99-E-54 C. 1

NATIONAL DEFENSE UNIVERSITY

ı.

đ

1

NATIONAL WAR COLLEGE

ARCHIVE COPY

THE FUTURE OF ARMS CONTROL

Core Course 5605 Essay 26 April 1999

Franklin R. Wolf, Lt Col, USAF Class of 1999 Course 5605 Seminar J

Seminar Instructor. Randy Larsen, Col, USAF Faculty Advisor: Mark Clodfelter, Lt Col, USAF

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE APR 1999		2. REPORT TYPE		3. DATES COVERED 00-04-1999 to 00-04-1999	
4. TITLE AND SUBTITLE				5a. CONTRACT NUMBER	
The Future of Arms Control				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) National War College,300 5th Avenue,Fort Lesley J. McNair,Washington,DC,20319-6000				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT see report					
15. SUBJECT TERMS					
16. SECURITY CLASSIFIC	17. LIMITATION OF	18. NUMBER	19a. NAME OF		
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	- ABSTRACT	OF PAGES 16	RESPONSIBLE PERSON

Standard Form 298 (Rev. 8-98) Prescribed by ANSI Std Z39-18 It is no exaggeration to suggest that of all the weapons created by man, none has created as much controversy as nuclear weapons. This is made all the more remarkable by the extremely brief combat history of these weapons, with the last use of a nuclear device in war a mere three days after the first. The unique character of these weapons was recognized early in the nuclear era when a consensus emerged that nuclear weapons were somehow qualitatively different and would be governed by a unique set of rules.¹ As a result of this qualitative difference, and although the value of nuclear weapons as the ultimate deterrent was soon recognized and the arsenals of the US and USSR mushroomed during the Cold War, a corollary belief developed that these weapons must somehow be controlled. Thus the now familiar Cold War dynamic of an arms race *and* an arms control process was created, a dynamic that remains largely relevant today, nearly a decade after the dissolution of the Soviet Union. The purpose of this paper is to assess the current state of play of things nuclear, to include an examination of where we're headed in the field of strategic nuclear arms control. Ultimately, the majority of my effort will be to suggest a set of principles for arms control, principles intended to function as signposts as we and the Russians chart our way down a path that has never before been traveled, the path toward lower levels of nuclear weapons.

The Cold War

Eefore dispensing advice on where we're going, however, it would be helpful to briefly look at where we've been. Although we all occasionally fall victim to the sentiment that arms control is moving at a snail's pace, remembering nuclear force levels only as far back as the mid 1980s is a useful tonic. At that time the United States had almost 13,000 *deployed* strategic warheads and the USSR had around 11,000 ² Nonstrategic warheads, also known as tactical nuclear weapons, drove counts much higher, up to around 35,000 warheads for the USSR, for example.³ Additionally, both sides had even more, and increasingly sophisticated, systems on the drawing board. The Strategic Air Command alone, for example, was in the process of developing and programming for 132 B-2 bombers, 100 Peacekeeper ICBMs in a rail mobile configuration, several hundred small, road-mobile

¹ For example, see Brodie, Bernard, <u>Strategy in the Missile Age</u>, Macmillan Publishing Company, 1959 and Kissinger Henry A , <u>Nuclear Weapons and Foreign Policy</u>, Council on Foreign Relations, 1957

² Burns, William F, "The unfinished work of arms control," Issues in Science and Technology, Fall 1997, pg 37

³ Warner, Edward III, SASC Testimony transcript, Strategic Forces Subcommittee, March 31, 1998, pg 3

ICBMs (the Small ICBM, sometimes referred to as the Midgetman), and several new nuclear munitions for the bomber force, such as a new Short Range Attack Missile (SRAM-2), and the Advanced Cruise Missile (ACM).⁴ Similar modification efforts were being pursued for the ballistic missile submarine fleet, and our efforts, significant as they were, represented a struggle to keep pace with Soviet deployments. Indeed, in the ten years from 1967 to 1977, the number of US ICBMs held constant at 1054, while the Soviet number rocketed (pun intended) from 570 to 1477, an increase of over 900 missiles. In other words, in the arms race-arms control dynamic described above, arms control was clearly the junior partner.

