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US NUCLEAR DOCTRINE AND POST-COLD WAR FORCE STRUCTURE

by

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Since the collapse of the Soviet Union and end of the Cold War, the US military has undergone significant changes in its global military strategy and its resultant force structure. While some would argue that the impetus for change has been the shrinking defense budget and force reductions, what allowed these changes to occur was the new nature of the world and the realization that the more prevalent conflict of the future will be regional, lower intensity conflict with much more limited aims than those prepared for during the Cold War. President Clinton?s November, 1997 signing of new nuclear weapons guidelines suggests that a post-Cold War rethinking of US strategic nuclear doctrine and force structure may be taking place as well. The US must continue this apparent evaluation of doctrine and be prepared to make appropriate force structure changes as doctrine shifts. This paper will examine the foundational importance of doctrine; the doctrinal underpinnings of our current force structure; and the implications of the post-Cold War world on strategic nuclear doctrine and force structure. In addition, based on the lessons we can learn from the Cold War years and the shape of our new post-Cold War world, this paper will address an emerging doctrine and its force structure implications. Chapter one provides background into the issue, defines key terms, and identifies a key assumption upon which this paper is based. Chapter two includes discussions on the nature of doctrine and its importance when fielding new, unique weapon systems. Chapter three discusses the early geopolitical and military influences on, and the evolution of, US Cold War nuclear doctrine. Chapter four reviews post-Cold War development of nuclear doctrine to include a discussion of the November, 1997 Presidential nuclear policy declaration and its doctrinal implications for the future. Chapter five reviews current strategic nuclear threats and chapter six discusses force structure requirements based on these current threats and emerging deterrence-based doctrine. Finally, chapter seven summarizes the thesis and reiterates the need for US action to lead the world through the post-Cold War nuclear era.

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Preface

This project began as an attempt to demonstrate that the new world order since the collapse of the Soviet Union and subsequent break-up of the Warsaw Pact mandated a reexamination of United States (US) strategic nuclear force structure. What I came to realize, however, was that while force structure does need to be reexamined, the foundation upon which US nuclear force structure was laid, its doctrine, is in need of attention as well. This led me in a different direction, away from force structure and toward doctrine. It seemed that without solid doctrine upon which to base my force structure conclusions, I would have been repeating history by attempting to build or structure forces without first exploring how they might be uniquely employed.

In an effort to lay the foundation before constructing the building then, what follows is a discussion of US strategic nuclear doctrine and its implications for force structure.

This paper came together due in great part to the insight, constructive criticism, and occasional debate offered by Major Edwin Marsalis. I thank him for his candor and above and beyond effort.

Abstract

Since the collapse of the Soviet Union and end of the Cold War, the US military has undergone significant changes in its global military strategy and its resultant force structure. While some would argue that the impetus for change has been the shrinking defense budget and force reductions, what allowed these changes to occur was the new nature of the world and the realization that the more prevalent conflict of the future will be regional, lower intensity conflict with much more limited aims than those prepared for during the Cold War.

President Clinton's November, 1997 signing of new nuclear weapons guidelines suggests that a post-Cold War rethinking of US strategic nuclear doctrine and force structure may be taking place as well. The US must continue this apparent evaluation of doctrine and be prepared to make appropriate force structure changes as doctrine shifts.

This paper will examine the foundational importance of doctrine; the doctrinal underpinnings of our current force structure; and the implications of the post-Cold War world on strategic nuclear doctrine and force structure. In addition, based on the lessons we can learn from the Cold War years and the shape of our new post-Cold War world, this paper will address an emerging doctrine and its force structure implications.

Chapter one provides background into the issue, defines key terms, and identifies a key assumption upon which this paper is based. Chapter two includes discussions on the nature of doctrine and its importance when fielding new, unique weapon systems.

Chapter three discusses the early geopolitical and military influences on, and the evolution of, US Cold War nuclear doctrine. Chapter four reviews post-Cold War development of nuclear doctrine to include a discussion of the November, 1997 Presidential nuclear policy declaration and its doctrinal implications for the future. Chapter five reviews current strategic nuclear threats and chapter six discusses force structure requirements based on these current threats and emerging deterrence-based doctrine. Finally, chapter seven summarizes the thesis and reiterates the need for US action to lead the world through the post-Cold War nuclear era.

Chapter 1

Background

Look to the essence of a thing, whether it be a point of doctrine, of practice, or of interpretation.

—Marcus Aurelius

Introduction and Problem Definition

Marcus Aurelius' words are as applicable now as they were nearly 1,800 years ago. The essence of the US strategic nuclear issue no longer lies in a simple debate over numbers of weapons and platform types and how those numbers and types match-up against those of an enemy. The fundamental questions surrounding US nuclear weapons now center on their role in the post-Cold War environment.

The world is still struggling to come to grips with its new multi-polar complexion. While undeniably good from a US military perspective, the loss of the monolithic "evil empire" has created many challenges in regards to strategic approaches and resultant force structures. This new geopolitical world and the seeming ever-present atmosphere of budget reductions left the US military with ample motivation to rethink old paradigms. Since the early 1990s, especially in the wake of the coalition efforts and lessons learned in Southwest Asia, we've given much attention to efforts aimed at enhancing our ability to fight conventional joint battles smarter and cheaper. While we are rightfully

expending great effort in redefining or clarifying the roles and missions of our conventional forces, a similar foundational review of the purpose or role of strategic nuclear weapons must also take place. This is not to infer that changes to targeting plans and force structures have not taken place; the strategic nuclear force of today is dramatically smaller than its Cold War predecessor. What seemingly has not occurred is a review of the *role* of strategic nuclear weapons, in light of 50 plus years of nuclear experience and a radically different world order.

The new geopolitical shape of the world allows us to step out of our "Cold War foxholes," as an old missile wing director of operations was fond of saying, and reassess our nuclear needs. Certainly, force structure questions must be raised and answered, but this respite in the nuclear arms race has given us the unexpected opportunity to look past force structure and go deeper into the foundational doctrine surrounding nuclear deterrence. The doctrine relative to the role of nuclear weapons must be dealt with before additional force restructuring is considered.

