms of accepted norms of international behavior, it undercuts these norms and fuels the perception that nothing more than a competition of power and interest is at stake.

What role can and should the United States play? In combating proliferation, the United States has no choice but to lead. If it abandons its

leadership position, others can be expected to fill the gap with projects of their own, projects that cannot always be expected to show the same respect for U.S. interests as those conceived in Washington. But the ability of any other state or coalition of states to fill the gap is very doubtful. Sustained retreat from its historic leadership of the nonproliferation project could well help precipitate a breakdown of the prevailing nuclear order Even if that breakdown would have many explanations, it seems highly likely that the blame for its breakdown would fall on Washington. After all, nuclear nonproliferation has been a special American Project from the advent of the nuclear era and American defection from this effort would lead others to predict the imminent collapse of existing approaches.³⁴ Moreover, as the most powerful actor in the international system, blame naturally attaches to the United States for any and all developments that others would have wished avoided.

What mode of leadership best suits U.S. interests in nonproliferation? The two White House strategy documents, the *National Security Strategy of the United States* (2002) and the *National Strategy for Combating Weapons of Mass Destruction* (2003), provide many useful answers. But leadership also requires an effort to build a shared vision of how to achieve desired objectives and a willingness to work at keeping people focused when distractions arise. Coming to a unified position on an approach to solving the weapons of mass destruction threat is difficult for we are not all of one mind on how best to pursue our nonproliferation goals. Indeed, there are entrenched and powerful opponents who provide a direct challenge to a president who seeks to lead a national strategy that is integrated, synergistic and has the backing of the public.

The questions and answers provided in this chapter are constructed with a focus on nuclear weapons. Do they fit the other problems we face, especially the proliferation of biological weapons? The biological weapons proliferation problem is analogous to the nuclear problem in the sense that the number of proliferators remains few. There are perhaps a dozen or so states with biological weapons or actively seeking to acquire them. But the number could increase in different ways and over different thresholds in response to some catalytic event. Winning here means some rollback of the BW capabilities of specific actors (especially Russia but also North Korea, Iran, and perhaps China). It also means accepting a high degree of latent capability among all states, given the diffusion of

dual-use biotechnologies. In the biological weapons domain, both military and political tools are applicable, as in the nuclear domain. But the military tools remain badly undeveloped, especially relative to the focus on nuclear security, and the political tools seem largely abandoned by an administration that sees the Biological and Toxin Weapons Convention as unverifiable. Unilateral approaches cannot "solve" the biological weapons problem just as they cannot solve the nuclear one—but they have a role to play. Norms matter, even more in the biological weapons realm than the nuclear, given the relative ease with which states and sub-state groups can produce and employ these weapons. Here as in the nuclear area, there is no substitute for U.S. leadership, as no other actor has a global view of the problem or a comprehensive view of the tool kit to work it.

The biological weapons problem seems, however, to hold out the possibility of future engagement with two new constituencies not relevant to the effort to prevent nuclear proliferation. One is the international scientific community seeking to develop biotechnologies for peaceful The other is the U.S. industrial community in the purposes. pharmaceutical, agricultural, and other domains that has a stake in promoting society's acceptance of its new products. Both of these constituencies resist engaging in the effort to police compliance with international norms against the misuse of their expertise but both are increasingly essential as partners in that effort. The biotechnology revolution is making bio-weapons more accessible to small states as well as terrorist groups. Thus, it is all the more important to bring scientists and bio-tech firms into new regimes. To do so will require new thinking and new cooperation between the U.S. government in partnership with key firms working together within a framework of guidelines and regulations designed to keep the BW genie in the bottle.

VI. The Next "Strengthening" Agenda

A decade or so ago the United States committed itself to leadership of an international effort to strengthen nonproliferation. Despite a widening and deepening of debate about the fundamentals of strategy and policy, national leadership appears committed to sustained pursuit of nonproliferation objectives. Looking ahead another decade or so, how might the United States best focus its efforts to strengthen nonproliferation?

Part of the answer is found in the context of the treaty regimes. Despite some Bush administration misgivings about the shortcomings of multilateral arms control, the United States remains a party to the three core treaties and remains central to the effort to strengthen them. In 2005, states parties to the Nuclear Non-Proliferation Treaty will again convene in a review conference to evaluate progress in implementing the terms of the treaty, and a successful review conference will oblige Washington to have a strategy that takes account of the various developments since the 1995 review and extension conference, including U.S. rejection of the Comprehensive Test Ban Treaty, the emergence of India and Pakistan as de facto nuclear weapon states, the Bush administration's Nuclear Posture Review and New Strategic Framework, and the challenges of rollback, as so far pursued against Iraq, Libya, Iran, and North Korea. Over the coming decade, most of the stockpiles of chemical weapons declared by states parties to the Chemical Weapons Convention will have been destroyed and the emphasis of states parties will shift increasingly to dealing with noncompliance and thus with challenge inspections. The effort to strengthen the Biological and Toxin Weapons Convention will also continue, though it is unlikely that the Bush administration or its successors will easily be persuaded that the treaty can be made verifiable at a cost that the United States (and others) are willing to pay—a fact that could help keep states parties focused on myriad other projects of utility to the regime.