In fact, the only significant arms accords of the time (the détente era SALT I, ABM Treaty of 1972, and SALT II agreements) represented mere caps on certain types of growth rather than an actual reduction in force levels. This tide began to turn with the Intermediate Nuclear Forces (INF) Treaty of the late 1980s that, for the first time, actually eliminated an entire class of nuclear systems, the Ground Launched Cruise Missile (GLCM) and Pershing II missiles for the US and the SS-20 for the Soviet Union. This momentum was quickly sustained in the arena of strategic systems with the Stratedic Arms Reductions talks (START), resulting in the landmark START I agreement, which entered into force on December 5, 1994.⁵ This treaty mandated that both sides reduce deployed strategic nuclear systems from well over 10,000 each down to no more than 6000 loaded onto no more than 1600 Strategic Nuclear Delivery Vehicles (SNDVs, i.e., bombers and ground or sealaunched baliistic missiles) by December 05, 2001.⁶ Finally, building on the success of START I, US and Soviet negotiators successfully concluded a START II agreement which further reduced strategic nuclear warhead limits to 3500 for each side, a dramatic decline when measured against Cold War levels of around 12,000 warheads each. Unfortunately, while the US Senate ratified START II in January 1996, it still remains mired in the Russian Duma, held hostage by Russian nationalists, as well as a widespread frustration over US actions such as Desert Fox and NATO bombing of Serbia. As a result of the Russian delay in ratification, the deadline for START II compliance after entry into force has been extended from January 1, 2003 to December 31, 2007. Despite these impediments,

⁴ Ibid, pg 2

⁵ Cohen, William S , "Annual Report of the Secretary of Defense to the President and the Congress," 1998, pg 58

⁶ Ibid

however, there appears to be a growing recognition in Russia that maintaining a START I force structure is beyond the ability of its economy to sustain and it would therefore be in the Russian national interest to lock in an American commitment to lower levels while it is possible.⁷ Indeed, at their March 1997 Helsinki Summit Presidents' Clinton and Yeltsin pledged to enter into negotiations for a START III agreement immediately following Duma ratification of START II. Furthermore, the outline of such a START III framework was also reached by a joint commitment to reduce warhead levels to the 2000 to 2500 range, also to be done by the end of 2007.⁸ Finally, despite a US Senate ratification of START II and presidential agreement on START II numbers, the United States remains Congressionally-mandated to maintain the START I force structure until the Duma ratifies START II. It is the sense of Congress, logically enough it seems to me, that a unilateral movement by the United States to START II levels would undermine the arms control process as well as remove a strong incentive for the Russians to ratify the treaty.

<u>1999</u>

ł

1

And so both sides today find themselves in the interesting position of supporting START I force structures despite having an agreed START III framework. Further, with the START III agreement largely filled in, the attention of the arms control cognoscenti have already turned to START IV and beyond. Not surprisingly this unusual situation leads to vastly different positions on a wide variety of issues, running the gamut from force structure and budgets to declaratory policy and WMD proliferation. As we approach a new century, a partial description of today's arms control menu demonstrates both the confused nature of the field as well as some interesting opportunities that may eventually bear fruit. For example, what should be the relationship between strategic nuclear offensive arms reduction efforts and our increasing interest in national missile defense? Is there any trade space between US proposals to modify the ABM Treaty and Russian concerns over some provisions of the START II agreement, such as its ban on MIRVed ICBMs? Secondly, at what point do offensive reduction talks need to become multilateral? 2000? 1500? 1000? When do the sizes of

⁷ Wilkening, Dean A, "The Future of Russia's Strategic Nuclear Force," *Survival*, Autumn 1998, pg 90
⁸ Cohen, pg 58

³

Chinese, French, British or Indian nuclear arsenals become a factor in determining how low we're willing to go?