Thesis Statement and Research Scope

History suggests that while solid doctrine is vital to the optimized employment of forces, it is rarely well developed prior to the first use of new weapons. Instead, doctrine evolves over time. US strategic nuclear doctrine has been evolving since its first appearance in the late 1940s.

A review of the nuclear doctrine during the Cold War, when coupled with the new geopolitical climate of the 1990s suggests that the WWII strategic bombing paradigms that served as a basis for early nuclear doctrine and force structure may be ready to evolve again.

A new emerging doctrine, based on concepts outlined in a 1997 Presidential Decision Directive, suggests that the role of the nuclear weapon has evolved from that of a war *winning* instrument to that a of a war *deterring* instrument. A US nuclear doctrine centered around deterrence as a primary goal would allow dramatic force reductions. This paper will demonstrate the need to examine new, unique nuclear doctrine based upon the nuclear weapon's deterrent role and then suggest, in broad terms, a force structure concept in-line with that new doctrine.

Key Terms Defined

Before going any further in this discussion, several terms must be defined. The list that follows is not intended to be an exhaustive glossary, but instead serves to clarify terms used whose meanings vary or are open to debate.

Deterrence: In a 1997 study on US nuclear weapons policy, the National Academy of Sciences explains that deterrence occurs when an action is discouraged by fear of retaliation; when the cost of pursuing the course of action is greater than the aggressor is willing to bear; or when the aggressor feels his objective(s) can not be met through a course of action based on an assessment of the situation. The Academy goes on to explain that core deterrence, in the strategic nuclear context represents the absence of nuclear exchange based on these fears or concerns. Drawing from these definitions, for the purpose of this paper, deterrence in the strategic nuclear context, represents the absence of direct, open conflict between potential adversaries, including nuclear exchange at any level, based on fear of retaliation and/or a presumed denial of objectives.

Doctrine: Col Dennis Drew and Dr. Donald Snow provide a very clear definition that will serve as a good starting point for defining nuclear doctrine. They suggest that:

"Military doctrine is what we believe about the best way to conduct military affairs."[1] Joint Pub 1's definition of doctrine, while similar, reflects on the ultimate purpose of doctrine. Joint Pub 1 states doctrine reflects "Fundamental principles that *guide the employment of forces*" (emphasis added).[2]

Merging these two definitions and substituting the terms "strategic nuclear" for "military" in the Drew and Snow definition, we get: "Strategic nuclear doctrine is what we believe about the best way to conduct strategic nuclear affairs to guide the employment of strategic nuclear forces." This is the definition that will be used throughout this project.

Key Assumption

Elemental to any doctrinal examination of strategic nuclear weapons is an understanding of their uses. Few would argue that one use for nuclear weapons is their ability to destroy enemy targets. A less substantiable use or role of nuclear weapons is their ability to deter aggression. Why is this hard to substantiate? Simply stated, deciding what deters an action will always be difficult, since the desired outcome is, by definition, the *absence* of something tangible. Concerning the ability of nuclear weapons to deter conflict, the National Academy of Sciences stated in 1997: "The nuclear era represents the longest period without war among the major powers since the emergence of the modern nation state in the sixteenth century."[3] Can we credit the lack of major conflict to the deterrent level provided by our nuclear forces? As Col Drew and Dr. Snow point out, while there's no real way we can *prove* that our nuclear forces deterred Soviet attack, evidence clearly allows that assumption.[4] For the purposes of this paper,

we will make the assumption that nuclear weapons are a deterrent as defined in this paper.

Notes

[1] Col Dennis M. Drew and Dr. Donald M. Snow, *Making Strategy, An Introduction to National Security Processes and Problems*, (Maxwell AFB, AL: Air University Press, 1988), 163.

[2] Joint Pub 1, *Joint Warfare of the Armed Forces of the United States*, (January, 1995), I-3.

[3] John P. Holdren, et al, *The Future of U.S. Nuclear Weapons Policy*, (Washington D.C.: National Academy Press, 1997), 9.

[4] Drew and Snow, 165.

Chapter 2

Importance of Doctrine

This chapter will explore the evolutionary nature of doctrine; discuss its importance when fielding unique weapons; and conclude with a discussion of the uniqueness of the nuclear weapon and its need for distinct doctrine.

Nature of Doctrine

The road from doctrine to force structure in a perfect world would be tremendously different than reality. In a perfect world the road from concept to battlefield would go something like this: A technological breakthrough occurs and military leaders immediately understand the defense-related implications and revolutionary significance of the new technology. In this perfect world, these military leaders, with keen foresight, immediately assesses the level to which future operations will be affected by this new weapon and quickly develop doctrine to best exploit it. Then after these military leaders have put down on paper exactly how they will fight with this new weapon, they quickly conceptualize the necessary force structure, which allows them to procure the precise number of new weapons to support the new doctrine.

Few would argue that the scenario described above is as improbable as it is desirable. History (and common sense) paints quite a different picture of how revolutionary new technologies get employed on the battlefield, with corresponding doctrine developed, not

at the onset, but somewhere along the way. Russian military writings, where the concept of the military technical revolution was first developed, espouse a more pragmatic flow of technology into doctrine and ultimately force structure. "Traditionally, Soviet military science, relying on the findings of military history (experience), held that technological changes usually affected the tactical level first, then percolated upward to affect operational art and strategy."[1] So, while we'd like the path to be technological breakthrough, to doctrine, to force structure, history shows that this ideal is seldom realized.

So if perfect doctrine is seldom in place prior to the fielding of new weapons, how is solid doctrine for weapons formed? The next section of this chapter attempts to shed light on that question by examining the doctrinal development of the tank and airplane.

Historical Examples: The Tank and Airplane

The Tank

The birth of the tank is a classic case in point where new revolutionary technology was employed on the battlefield prior to a solid doctrinal foundation being poured. The tank was born of a need to break the stalemate of the WWI trenches. In WWI, the revolutionary use of the machine gun and barbed-wire in defensive roles with no corresponding change in offensive strategies, tactics, and capabilities led to wave after wave of frontal assaults on heavily defended entrenchments. The staggering and needless loss of life and the resultant outcry to break the stalemate of trench warfare (which led to 1.7 million deaths at Verdun and the Somme alone) pushed military leaders to seek solutions.[2] Enter the tank. Charles Messinger in his book, *The Blitzkrieg Story*, describes

the WWI use of the tank from its inception as a means to cut through barbed wire allowing troops to advance unhindered, to its eventual use in limited numbers, as a "blocker" for advancing infantry troops and a means to pierce fortified positions. In this work, Messinger paints a clear picture of a military establishment that did not immediately understand the unique nature and potential of their new weapon; who had no unique doctrine upon which to base strategy and tactics; but who, based on the critical need to deploy a weapon to try to break the stalemate of the trenches, understandably put the new weapon into service. It wasn't until later when, given the time and resources, paradigm-breaking men such as J.F.C. Fuller, Liddell Hart, and Heinz Guderian eventually helped to create a body of doctrine which permitted the exploitation of the tank's unique capabilities.