But, of course, treaty regimes are only part of the "answer." Expect continued efforts to tighten export controls and the associated ad hoc coordinating mechanisms—as well as continued frustration with the utility of such measures in an era of globalization and a broadening array of dualuse (civil-military) technologies.

Expect also continued efforts to promote international partnerships to deal with particular problems—partnership for example with Russia and China and with other conduits of weapons of mass destruction technology and expertise to proliferators. Expect continued efforts to interdict shipments of sensitive materials, technologies, and weapons when other measures have failed.

An important new question has emerged about how to reap the benefits for nonproliferation of the Bush administration's efforts to confront "gathering threats at the crossroads of technology and tyranny." Some in the administration have spoken privately about their hope that these efforts will "re-set" international norms by demonstrating that the United States in partnerships with coalitions of the willing will see to it that flagrant violations will not go unpunished. In other words, having eliminated the Taliban, suppressed al Qaeda, driven Saddam from power in Iraq, and tightened political and economic pressures on North Korea and Iran, are there opportunities now to rollback others without recourse to war and to reinforce nonproliferation more broadly?

Richard Perle, among others, has offered up one logical implication: that other proliferators, watching military action against these actors, ought to conclude that the possible costs of weapons of mass destruction far outweigh the benefits and, thus, the next round of proliferators ought to be dissuaded by the action of the Bush administration.³⁵ Libya's decision to give up its nuclear program would seem to buttress this claim. Of course, some (such as North Korea) may conclude that they had better rush to complete nuclearization before they face serious prospect of a U.S. effort to remove their regime.

Another possibility is that other states will come to appreciate the seriousness of the United States in its desire to confront weapons of mass destruction proliferators and will no longer object to U.S.-led efforts to pressure those suspected of noncompliance. This message may be especially powerful for Moscow and Beijing, who also desire greater partnership with Washington on various other concerns. Of course, success in this regard would seem to require some vindication of the intelligence that led to Bush administration claims that Iraq possessed weapons of mass destruction. Failing to uncover such vindication, the United States may find it considerably more difficult to build such coalitions in the future.

These possibilities suggest that the future focus of U.S. policymakers will remain on the challenges of compliance and not on the challenges of constructing new pieces of the nonproliferation architecture. But to a significant extent, this would seem to depend on the political winds.

VII. Conclusions

After a decade or so of intensifying debate about the means and ends of nonproliferation, remarkable continuity prevails in the main scope and thrust of policy. Despite debate about whether "winning" is possible, judging by its actions the United States remains strongly committed to winning. Despite debate about whether nonproliferation is an anachronistic concept with roots in an era now past, the United States remains committed to the effort to strengthen nonproliferation mechanisms. Despite debate about the proper balance between military and political tools of policy, there is broad consensus that both sets of tools are necessary to deal with the various facets of the nonproliferation problem.

Events may trigger new nonproliferation possibilities in the future. For example, if there were a major use of nuclear, biological, or chemical weapons, whether by a state or terrorist group, this could create new dynamics, including perhaps new demands and opportunities for increased international cooperation and perhaps also increased regulation of sensitive industries (e.g., biotechnology, pharmaceutical plants, chemical factories, and the nuclear power industry). It could also create a new potential for armed conflict, especially if a state made the attack or is believed to have assisted.

A consistent long-term U.S. goal of this importance deserves consistent, strong policy support, especially in the face of what seems to be a growing proliferation challenge. But looking to the future, continued debate about both the means and ends of policy seems likely—with a harmful effect on the ability of the United States to achieve its objectives and to lead others toward that end. Indeed, fundamental questions deserve broader and deeper exploration as the Cold War recedes further into the past and the new challenges of technology diffusion, mass casualty terrorism, and weak and collapsing states come into sharper focus. But for the coming decade at least it seems that no American president will want to be tarnished with a rapid and broad proliferation of nuclear weapons. As the *National Strategy to Combat WMD* concludes, there is too much at stake for the United States to allow this to come to pass.