Additionally, nuclear arms agreements to date have only addressed warheads that are deployed and strategic, which is defined as carried on an intercontinental bomber, ICBM, or SSBN. Tactical nuclear weapons, as well as the large number of warheads in the inactive stockpile, have remained outside treaty limits. When do our arms control efforts take on these classes of weapons, and will the enhanced security of bringing them into the regime be outweighed by the time and difficulty of reaching an agreement? Third, what is the relationship, if any, between US and Russian nuclear weapon levels and the burgeoning problem of WMD proliferation? Should we change our declaratory policy, such as adopting a No First Use pledge, as a way to influence other countries which may be considering acquiring nuclear weapons? Fourth, what role do nontraditional measures, such as the Cooperative Threat Reduction (CTR) program or the various "dealerting" proposals, have in future arms control? And, finally, what will be the effect of ever-declining numbers of weapons on such key topics as extended deterrence and the need for reliable and potentially intrusive verification requirements? And so on It appears, in sum, that a field seen by many as sterile will instead present tomorrow's policymakers an abundance of vital and vexing issues that will demand their attention.

Principles for Arms Control??—A Few Suggestions

Predictions for the future of any endeavor are always risky propositions, and much more likely wrong than right. While this is certainly true of arms control as well, we are probably on safe ground when we suggest that strategic nuclear arms control between the United States and Russia will continue well into the future as a key component of the relationship between the two countries. Further, for at least the next several years it will also likely remain only a bilateral process between the two nuclear superpowers. Given this context, I offer ten possible principles, an Arms Control Top Ten list if you will, that could perhaps guide our arms control efforts in the future.

Principle #1: Arms control is not an end in itself.

While this may appear obvious to us, to some this principle comes as a revelation. For many practitioners in the field, arms control has assumed a life of its own and any arms agreement is by

definition good. This can seductively create a condition where arms control is blindly pursued for its own purposes, disconnected from the larger political environment. Rather, we must remember that arms control, rather than being an end in itself, is instead a means to the larger end of maintaining strategic stability, traditionally defined as avoiding the creation of incentives for either side to strike first, usually by preserving a credible second strike capability. Clearly some arms control proposals are better than others in maintaining this stability. Although arms control is a fundamentally political process--a continuation of politics by other means perhaps--it operates at that key, and potentially dangerous, intersection of political and military considerations and therefore impacts fundamental military capabilities. Arms control must not get ahead of the political environment it serves lest we create a military situation at variance with political reality. Military considerations must not be casually dismissed, because capabilities lost are not soon restored and the consequences of retiring systems too sdon are substantially greater than retaining them for too long

Principle #2: Arms control is not inherently stabilizing

Closely related to the first principle, some suggest that lower levels of arms or alert postures inherently contribute to stability. As stated above, the proper goal of arms control is to reach lower force levels, but without undermining strategic stability. Poorly done, arms control has the potential to work contrary to that goal and produce profoundly destabilizing results. For example, a unilateral decision to dramatically alter our alert posture could well favorably alter a potential adversary's cost and risk calculations of nuclear aggression, hardly a stabilizing result. There are also serious proposals that the United States should, since START II is buried somewhere in the Duma, unilaterally reduce our nuclear forces in order to cause a reciprocal reaction in Russia. While certainly possible, this course of action also carries some risk, notably the creation of asymmetries of unknown duration. I'm more inclined to the "stability through equality" line of reasoning, which stresses the importance of mutual, balanced, and phased force reductions.⁹ This removes the potential instabilities created by asymmetry and the associated possibilities for faulty assessments of advantage or incorrect

⁹ Burns, William F, "The unfinished work of arms control," Issues in Science and Technology, Fall 1997, pg 39

calculations of either superiority or inferiority. In essence, this is the inheritor of the old strategic parity logic, but with a direction of declining rather than rising warhead levels.

Principle #3: The abolition argument is a harmful distraction.