This example simply demonstrates how the rush to field and use new weapons often leads to employment before doctrines are perfected to maximize their unique potentials.

The Airplane

The US military has struggled to fully grasp the implications of airpower across a broad spectrum of missions. Carl Builder, in his work on the evolution of air theory and doctrine, *The Icarus Syndrome*, details a doctrinal chronology characterized by political maneuvering and unfounded claims of capabilities that led to the development and equipping of a United States Air Force (USAF) which has many times proven to be ill-suited for the roles and missions it was asked to perform. In the case of airpower, unlike the tank, instead of being relegated to roles and missions to support old battle concepts and strategies, early air zealots were allowed to chart a new course and structure a force to meet the needs of that course without fully anticipating the multiple roles and missions

airpower could, should, and eventually would, be asked to perform. This led to the early over-emphasis on airpower's strategic role and a force structure that reflected just that. Mark Clodfelter also deals with this in the first chapter of his book, *The Limits of Air Power*. Here Clodfelter portrays early US airpower advocates' struggles to adapt the use of airpower to roles other than strategic bombing in support of total war. He explains that during the interwar period "General Headquarters Air Force…stressed strategic bombing as the Air Corp's primary mission" and Air Corps Tactical School "instructors" developed the air doctrine whose strict adherence to the concept of strategic supremacy led to the development of Air War Planning Document-1 (AWPD-1) which "guided the American bombing of Germany."[3] Clodfelter goes on to explain how, despite having to adapt the role of airpower to support limited objectives in Korea, the USAF saw this type of limited war as an "aberration" and went into Vietnam with a force structure better equipped to carry out another total war (ala AWPD-1) rather than to fight a limited war for limited objectives.[4]

While many will argue that airpower doctrine is still evolving, what this brief historical review demonstrates is that unique airpower doctrine was not born instantaneously when the new, unique weapon arrived on the scene. Airpower doctrine evolved as we gained experience.

For the purposes of this discussion on the nature of doctrine, there are two important lessons to learn from the preceding discussions of the tank and airplane. First, that new unique weapons often demand new unique doctrine to allow a full realization of their potential, and second, that doctrine is not static; it usually evolves over time.

Implications of Historical Examples on Strategic Nuclear Forces

Much like the tank and airplane, the nuclear weapon is a unique weapon also in need of unique doctrine to guide its force structure and employment. McGeorge Bundy, William Crowe, Jr., and Sidney Drell, in their combined effort, *Reducing Nuclear Danger,* make the point that the nuclear weapon is unique due to its sheer destructiveness and history of non-use.[5] Certainly Bernard Brodie, "the quintessential strategist of the first generation of the nuclear age," also recognized the nuclear weapon as unique.[6] He saw nuclear weapons as changing the entire military establishment from that of fighting wars to that of preventing them.[7] So much like the tank and airplane, we have in the nuclear weapon a unique weapon in need of unique doctrine to maximize its full potential. The next chapter of this paper will explore influences on, and the evolution of, early US nuclear doctrine in an attempt to determine if early nuclear doctrine immediately optimized the unique capabilities of the nuclear weapon or if, like the tank and airplane, it evolved.

Notes

[1] Willard C. Frank and Philip S. Gillette, *Soviet Military Doctrine from Lenin to Gorbachev, 1915-1991*, (Westport, CT: Greenwood Press, 1992), 52.

[2] Charles Messinger, *The Blitzkrieg Story*, In ACSC War Theory Course Book, (Maxwell AFB, AL, 1997), 197.

[3] Mark Clodfelter, *The Limits of Airpower, The American Bombing of North Vietnam*, (New York, N.Y.: The Free Press), 2, 5.

[4] Ibid., 3.

[5] McGeorge Bundy, William J. Crowe Jr., Sidney D. Drell, *Reducing Nuclear Danger-The Road Away From the Brink*, (New York, N.Y.: Council on Foreign Relations Press, 1993), 7.

[6] John Baylis, et al., *Makers of Nuclear Strategy*, (New York, N.Y.: St. Martin's Press, 1991), 19.

[7] Fred Kaplan, *The Wizards of Armageddon*, (New York, N.Y.: Simon and Schuster, 1983), 31-32.

Chapter 3

US Nuclear Doctrine—Cold War

Before directly discussing early US nuclear doctrine, it is helpful to first understand the environment that this doctrine was shaped in. Exploring these contextual factors will allow a better understanding of why certain doctrinal approaches were undertaken at the onset of the Cold War and provide a better basis for the later exploration of nuclear doctrine's next evolutionary step. The first section of this chapter is devoted to the discussion of several factors that helped shape US nuclear doctrine. These geopolitical and military factors had a significant bearing on the evolution of nuclear doctrine and thus bear examination.

Geopolitical Influences on Doctrine

Prior to WWII, despite conflicting ideologies, US and Soviet relations had been "cool but correct" based on the "physical distance between the two states, the lack of historical confrontations, and no clear ability to challenge the security of the other…"[1] Following the war, the Soviet Union strengthened its hold on much of Eastern Europe both physically and ideologically, through the increasing dominance of the Communist Party, and began to increasingly assert itself in other Eastern European nations' internal affairs. At this point, the US began to shape what was to become its policy of "containment," wherein the US would support friendly governments, both economically

and militarily, against communist insurgencies.[2] Relations between the US and Soviet Union, never good before or during the war, were beginning to chill further. The climate got even cooler in 1949 as the Soviets detonated their first atomic device and reports provided to the Joint Chiefs of Staff declared that the Soviets, who already appeared to have the will, would very soon have the capacity to "…attack at the earliest possible moment…at any time they assessed that it was to their advantage."[3] With the atomic bomb firmly established in each nations' arsenal, the Cold War was now officially underway.