26 . . . Nonproliferation – Challenges Old and New

Notes

- 1. Earlier drafts of this paper have benefited from thoughtful and constructive critiques by Lewis Dunn, Michael Moodie, and Victor Utgoff. The author alone remains responsible for the final arguments presented here.
- 2. Michael Moodie, "Multilateral Arms Control: Challenges and Opportunities," in James Brown, ed., *Challenges in Arms Control for the 1990s* (Amsterdam: VU University Press, 1992), 71-82. Moodie was, at the time, assistant director for multilateral affairs in the U.S. Arms Control and Disarmament Agency.
- 3. Richard Hooper, "Strengthening IAEA Safeguards In an Era of Nuclear Cooperation," *Arms Control Today*, Vol. 25, No. 9 (November 1995), 14-18.
- 4. UN Security Council Resolution on proliferation: Note by the President of the Security Council, UN Document S/235000 (January 31, 1992).
- 5. For a review of the effort to strengthen the BWC, see Jonathan B. Tucker, "In the Shadow of Anthrax: Strengthening the Biological Disarmament Regime," *Nonproliferation Review*, Vol. 9, No.1 (Spring 2002), 112-121.
- 6. For a review of this effort, see Office of the Secretary of Defense, *Proliferation: Threat and Response* (Washington, D.C.: GPO, April 1996).
- 7. Cited in John Ikenberry, "American Grand Strategy in the Age of Terror," *Survival*, Vol. 43, No. 4 (Winter 2001-2002), 27.
- 8. For some analyses of the progress made during the 1990s in working these various problems, see Brad Roberts, "Proliferation and Nonproliferation in the 1990s: Looking for the Right Lessons," *Nonproliferation Review*, Vol. 6, No. 4 (Fall 1999), 70-82; Jayantha Dhanapala, "Multilateralism and the Future of the Global Nuclear Nonproliferation Regime," *Nonproliferation Review*, Vol. 8, No. 3 (Fall-Winter 2001), 99-106; Jonathan B. Tucker, The Chemical Weapons Convention: Has it Enhanced U.S. Security?" *Arms Control Today* (April 2001), 8-12; and Siegfried S. Hecker, "Thoughts about an Integrated Strategy for Nuclear Cooperation with Russia," *Nonproliferation Review*, Vol. 8, No. 2 (Summer 2001), 1-24.
- 9. William Schneider, "Weapons Proliferation and Missile Defense: the Strategic Case," in Robert Kagan and William Kristol, eds., *Present Dangers: Crisis and Opportunity in American Foreign and Defense Policy* (San Francisco, Calif.: Encounter Books, 2000), 269.

10. Ibid., 269, 271.

- 11. Phillip C. Saunders, "New Approaches to Nonproliferation: Supplementing or Supplanting the Regime?" *Nonproliferation Review* (Fall-Winter 2001), 123-136.
 - 12. Tucker, "In the Shadow of Anthrax."
 - 13. Statement to the Conference on Disarmament, January 2002.
- 14. "Expounding Bush's Approach to U.S. Nuclear Security, an Interview with John R. Bolton," *Arms Control Today* (March 2002), 3-8.
- 15. In each significant debate over the nuclear era about how to respond to the next nuclear proliferation challenge, there has been a body of opinion reflecting the view that some additional proliferation might serve U.S. interests, whether by strengthening an ally or by providing security to a friendly state for which a security guarantee would not be viable. Such arguments have tended to draw on the thinking of Kenneth Waltz about nuclear proliferation that "more may be better" because it stabilizes competitive relationships. See Scott D. Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: A Debate Renewed* (New York: Norton and Co., 2003). But as a matter of policy, the U.S. government has opposed each and every new nuclear state, including even Britain.
- 16. Both are available at the website of the White House, *White House website*. Online, Internet, 10 January 2004, available from www.whitehouse.gov.
- 17. "Countries Draft Guidelines for Intercepting Proliferation," *Arms Control Today*, Vol. 33, No. 7 (September 2003), 27, 48.
- 18. Remarks by the President on Weapons of Mass Destruction Proliferation, National Defense University, Washington, D.C., February 11, 2004. On-line, Internet, 10 January 2004, available from www.whitehouse.gov.
- 19. "Transcript: David Kay at Senate Hearing," *CNN.com*, 28 January, 2004. Online, Internet, 22 Nov 04, available from www.cnn.com/2004/US/01/28/kay.transcript/. David Kay's report also indicated that Iraq still had traces of a BW program but no serious on-going effort. Also, his team found Iraq was not in full compliance with UN resolution and Desert Storm ceasefire terms with regard to the deployment of ballistic missiles.
- 20. The Chechen acquisition of a small amount of Cesium-136 and threatened use, with no result, is a possible exception, except that they appeared to have no more than they buried in a Moscow park for police to find. The Aum Shinrikyo cult in Japan manufactured its own biological and chemical weapons. There is also the possibility that the South African chemical and biological weapons programs were exported to Zimbabwe and elsewhere in Africa. See Stephen Burgess and Helen Purkitt, *The*

Rollback of South Africa's Chemical and Biological Warfare Program (Maxwell AFB, AL: USAF Counterproliferation Center, April 2001), 17-38. See also, W. Seth Carus, Bioterrorism and Biocrimes (Washington, D.C.; Center for Counterproliferation Research, NDU, March 1999 edition), 47-86.