My reading of the evidence suggests that abolition should not be a near-or even mid-term goal of arms control. Abolishing nuclear weapons without solving the underlying political conditions that led to their creation accomplishes little and risks much. To paraphrase President Reagan, nuclear arms do not create adversaries, but it is adversaries who create nuclear arms. Further, abolitionists as a rule fail to acknowledge the shopworn but still true adage that nuclear weapons cannot be disinvented Retired generals and admirals notwithstanding, serious policy-makers and others tasked with providing our nation's security must continue to approach the world as it is, not as some wish it to be.¹⁰ My concern with the abolitionist argument is not only that it does not appreciate the many contributions of nuclear weapons in keeping superpower peace for the past fifty years, but, more importantly, to the extent time spent on abolition delays consensus on serious proposals, it actually undermines our efforts to control nuclear arms. In sum, until the lion lies down with the lamb, abolition is a false god and worshipping it is at best a distraction.

Principle #4 Too much arms control too soon can cause nuclear proliferation

Cne of the largely unsung but important benefits of American nuclear weapons during the Cold War was their effect on curbing nuclear proliferation Germany, Japan, and South Korea, for example, all had the resources, capability, and threat that could well have resulted in their development of an independent nuclear program, and vet none did. This restraint was the direct result of the American strategic nuclear umbrella extended to these and other allies. One of the consequences of our current arms control success is that as numbers of US weapons continue to decline, extended deterrence becomes more difficult. At some point, our allies may decide that the US umbrella has become too small for them and it may become in their national interest to develop their own nuclear capability. Many observers urge the US to reduce its nuclear force to approximately

¹⁰ Goodpaster Committee, "Nuclear Roles in the Post-Cold War World," The Washington Quarterly, Summer 1997, pgs 163-166

200 weapons, which in their view is sufficient for our needs. While this could be true, we should also not be surprised if allies decide it is too few for extended deterrence to remain credible and thus they "go nuclear" themselves. This, obviously, is not what the 200-is-enough crowd intends, but such is the law of unintended consequences when issues are not fully examined. Of course, the alternative to this scenario is a peaceful international security environment where no currently nonnuclear country senses a need to develop a nuclear program. Such a world would have to contain, for example, a largely benign China, a democratic Russia, and relative stability in Northeast Asia and the Middle East. Unfortunately, reality fails to conform. Even assuming the continuation of the START process, Russia appears to be in the nuclear business for the long haul, witness their ongoing deployment of a new SS-27 ICBM¹¹, and China is rapidly modernizing its nuclear forces as well.¹² Such a world remains a far off prospect at best, and thus too large a near-term reduction in the US strategic nuclear arsenal may ironically create, rather than reduce, pressures on the nonproliferation regime

Principle #5: Declaratory policy is important, but not that important

I tend to subscribe to the minority view that nuclear superpower declaratory policy has little if anything to do with nuclear proliferation. The majority opinion on this matter is that American, and to a lesser extent, Russian attitudes, policies, and pronouncements about nuclear weapons exert a powerful influence on whether other nations pursue nuclear capabilities. In my view this is rubbish. Instead, the Iraqs, Irans, and North Koreas of this world, not to mention the Indias and Pakistans, pursue these weapons for their own perceived security needs, usually spurred by regional, not global, actors and rivalries. Superpower nuclear postures and declaratory policies remain secondary considerations at best. Certainly America does enter into the security calculations of these countries, but this is more on how to offset American conventional superiority or keep us out of theater than about what we do, much less say, about nuclear weapons or whether or not the US pronounces a no first use pledge. Nowhere is the importance of US declaratory nuclear policy more overstated than during nonproliferation discussions.

¹¹ Hoffman, David, "Russian Rocket Called Invincible," *The Washington Post*, February 25, 1999, pg 19

¹² Opall-Rome, Barbara, "India Moves May Spur China Nukes Buildup," Defense News, April 26, 1999, pgs 3, 19

Likewise, we should not delude ourselves that Moscow or Bejing pay more than passing attention to our declaratory policy either No doubt US capability speaks more loudly to them than nuclear declarations, which may be important for political purposes and may lead to force level changes, but slowly and indirectly at best. A prime example of the limited utility of declaratory policy was the yawn that greeted Russia's recent declaration that it was retracting its longstanding and public no first use pledge, due to the decay of its conventional capabilities. In other words, Russia was announcing that nuclear weapons were becoming more, not less, important to its national security and Russia was willing to use them first if necessary. This was a major shift in Russian declaratory policy, and it caused nary a ripple. Why? Because we already knew, from Eastern European warplans examined after the end of Cold War, that the Soviets, no first use pledge notwithstanding, intended to use nuclear weapons early and often in an invasion of Western Europe.