With the Cold War as a backdrop, much of the academic and military world was struggling to come to grips with the new weapon which had reshaped much of the world's thinking on warfare. Fred Kaplan, in his book, *The Wizards of Armageddon*, paints a vivid picture of two distinct worlds, one academic and one military, trying to deal with the issue from their own unique perspectives.

The academic world, without the pressures of an immediate threat to deal with, was trying to find answers to broad questions, such as: What is the role of atomic weapons when two states have them? Is war more or less likely if two potential adversaries have them? How many atomic weapons are needed? Does numerical superiority mean much if both sides have ample forces to affect large scale devastation? These types of questions are exactly what one might expect within academic circles.

The military world, on the other hand, while also wondering about many of the same issues, was applying itself to more pragmatic, immediate questions such as: If the Soviets rolled West in Europe, and they were convinced they would, how could they be stopped? When attacking the Soviet land mass do we engage *en masse* or with limited

offensives? Finally, the age-old strategic bombing question…Do we target the Soviet support base, military targets, or population centers to break the Soviet will to fight?[4]

Clearly, in the early Cold War years US leaders did not have the time to solve every doctrinal puzzle prior to fielding forces. Speed was critical based on a growing fear of the USSR which was heightened by a conventional inferiority in Europe.

The fear of the USSR was driven by several "scares" that occurred in close succession in the early Cold War years which had rippling effects across the nation, both within military and political leadership as well as the civilian populace. Among the more prevalent "scares" were the detonation of the Soviet's first atomic device in 1949, several years before Western estimates predicted it;[5] the alleged "bomber gap" of the mid-1950s;[6] the launching of Sputnik and the resultant fear of a Soviet intercontinental ballistic missile (ICBM) threat;[7] and finally the alleged "missile gap" of the late-1950s.[8]

Exacerbating these scares was a clear conventional inferiority in Europe due to post-war US and allied force reductions.[9]

A combination of these fears and the impact of US conventional reductions led US leaders to a natural reliance on nuclear weapons. Thus, geopolitical realities pushed nuclear discussions quickly out of the purely academic world and into the military realm, where these pragmatic concerns could be addressed.

Military Influences on Doctrine

In addition to geopolitical factors, US military leadership also played a key role in the shaping of Cold War nuclear doctrine. Carl Builder in his book, *The Icarus Syndrome,* suggests that USAF leadership brought much baggage with it from its recently acquired separate service status debate. Builder proposes that the USAF moved into the

early Cold War period still feeling the need to justify its unique utility and separate service status. He contends that one of the three emerging theoretical threads binding the USAF together in this time-frame was its belief in the decisiveness of strategic bombing. He explains that while strategic bombing's decisiveness was still very much in debate as the war drew to a close in Europe, the use of the atomic bombs in Hiroshima and Nagasaki made the "arguments about its validity…academic to the American public."[10] He goes on to assert, absent another conclusively established theory or role for the new independent service, that the strategic bomber and its nuclear payload became in effect the USAF's *raison d'etre*.[11] If this is true, the implications for doctrine are clear. It is possible that post-war nuclear doctrine was partially shaped, or at least influenced by, the new service's need to firm its foundation through the acquisition of a large nuclear-equipped bomber force.

Whether "service justification" was a conscious motive behind USAF leaders' actions as they guided the shaping of the US nuclear force is unclear, but there is no doubt that those military leaders did shape a force that very clearly reflected the strategic bombing theory of the day.

Most prominent of these military leaders was General Curtis LeMay. As the leader of the new Strategic Air Command (SAC), General LeMay had profound and lasting impact on US nuclear doctrine. Any effort to grasp early military influences on nuclear doctrine must begin with LeMay. General LeMay's vision of strategic bombing was shaped in his early years as an officer and then reinforced by his education at Air Corps Tactical School (ACTS) in the late 1930s.[12] Here strategic bombing theories of early airpower pioneers such as Hugh Trenchard and Giulio Douhet dominated or at least

significantly influenced the course material.[13] Was LeMay influenced by these teachings? A brief look at his bombing operations against the Japanese mainland as Commander of the 21st Bomber Command paints a picture of a student very well learned in the strategic bombing theories of Trenchard and Douhet.[14]

LeMay's successes in Japan probably solidified, in application, the strategic bombing theories he learned prior to the war. And it was this foundation that most certainly guided his approach to shaping SAC. Just how influential was LeMay in the shaping of US nuclear forces under SAC?

First, LeMay had tremendous influence and access to resources. While most of the military was fiscally constrained in the post-WWII timeframe, SAC, under the pressure to build US strategic nuclear forces, did not suffer for lack of funding.[15] Helping to ensure SAC had all of the resources it needed was a growing feeling among political leaders that, in the face of Soviet conventional numerical superiority, the US strategic nuclear forces provided the US and her allies "a way to wage war on the cheap."[16]

In addition, the liberal allocation of resources into SAC was not a one or two year commitment, but a steady stream.

> As intelligence gathering techniques in the Soviet Union improved, more targets were identified. At SAC headquarters, LeMay was always ready to revise bomb requirements upward in order to hit the new targets intelligence had discovered, and the White House and Congress could always be persuaded to step up production of nuclear weapons to fill LeMay's orderbook.[17]

So while LeMay did not set US nuclear policy directly, this first SAC commander, through his experience and influence, certainly helped shape a robust nuclear force, guided by WWII strategic bombing theory.

With this understanding of the geopolitical and military influence on our Cold War nuclear doctrine serving as the foundation, the next section of this chapter will discuss the evolution of US Cold War nuclear doctrine.

US Cold War Evolution of Nuclear Doctrine

This section will briefly reflect on the basic doctrines that emerged to cope with the influencing factors discussed above. The task of defining doctrinal evolution during the Cold War is complicated by a lack of consistent terminology used by different administrations. What might be called *doctrine* by one administration, is called *policy*, *strategy*, or *guidance* by another. Regardless of what they have been called, within these declarations have been descriptions of what different administrations felt were the best ways to conduct strategic nuclear affairs to guide the employment of forces, which by definition is doctrine. Thus what follows is a brief description of the different approaches guiding our nuclear policy during the Cold War.