- 21. Albert Wohlstetter, "Nuclear Sharing: NATO and the N+1 Country," *Foreign Affairs*, Vol. 39, No. 3 (April 1961), 355-387.
- 22. These arguments are elaborated in more detail in Brad Roberts, *Weapons Proliferation and World Order After the Cold War* (Boston, Mass.: Kluwer Press, 1995).
- 23. Leonard S. Spector, "Repentant Nuclear Proliferants," *Foreign Policy*, No. 88 (Fall 1992), 3-20 and Mitchell Reiss, *Bridled Ambition: Why Countries Constrain Their Nuclear Capabilities* (Washington, D.C.: Woodrow Wilson Center Press, 1995).
- 24. For more on nuclear recidivism, see Kurt M. Campbell, "Nuclear Proliferation beyond Rogues," *Washington Quarterly*, Vol. 26, No. 1 (Winter 2002-03), 7-15 and Ariel E. Levite, "Never Say Never Again: Nuclear Reversal Revisited," *International Security*, Vol. 27, No. 3 (Winter 2002-03), 59-88.
- 25. Secretary of Defense Donald H. Rumsfeld, remarks delivered on the 10th anniversary of the George Marshall Center in Garmisch, Germany, June 11, 2003.
- 26. For the argument that winning is possible by two conservative commentators, see Henry Sokolski, *Best of Intentions: America's Campaign Against Strategic Weapons Proliferation* (Westport, Ct.: Praeger, 2001) and Baker Spring, *Ten Principles for Combating Nuclear Proliferation*, Heritage Lecture No. 783, Heritage Foundation, Washington, D.C., March 27, 2003.
 - 27. National Strategy to Combat WMD, 6.
- 28. Joseph Cirincione with Jon B. Wolfstahl and Miriam Rajkumar, *Deadly Arsenals: Tracking Weapons of Mass Destruction* (Washington, D.C.: Carnegie Endowment for International Peace, 2002).
- 29. See remarks by Richard N. Haass on "hard-headed multilateralism" to the Carnegie Endowment for International Peace and the Center on International Cooperation, November 14, 2001. On-line, Internet, 10 January 2004, available from www.ceip.org. See also Richard N. Haass, "What to Do with American Primacy," *Foreign Affairs*, Vol. 78, No. 5 (September-October 1999).
- 30. For more on the argument that American primacy is the major foreign policy theme for most of the other actors in the international system, see Brad Roberts,

American Primacy and Major Power Concert: A Critique of the 2002 National Security Strategy (Alexandria, Va.: Institute for Defense Analyses, 2002).

- 31. Saunders, "New Approaches to Nonproliferation," 133-135.
- 32. Rumsfeld remarks, June 13, 2003.
- 33. Coral Bell, "Normative Shift," National Interest (Winter 2002/03), 44.
- 34. William Walker, "Nuclear Order and Disorder," *International Affairs*, Vol. 76, No. 4 (2000), 703-724.
- 35. This was an argument made in the context of his case for going to war to expel Saddam in such close succession to the war against the Taliban. See Richard N. Perle, "Next Stop, Iraq," remarks to the Foreign Policy Research Institute, November 14, 2001. On-line, Internet, 10 January 2004, available from www.aei.org. More precisely, Perle has argued that a wider war ought not be necessary to achieve desired changes among many countries so long as a good example is made of one or two countries.

USAF Counterproliferation Center

The USAF Counterproliferation Center was established in 1999 to provide education and research to the present and future leaders of the USAF, to assist them in their activities to counter the threats posed by adversaries equipped with weapons of mass destruction

Barry R. Schneider, Director USAF Counterproliferation Center 325 Chennault Circle Maxwell AFB AL 36112-6427

Email: Barry.Schneider@maxwell.af.mil

Jo Ann Eddy, Associate Editor The Counterproliferation Papers

Email: JoAnn.Eddy@maxwell.af.mil

(334) 953-7538 (DSN 493-7538)

32 . . . Nonproliferation – Challenges Old and New