¹ Finally, having an explicit declaratory position is not necessarily a friend of deterrence. In some situations, clarity is indeed the enemy of good policy. For example, the nature of a potential US response to a WMD attack on American or allied forces should remain unclear in order to maximize deterrence. Even if a US nuclear response is considered by many to be low, as long as our policy remains one of creative ambiguity it retains some deterrent potential we should use. Others may assign more credibility to a potential US nuclear response than would an American audience, and who could blame them? The United States is, after all, the only nation in history to use nuclear weapons in war

Principle #6: Creativity has its place...but can be overdone

Much has changed in the world since the early days of US-Soviet arms control. Both nations, but especially Russia, face economic pressures more acute than during the Cold War, there is dramatically less hostility and a measure more mutual trust between the two countries, and both face new types of threats largely unknown in previous decades. As a consequence of these changes, alterations to certain aspects of the arms control regime may now be appropriate. For example, the traditional treaty-approved method of missile elimination usually involves some form of missile or launcher destruction. This is meant to preclude a force reconstitution capability and was certainly the

correct approach for the Cold War. Such a regime, however, also prevented the use of proven (and paid for) assets for other strategic but nonnuclear missions The one exception to this rule is the START I provision allowing a redesignation of ICBMs into space launch vehicles. It may be time to expand this philosophy of platform conversion rather than destruction to other areas as well, with the goal of preserving maximum platform flexibility in uncertain times. For example, the US Navy is exploring an option to use former SSBNs as covert insertion platforms for special operations forces as well as for other new missions.¹³ Certainly such issues as relief from START accountability and verification questions are serious questions currently without answers, but they are worth asking in a fiscal environment where it only makes sense to leverage existing assets to the fullest extent possible

Likewise, the land-based ICBM force also has inherent potential for strategic nonnuclear missions. Active and retired ICBMs (of which we have hundreds in storage) have been studied by the Ballistic Missile Defense Organization and the Air Force and found to be a suitable candidate for providing the booster and infrastructure for a low cost, near-term national missile defense (NMD) system to protect the US against a limited rogue nation ballistic missile attack.¹⁴ Indeed, the primary questions concerning the use of Minuteman in this role pertain more to ABM and START compliance and required relief than to technical limitations

Similarly, the concept of a conventional ICBM (CICBM) has been under consideration for several years and for use in a variety of missions, ranging from anti-satellite (ASAT) delivery platforms to long-range precision strike weapons. Regarding precision strike, this proposal essentially calls for taking a portion of the aforementioned 450 Minuteman II ICBMs in storage, modifying the front ends for conventional operations, and basing them on each coast, at Patrick AFB FL and Vandenberg AFB, CA. Studies indicate these conventional ICBMs would be capable of delivering any of several tailored conventional munitions at Mach 15, with approximately 10 meter accuracy, against targets anywhere in the world in under 30 minutes.¹⁵ While such a platform would be suitable only against certain high value targets, it would provide the NCA with a rapid global-coverage-in minutes option, from the CONUS, requiring no tanker or personnel support, with no overflight requirements, with no prospect

 ¹³ Matthews, William, "Trident Subs Could Enjoy Rebirth," *Defense News*, April 5, 1999, pg 24
 ¹⁴ <u>Final Report Conference on START II, NMD, and the ABM Treaty Interrelationships and Implications</u>, 23-24 Jan 96, Tab G
 ¹⁵ Gibson, Robert, "Conventionally armed ICBMs," *Airpower Journal*, Fall 1997, pg 120

of American casualties in making the attack, and, with a Mach 15 delivery, a high probability of kill and immunity to defenses.