The first issued Presidential-level nuclear guidance was National Security Council (NSC)-30, signed by President Truman in the Fall of 1948. While significant in that it reserved nuclear execution authority for the President, NSC-30 provided little doctrinal guidance. However, its timing alone, during the Berlin crisis, was probably a very clear message in and of itself.[18]

NSC-68 followed soon after and codified into written policy the need for the US to rely on its nuclear arsenal to counter, what it described as, a very aggressive Soviet Union. NSC-68 called for more robust nuclear forces to fill a void left by conventional force reductions and officially "rejected the policy of no first use."[19]

The Eisenhower years have been described as the "golden age of the American (nuclear) monopoly," where "the various projects (nuclear) initiated during the Truman years had come to fruition."[20] The military *New Look* of the 1950s was documented in NSC-162/2 and continued the US' reliance on its nuclear arsenal. During this period the concept of *massive retaliation* was coined and was used to describe US policy to contain Soviet aggression with its nuclear forces. This did not mean that the US would always respond "massively," but that it reserved the right to "retaliate, instantly, by means and at places of our own choosing."[21]

During this age of US nuclear dominance, the Truman and Eisenhower policies of containment and massive retaliation seemed sufficient.[22] But, as the Kennedy administration took the helm, and the US' first Single Integrated Operational Plan (SIOP) was on the verge of taking effect, nuclear doctrine got much more complicated and civilian leaders were beginning to question US doctrine. In the early 1960s, most of the pointed questions being asked within the administration primarily originated from Secretary of Defense McNamara. His concerns centered around the wisdom of a war plan that seemed to virtually handcuff the national command authorities into a massive all or nothing nuclear option. In addition, immediately upon assuming office, McNamara's Defense Department "whiz kids" began to decipher evidence from national intelligence agencies that confirmed that the missile gap was ill founded. This further brought into question the entering arguments for not only the new single integrated operational plan (SIOP-62), but SAC's stated goals of going to a force structure of thousands of bombers and 10,000 Minuteman ICBMs.[23] McNamara's concerns over the all or nothing nature of US nuclear doctrine eventually led to the development of a new

SIOP. The new SIOP centered around an emerging doctrine which provided leadership with flexible response options. In addition to supporting this new doctrine by providing several flexible response options, this SIOP also shifted targeting emphasis toward a "no cities counterforce strategy," where strategic military targets were emphasized vs. population centers, and maintained withheld forces for intrawar deterrence. While McNamara was in office, under Kennedy and Johnson, declared emphasis did shift more toward a deterrence-based mutually assured destruction doctrine, but few changes were made to the SIOP to reflect that shift.[24]

Both the US and Soviets continued to add to their arsenals in the 1970s with the Soviets even gaining numerical superiority in some categories.[25] This was also an era of technological improvement on both sides, most notably in the development and deployment of the multiple independently targetable reentry vehicle (MIRV). While numbers increased and technological improvements were made, US force structure did not change appreciably and doctrinally, while several shifts were made that altered targeting emphasis and increased flexibility, all doctrines were still primarily based on the concept of deterrence-based assured destruction. One significant shift in policy, however, came at the end of the Carter presidency when he signed a presidential directive defining a policy aimed at denying an enemy from winning a nuclear war by targeting what "the Soviet leadership values most" in a protracted nuclear war. This became known as a "countervailing" strategy and purposely stopped short of making "winning" a war aim. [26]

During the 1980s, however, President Reagan would go even one step further by signing a national security decision directive (NSDD-13) which specifically sought to

target Soviet leadership and Communist Party hubs as part of a declared effort to "prevail in a protracted nuclear war."[27] This new doctrine of "prevailing," when coupled with the Reagan administration's announcement in 1983 of its intent to create a national missile defense system, the Strategic Defense Initiative, began a new doctrinal era where the US overtly declared a war-winning policy.[28] This policy officially served as US strategic nuclear doctrine until amended in late 1997.

In summarizing this chapter, based on the fear of Soviet aggression and a lack of credible conventional resources, the US developed a nuclear doctrine where enemy aggression was to be countered by a large nuclear force conforming to WWII strategic bombing paradigms.

In the next chapter, post-Cold War doctrinal development will be discussed and a doctrinal direction for the future will be explored.

Notes

[1] Peter R. Beckman, et al., *The Nuclear Predicament*, 2d ed, (Englewood Cliffs, N.J.: Prentice Hall, 1992), 61.

[2] Ibid., 63.

[3] Kaplan, 39.

[4] Kaplan, 34-50.

[5] Peter Pringle and William Arkin, *SIOP The Secret U.S. Plan for Nuclear War*, (New York, N.Y. and London, U.K.: W.W. Norton Company, 1983), 87.

[6] Kaplan, 156.

[7] Pringle and Arkin, 85-86.

[8] The missile and bomber gaps were later found to be unfounded. Initial scares were based on poor intelligence of Soviet capabilities. Beckman, 83.

[9] Ibid., 80.

[10] Carl H. Builder, *The Icarus Syndrome*, (New Brunswick, U.S.A. and London U.K.: Transaction Publishers, 1996), 207.

[11] Ibid., 208.

[12] Trevor N. Dupuy, *The Harper Encyclopedia of Military Biography*, (Edison, N.J.: Harper Collins Publishers, 1995), 434.

[13] Maj H. Dwight Griffin, et al., "Air Corps Tactical School: The Untold Story," Research Report no. 053/95-05, Air Command and Staff College, 1995, 12.

Notes

[14] After taking Command from Brigadier General Haywood Hansell in January, 1945, General LeMay eventually directed the firebombing of Tokyo and other major cities that resulted in nearly 84,000 dead, 41,000 injured, and more than 1 million homeless in just Tokyo alone. Note, the point is not to criticize LeMay. He had tried to employ other strategies similar to Hansell's, earlier in his command but after being tasked by Washington to commence a "maximum effort," he sought a new course of action. Edward Jablonski, *Airwar*, (Garden City, N.Y.: Doubleday and Company, Inc, 1971), 163-173.

[15] Kaplan, 40.

[16] Beckman, 65.

[17] Pringle and Arkin, 48.