Too much creativity in the wrong hands, however, can be counterproductive. Much of the recent dealerting discussion, for example, is a solution in search of a problem, a placing of the cart before the horse, or defining the wrong fix to the right problem, depending on your point of view. The nightmare scenario for dealerting proponents is a breakdown in Russian early warning, compounded by a "hair-trigger" use-or-lose ICBM alert posture, resulting in a crisis-driven, error-induced nuclear war. The remedy usually prescribed is some form of ICBM warhead removal where warheads are stored a distance away from the missile and hours to days are required for generation, allowing time for cooler heads to prevail.

This cure, in my estimation, is worse, far worse, than the disease. No more than we send cops into the night without bullets should we take warheads off missiles or otherwise remove them from alert as they were intended to operate. These systems were designed to function, and are at equilibrium when, on alert with warheads mated Any other form of operation requires modification, costs money, degrades reliability, and removes capability—recommending any one of which defies common sense and asking for all four borders on stupidity. More importantly, however, such a configuration is potentially destabilizing in a crisis. At present, attacking an on-alert ICBM is an invitation to suicide and there are no mobilization considerations for decision-makers to ponder, because it is already on alert. In a de-alerted state, however, the converse on all counts is true. There are pressures to preempt if possible, before warheads are re-mated, and, knowing that, leaders would face powerful 1914-like pressures to mobilize first. and we all know how that one turned out.

There is a better answer, albeit a less creative one. If the root cause of this scenario is faulty Russiah early warning, and it is by several accounts in poor shape, then the answer is to help the Russiahs rebuild their early warning system, and there are currently proposals to do just that. This solution is illustrative in that it fixes a problem in the most direct manner, which is usually a good thing, while not making nuclear systems perform unnatural contortions, which is usually not a good idea. In sum, creativity is not always good, and not all arms control proposals are created equal.

<u>Principle #7: As a rule, military logic trumps financial savings</u> One of the most striking aspects of the defense "build down" of the post-Cold War era is the

degree to which the peace dividend has indeed been realized. The amount spent on strategic nuclear forces has fallen from almost \$19 billion per year in 1990 to just under \$6 billion annually today.¹⁶ Given the collapse of our principal nuclear adversary this decrease surely represents an appropriate realignment of fiscal priorities, but those who suggest that further reductions can continue apace are placing achieving the last drop of conceivable savings over our most fundamental task in national security. In their wisdom vesterday's decision-makers, even as they were cutting billions of dollars from the strategic budget, retained the strategic triad as their force structure framework. By presenting a potential adversary with an impossible targeting and timing challenge the triad has served the nation well over the past 35 years and should not be lightly discarded. The logic of the triad still holds and it should remain the bedrock of our strategic posture. Certainly we should continue to realize additional savings where we can, but this should be done in the context of a smaller triad rather than alternatives such as a monad or dyad, at least until we get down to somewhere around 1000 to 1500 warheads. It is also far from self-evident that a monad or dyad of similar size to a triad would necessarily be more cost-effective and still provide a vigorous nuclear deterrent. The nuclear capability of the bomber leg, although less robust than the other two legs, is essentially free since the primary mission for the bomber force is now conventional operations Retiring the ICBM force, traditionally the most cost-effective of triad systems, would result in little savings, and would sacrifice the enormous targeting challenge presented by ICBMs to potential adversaries. And, finally, the inherent survivability provided by our SSBN force represents the ultimate insurance policy, and one not adequately measured in dollars. In sum, the percentage of the total DoD budget currently spent on strategic offensive forces is just over 2% (compared to almost 7% in 1991)¹⁷, and rather than being a potential cash cow for other programs, is instead a bargain for the American taxpayer.

¹⁶ Cohen, pg 60 ¹⁷ ibid

Principle #8: When in doubt, keep it simple (for the time being).