[18] Maj Richard A. Paulsen, *The Role of US Nuclear Weapons in the Post-Cold War Era*, (Maxwell AFB, AL: Air University Press, 1994), 2.

[19] Beckman, 68.

[20] Lawrence Freedman, *The Evolution of Nuclear Strategy*, 2d ed, (New York, N.Y.: St. Martin's Press, 1989), 77 and Beckman, 79.

[21] Beckman, 79.

[22] Builder, 208.

[23] Kaplan, 270-296.

[24] Paulsen, 9-10.

[25] Ibid., 11 and Robert S. Norris and William M. Arkin, *Bulletin of the Atomic Scientists*, November/December 1994, Volume 50, Issue 6, 58.

[26] Beckman, 102.

[27] Ibid., 110.

[28] Ibid., 107.

Chapter 4

US Nuclear Doctrine—Post-Cold War and Future

End of Cold War to November, 1997

Until late 1997, official US nuclear doctrine did not change from the Reagan administration's doctrine of prevailing in a nuclear war. This does not mean that there was no activity on the nuclear front during this period, quite the opposite. Despite no official change in policy, US nuclear force structure made several dramatic shifts following the collapse of the Soviet Union and the end of the Cold War. Most significant, the US strategic nuclear arsenal rapidly declined. Strategic warhead stockpiles now number less than 8,000 and are roughly at their 1972 levels.[1] In addition, delivery systems themselves have undergone dramatic reductions as well.[2] While these reductions reflect, in great part, US efforts to comply with Strategic Arms Reduction Treaty (START) I, which was actually drafted during the Cold War, the post-Cold War 1990s have produced other changes, not related to force reductions.[3] Some of the more significant changes in the post-Cold War environment include the de-alerting of the bomber force and airborne command and control platforms; the de-targeting of the alert missile forces; and stopping the production of weapons grade fissile material.[4] All of these are significant steps, but as the 1997 National Academy of Sciences publication,

The Future of U.S. Nuclear Weapons Policy, points out, actions such as these listed above:

> …have not sufficiently altered the physical threat that these weapons pose…The basic structure of plans for using nuclear weapons appears largely unchanged from the situation during the Cold War, with both sides apparently continuing to emphasize early and large counterforce strikes, and both remaining capable, despite reductions in numbers and alert levels, of rapidly bringing their nuclear forces to full readiness for use.[5]

Simply stated, despite the dramatic nuclear force reductions during the 1990s, basic doctrine did not change appreciably; the US still has several thousand weapons targeted much as they were in the height of the Cold War.[6]

November, 1997 Presidential Decision Directive

In November, 1997, President Clinton issued the first broad change to official US nuclear policy since the Reagan "prevailing policy" of 1981. President Clinton's new strategic nuclear guidance was a result of expressed concerns from the former Chairman of the Joint Chiefs and the Commander in Chief, US Strategic Command (CINC USSTRATCOM). Upon reviewing strategic nuclear force structure, they realized that the doctrine that underwrote deterrence during the Cold War and the resultant targeting strategy could no longer be supported with current force levels.[7] The administration's response to this doctrine/force structure mismatch was to re-examine Cold War policy. What emerged in the November, 1997 Presidential Decision Directive (PDD) appears to be a major shift in the officially expressed role of US nuclear weapons. According to Robert G. Bell, special assistant to the President and National Security Council Senior Director for Defense Policy, this PDD removes all references to prevailing in a nuclear war and changes the role of US nuclear weapons to that of "deterring nuclear wars or the

use of nuclear weapons at any level, not fighting (with) them."[8] This marks a significant departure for official US policy.

The last two chapters of this paper have explored the evolution of US nuclear doctrine from *massive retaliation* of the 1950s to the apparent emergence of *deterrence doctrine* from the 1997 PDD. While US nuclear doctrine has clearly evolved over the decades, the question remains: "Is US nuclear doctrine a finished work or is there more to be done?"

The Tank Revisited

To answer the question posed above, I'd like to return to one of the historical examples used in chapter two to describe the evolutionary nature and foundational importance of doctrine. In chapter two we examined the WWI tank as an example of a new weapon system that initially failed to maximize its potential based on a lack of understanding of its uniqueness and the rush to employ it. We know that eventually, during the respite between world wars, military experts had the time to reflect on the truly unique nature of the tank and establish a doctrinal foundation and force structure better suited for its unique capabilities. Time had spawned better doctrine. When the tank was used again, it was used in ways that better accentuated its unique capabilities.

Nuclear Doctrine's Next Step—Refining Emerging Deterrence Doctrine

It is quite possible that we have that same opportunity now pertaining to strategic nuclear weapons that military leaders had pertaining to the tank in the interwar period. With the end of the Cold War and the associated arms race, we have been given an opportunity, or respite, in which to examine our strategic nuclear doctrinal foundation

and force structure. If we elect to reexamine doctrine, however, we must first, as post-WWI armor theorists most assuredly did, reflect on what we learned about the unique nature of the weapon during the "war," in this case the Cold War.

Based on the strategic nuclear weapon's history of non-use and its apparent ability to deter nuclear powers from allowing hostilities to escalate to nuclear levels, we can deduce, much as the current administration's PDD declares, *that the emerging role of the strategic nuclear weapon is not to fight wars, but to deter them*.

The implications of this emerging deterrent role and the 1997 PDD are clear. Any new doctrine serving to shape our future nuclear force structure should embrace this pure deterrence role at its core. Thus, if our doctrine is to be centered around deterrence, and not war fighting, then our force structure developed during this "respite" should be one that supports that *deterrence doctrine*.

The next issue then is to examine the current threats our nuclear forces must be structured to deter. This will ultimately allow a discussion of force structure to meet that deterrent need.

Notes

[1] Norris and Arkin, 58 and National Resources Defense Council Arms Control Association International Institute for Strategic Studies (untitled), 1997, n.p.; On-line, Internet, 26 January 1998, available from http://www.clw.org/pub/clw/ef/nukes97.html.

[2] US bomber assets are now a fraction (less than ten percent) of their Cold War high and are now at less than fifty percent of their 1990 totals. ICBM numbers have been reduced as well and now reflect roughly half of their Cold War total, approximately 550 on-alert sorties. In addition, the US submarine force is now at fifty percent of its 1990 strength. National Resources Defense Council Reports (untitled), 1997, n.p.; On-line, Internet, 26 January 1998, available from http://www.igc.apc.org/nrdcpro/nudb/dasour.html.

[3] Holdren, et al., 34.

[4] Ibid., 2.

[5] Ibid., 2.

Notes

[6] Some might contend that the 1994 Russian/US agreement to "de-target" strategic nuclear missiles is proof that weapons are no longer targeted as they were during the Cold War. Since "de-targeting" is both unverifiable and quickly reversed, this should be seen, not as a targeting policy reversal, but simply a political demonstration of good will.

[7] Steven L. Meyers, "U.S. 'Updates' Nuclear War Guidelines," *New York Times*, 8 December, 1997.

[8] R. Jeffrey Smith, "Clinton Directive Changes Strategy On Nuclear Arms," *Washington Post*, 7 December 1997.

Chapter 5

Threats

Threat Discussion Limitations

As mentioned in the previous chapter, in light of the Clinton administration's Winter, 1997 PDD redefining the role of US strategic nuclear forces as a deterrent against strategic nuclear attack and not as a war winning weapon, when seeking to examine the nature of the threats US nuclear forces must be structured to deter, we must confine our examination of "threats" to those which can be deterred by strategic nuclear forces.

However, deciding what threats are deterred by strategic nuclear forces is not an easy task. Why is this so difficult? Simply stated, because when deterrence works, the only evidence that exists is the *lack* of conflict. And while the lack of conflict is evidence that war did not occur, it does not tell us *why* it did not occur. The "why" usually rests in the minds of the leaders who elected not to act. In other words, it can be very difficult to determine what types of threats are or are not deterred by nuclear weapons.

However, identifying each and every threat may not be necessary when considering force structure options for strategic nuclear weapons to support a doctrine centered around deterrence. The uniqueness of the nuclear weapon, as discussed earlier in this paper, when coupled with an assumed ultimate objective of deterrence (as opposed to war winning) allows us to *not* consider each and every possible threat that a strategic nuclear

arsenal might deter when structuring a force. How is this possible? If a strategic nuclear force is structured to deter the absolute largest of threats (i.e., large strategic nuclear attack) and contains assets which can be flexibly responsive enough to engage "deterrable" threats on the lower end of the spectrum (e.g., chemical battlefield weapons), then the strategic nuclear deterrent "umbrella" designed to cover the largest of threats would cover, or deter, the smaller ones as well. Using this concept, the remainder of this chapter will focus on the largest of the "deterrable" threats posed by non-allied states possessing declared, deliverable strategic nuclear weapons, namely Russia and China.

Strategic Nuclear Threats

Russia

While several unilateral and bilateral initiatives, including force reductions and detargeting, have markedly reduced tensions between the US and Russia, Russian strategic nuclear forces are still formidable. A 1997 report from the National Academy of Sciences, drawing from data from the Natural Resources Defense Council, estimates Russian strategic launchers at approximately 1,500 with a total warhead count at near 8,000. These numbers reflect Russian moves to meet START I treaty limits. START II, signed in 1993 but not yet ratified by the Russian Duma, would reduce warheads to 3,000 to 3,500.[1]

Peoples Republic of China

Chinese strategic capabilities are small and structured around a concept of "limited deterrence." Limited deterrence is a concept recently coined by the Chinese, after a reexamination of their nuclear doctrine, which sees nuclear weapons not only as a

deterrent force against both nuclear and conventional attack, but also as weapons of war to be used to control escalation during an intrawar period.[2] Obtaining exact force levels for the Chinese is difficult. As a Defense Intelligence Agency report noted in the late 1980s, information concerning Chinese strategic nuclear capability is "extremely limited and difficult to verify."[3] With that said, different unclassified sources over the last few years estimate the Chinese total strategic warhead inventory at anywhere between 149 and 375 strategic nuclear warheads with only a small number of long range ICBMs.[4] These forces are spread among multiple platforms similar to those of the US and Russia.[5]

To summarize this look at the largest threats our forces must be structured to deter, we can see clearly that, despite the many successes in drawing down both tensions and arsenals, Russia still maintains a robust strategic nuclear capability and China seems committed to maintaining its small force as well.

Having previously established the need for a force structure that supports a doctrine of deterrence, and having reviewed our major nuclear threats, the next step is to explore the US force structure implications of nuclear doctrine firmly centered around deterrence.

Notes

[1] Holdren, et al., 34. Other sources place current warhead counts at slightly lower figures, but fall between the 7000-8000 range. Rodney Jones, et al., Carnegie Foundation For International Peace (untitled), 1996, n.p.; On-line, Internet, 26 January 1998, available from http://www.ceip.org/pubstr96.htm.

[2] Alastair I. Johnston, "China's New, Old Thinking," *International Security*, Winter 1995, Volume 20, Issue 3, 12.

[3] Defense Intelligence Agency Report, China Intelligence Update (untitled), 1988, n.p.; On-line, Internet, 4 February 1998, available from http://www.fas.org/irp/dia/product/index.html.

[4] National Resources Defense Council Arms Control Association International Institute for Strategic Studies (untitled), 1997, n.p.; On-line, Internet, 26 January 1998, available from http://www.clw.org/pub/clw/ef/nukes97.html. Paulsen, 110. Johnson, 31.

[5] Paulsen, 110.

Chapter 6

Force Structure Needs in Light of Deterrence Doctrine

Before any discussion on force structure can take place, one must first enter the "how much is enough to deter" debate. This debate began even before the Soviet Union emerged as a nuclear threat, but based on the previously discussed need to quickly counter the Soviet threat and our reliance on strategic bombing paradigms to guide our force structuring, any debate on the "how much is enough" question apparently got lost in the rush to mass forces.

With the end of the Cold War we now have the luxury of time to address the "how much is enough" question. In addition to having the luxury of time to explore this question, we also now have a new doctrinal approach, that helps us frame the question. Assuming a doctrinal foundation based on deterrence, the discussion of numbers and platforms must simply answer the question…"How much is enough, not to *win* a war, but to *deter* one?"