In our zeal to do all there is to do in the field of nuclear arms control, we sometimes succumb to the urge of wanting to negotiate the kitchen sink into our agreements. Some of the candidates for inclusion in future rounds of talks include previously excluded nonstrategic nuclear forces, inactive warheads, fissile materials, transparency measures, and the relationship between offensive and defensive systems, to name but a few. Although these are all key issues and will have to eventually be addressed, we would be better served by resisting this temptation in the near term. I subscribe to the view that it is better to keep nuclear arms control relatively simple until democracy and order become more established in Russia and the Duma is less anti-Western.¹⁸ Goodness knows that Russian security officials have had their hands full over the past several years trying to get Duma ratification of START II. To maximize our prospects for success, we should present Russian arms controllers with less challenging tasks and remove complications and potential excuses for failure where possible. We should save the truly complicated matters until later, especially the relationship between the ABM Treaty, limited missile defenses, and START II We must strive to somehow get back to the arms control situation at the end of the Bush Administration where the Russians were indicating a willingness to both ratify START II in its original form and negotiate changes to the ABM Treaty to allow a limited national missile defense. The alternate approach, formally linking the START II and ABM Treaties, while interesting in theory, may be problematic in execution. Indeed recent reports point to signs of a conscious US strategy to link Russian concessions on the ABM Treaty to granting relief on one of the key provisions in START II, the ban against MIRVed ICBMs.¹⁹ If true, this line should be approached very carefully.

Principle #9: We must do our homework before plunging into START IV

For example, as numbers of nuclear weapons continue to decline, adequate verification becomes increasingly important, which will have to be done in part by trust and in part by technology. In other words, we should remember President Reagan's advice to trust but verify, and we should not

¹⁸ Burns, William F , "The unfinished work of arms control," Issues in Science and Technology, Fall 1997, pg 38

¹⁹ Pincus, Walter, "Pentagon Debates Treaty Changes, Plan to Allow Missile Defense," *The Washington Post*, January 22, 1999, pg A16

go below START III numbers without having extreme confidence in the verification regime. We must also develop a consensus on when strategic nuclear arms control must move beyond the US and Russia to encompass other countries, such as China and even France and Great Britain. Similarly, we also need to be clear as to what will be our force sizing criteria as we prepare to go below the 2000 warhead threshold. Certainly as US & Russian numbers decline, the levels of other nuclear arsenals become more important, but how is that to be measured? Will we remain content to compare ourselves to Russia alone, or Russia and China, or Russia and China and hostile regional nuclear powers, or some percentage of the total rest of world (ROW) warheads? I don't pretend to have answers for these questions, but I also don't hesitate in saying that someone must before we march off to START IV. This in itself would mark a departure from recent practice. As surely as night follows day we moved on START II immediately after START I and agreed on START III provisions before START II has even been fully ratified. Given the size of our arsenals at the time and our numerical advantage over the rest of the world, this rapidity was appropriate. Those days, however, are drawing to an end and if we hope to remain a nuclear superpower, rather than just one of the boys, we must not be in such a rush to agreement in the future.

Principle #10: Be patient

This is perhaps the most difficult principle for late-20th century Americans to observe. We are an impatient people and one prone to forget even recent history. This combustible combination often creates an unacknowledged pressure to do *something*, because doing nothing is un-American and therefore unacceptable. With respect to nuclear arms control, however, this can get us into trouble. As a tonic, we must never forget the bromide that no agreement is better than a bad agreement, and always remember the staggering progress in nuclear arms reductions that has occurred over the last decade. We must try to take the long view of these matters and not fall victim to the pressure to reach agreement for agreement's sake or because a summit or end of term approaches. Rather, as always, a steady calculation of the national interest, based on sound strategic logic, represents the best way to provide national security and the common defense

<u>Summary</u>

If there is any single issue we as a nation need to get right, it is nuclear deterrence, especially our strategic nuclear relationship with Russia, the one nation on Earth that can destroy the United States in thirty minutes Conversely, if we do everything right in national security affairs except our management of this issue, we're still in big trouble. In other words, to put this in the language of the National War College, this is the most vital of our vital national interests, the interest of national survival, and leads directly to fundamental national security objectives. In regular English, these are the family lewels we're protecting; this is Job One of the American military establishment. In accomplishing this key mission, those charged with the stewardship of our nuclear programs must continue to work toward greater and greater efficiencies, as they have done so well over the past decade. Of course we want to get it just right, to spend no more than necessary, to do no more than what's required to do the business of nuclear deterrence But if we err, given the gravity of being wrong, let it be on the side of caution, on too big rather than too small, too much than too little, too robust than too fragile. At the same time, however, we must also work toward a further deepening of our arms control relationship with Russia as a key part of a maturing political relationship This relationship promises to eventually form the basis for even greater progress in arms control than we've accomplished in this decade, which is already one of the greatest foreign policy successes of the post-Cold War era

BIBLIOGRAPHY

Benson, Summer, "Competing Views on Strategic Arms Reduction," Orbis, Fall 1998, pgs 567-604

Binnencijk, Hans and Goodby, James, editors, <u>Transforming Nuclear Deterrence</u>, National Defense University Press, 1997

3. Brodie, Bernard, Strategy in the Missile Age, Macmillian, 1959

4. Burns, William F, "The unfinished work of arms control," Issues in Science and Technology, Fall 1997, pgs 37-40

5. Gibson, Robert, "Conventionally armed ICBMs," Airpower Journal, Fall 1997, pgs 119-123

6. Glaser, Charles, "The Flawed Case for Nuclear Disarmament," Survival, Spring 1998, pgs 112-128

Goodpaster Committee, "Nuclear Roles in the Post-Cold War World," *The Washington Quarterly*, Summer 1997, pgs 163-166

8. Hoffman, David, "Russian Rocket Called Invincible," The Washington Post, February 25, 1999, pg 19

9. Jones, Rodney W and Sokov, Nikolai N , "After Helsinki, the hard work," *Bulletin of the Atomic Scientists*, July/August 1997, pgs 26-30

10. Joseph, Robert G & Lehman, Ronald, <u>U S Nuclear Policy in the 21st Century A Fresh Look at National Strategy and Requirements, Executive Report, July 1998, National Defense University Press, 1998</u>

11. Joseph, Robert G and Reichart, John F, "The Case for Nuclear Deterrence Today," Orbis, Winter 1998, pgs 7-19

12. Kissinger, Henry A, Nuclear Weapons and Foreign Policy, Council on Foreign Relations, 1957

13. Matthews, William, "Trident Subs Could Enjoy Rebirth," Defense News, April 5, 1999, pg 24

14. Opall-Rome, Barbara, "India Moves May Spur China Nukes Buildup," Defense News, April 26, 1999, pgs 3, 19

15 Payne, Keith B , Deterrence in the Second Nuclear Age, The University Press of Kentucky, 1996

16. Payne, Keith B , <u>Post-Cold War Requirements for U S Nuclear Deterrence Policy</u>, National Institute for Public Policy, March 1998

17. Payne, Keith B , The Case Against Nuclear Abolition And For Nuclear Deterrence, National Institute for Public Policy, 1997

18. Pincus, Walter, "Pentagon Debates Treaty Changes, Plan to Allow Missile Defense," The Washington Post, January 22,

1999, pg A16

1

19. Quinlan, Michael, "Thinking about nuclear weapons," RUSI Journal, December 1997, pgs 1-4

20. SAIC, Final Report Conference on START II, NMD, and the ABM Treaty Interrelationships and Implications, 23-24 Jan 96

21. Schlesinger, James R, "Nonproliferation and US Nuclear Policy, The Washington Quarterly, Summer 1997, pgs 103-106

22. Slocombe, Walter, "Is there still a role for nuclear deterrence?" NATO Review, November/December 1997, pgs 23-26

23. Sloss, Leon, "Arms Control Keep Your Eye on the Ball," The Washington Post, December 9, 1998, pg A24

24. The Economist, "Re-starting arms control," February 15, 1997, pg 17

25. Waltz, Kenneth, "Thoughts About Virtual Nuclear Arsenais," The Washington Quarterly, Summer 1997, pgs 153-161

26. Weinberger, Caspar W , "The dangers of denuclearization," Forbes, February 23,1998, pg 37

27. Wilkening, Dean A , "The Future of Russia's Strategic Nuclear Force," Survival, Autumn 1998, pgs 89-111