To answer this question, we must return to the discussion of deterrence itself. For deterrence to be effective, a potential aggressor must not only perceive a credible retaliatory force, but the political will to use it. So now, assuming the "will to use" is a given, the question is reduced to this…"What force levels would convince a potential aggressor that any attack on the US would cause a US response that would inflict

unacceptable losses to his state?" During the course of my research for this project, I encountered several different answers to this question. The large disparity in claimed minimum weapons levels is tied to differences in targeting strategies. If one assumes a strategic objective of destroying an enemy's ability to wage war through the targeting of his deployed systems and war supporting infrastructure, counterforce, as ours was throughout most of the Cold War, then to achieve necessary levels of damage, planners must employ large numbers of weapons against a vast array of targets. If, on the other hand, one has as his goal, selecting targets based on their deterrent value, then the number of weapons needed goes down significantly.

This difference in force structure needs based on targeting strategies was reinforced in a recent *Air Force Times* interview with General Eugene Habiger, CINC USSTRATCOM. In the interview, the general stated that any cuts taking US strategic nuclear force levels below START II levels would mean we are "no longer deterring superpowers."[1] However, the USSTRATCOM staff, in the same *Air Force Times* article, claimed that any level below 1,000 warheads "would need to be aimed at cities to maintain its deterrent effect."[2] Does General Habiger's staff contradict him in this article? No. General Habiger undoubtedly based his statement on the assumption that he could not meet current mission objectives, where his targeting plan is aimed at "military and civilian leadership and nuclear forces in Russia," if his forces were significantly reduced.[3] His statement probably reflects his minimum needs to support the current counterforce-based targeting scheme where his staff simply states that to go lower in numbers, counterforce would have to shift to a countervalue targeting scheme. The underlying premise being that a smaller force could not hold sufficient counterforce

targets at risk to deter potential aggressors, but countervalue targets, such as cities and industrial areas, could be easily struck.[4]

What this infers is that there is more than one way to deter potential aggressors and that force levels are directly tied to the type of targeting scheme employed to deter. Assuming the political will exists to use a smaller, countervalue targeted force, would a smaller force be credible to serve as a deterrent?

Countervalue Targeting and Deterrence Doctrine

The goal of this section is not to prescribe actual force structure needs by weapon system and number, but to simply describe how countervalue targeting can support a deterrence doctrine with a dramatically smaller nuclear arsenal than the US now possesses.

Many have calculated minimum forces necessary to achieve desired destruction levels to support their doctrines and strategies. Robert McNamara did exactly that when establishing his force level caps in the 1960s.[5] The question is, based on a countervalue targeting scheme, what is the minimum force level needed to hold potential aggressors at risk.

The National Academy of Sciences estimates that 20 submarine launched W-88, 475 kiloton warheads detonated over Russia's 12 largest cities would kill one sixth of the Russian population, from blast and thermal effects alone (actual death tolls would be much larger) and destroy one quarter of Russia's industry.[6] Stansfield Turner in his book, *Caging the Nuclear Genie*, cites a 1987 Massachusetts Institute of Technology (MIT) study in which computer simulation was used to calculate destruction levels by various attack levels against the US. The simulations concluded that 239 nuclear

weapons targeted against the US liquid fuel system, strategically important targets collocated with urban areas, would result in the decimation of the US GNP (returning to only forty percent of prewar levels in 6 years after the war) and the deaths of sixty percent of the population within 2 years of the detonations. Mr. Turner called this level of destruction, the "point of non-recovery" and asserts that, like the US, Russia also has its points of vulnerability that if struck with 250 similar warheads, would also pass the point of non-recovery.[7]

While Mr. Turner's estimates were not based on computer modeling as MIT's were, the implications of his estimates, when coupled with the MIT and National Academy of Sciences numbers, paint a grim picture of the level of damage our adversaries could expect from a well-planned and accurately targeted small nuclear strike.

So it seems possible that a dramatically smaller strategic nuclear arsenal could meet US strategic nuclear needs to support a pure deterrence-based doctrine if targeted against countervalue targets.

Benefits of Smaller Forces to Support Deterrence Doctrine and Countervalue Targeting

A small, credible force, built around the doctrine of deterrence could yield several benefits.

Impact on counterproliferation aims

De-emphasis on large arsenals should send the message to other nuclear capable states and those seeking nuclear capability that the US is serious in its commitment to nuclear non-proliferation and would possibly de-emphasize the link between nuclear weapons and international power and prestige.[8]

Budgetary savings

A force structured around hundreds of weapons, vs. thousands, should reduce expenditures in the long term, especially if force reductions result in the elimination of an entire weapon system type (e.g., land-based or submarine-based ballistic missiles) and its supporting infrastructure. Short term savings may not be realized, however, due to the great expenses incurred as nuclear weapons are dismantled. The Brookings Institute published a study in 1995 detailing US nuclear weapons related expenditures since the Cold War. Their study reported that in 1995, approximately one fourth of all US nuclear weapon-related expenditures were linked to "waste management, environmental remediation, and dismantling nuclear weapons and storing their fissile materials."[9] Dramatically smaller arsenals would demand even greater fiscal commitment in this area. This simply indicates that the savings would likely be long term as these peripheral costs of drawing the force down would reduce or even negate immediate savings.

Reduced likelihood and impact of accidents

Clearly, lower numbers reduces the chances of catastrophic accident. In addition, smaller numbers reduce the impact of an accidental launch. While accidental release or launch has never occurred, as a 1995 incident involving the Russian response to the launching of a Norwegian meteorological missile showed, forces on "hair trigger" alert are subject to crisis decisions and the larger available retaliatory forces are, the more severe the potential impact of such an accident. [10]

Drawbacks of Smaller Forces to Support Deterrence Doctrine and Countervalue Targeting

International pressure

Countervalue targeting might face international opposition. Governments, entire world regions, hundreds of private organizations, and even a group of retired general officers from 17 nations have increased pressure on the nuclear capable states to reduce stockpiles with the eventual goal of total disarmament.[11] In addition, while not by unanimous vote, and with some qualifying statements, the International Court of Justice even ruled in 1996 that the threat and use of nuclear weapons is "generally contrary to the rules of international law."[12] In this climate, reducing but not eliminating nuclear weapons, as well as an expressed doctrine which holds major industrial and population centers at risk might draw considerable pressure.

Need for bilateral movement

Ideally, a dramatic reduction, such as would be mandated under a deterrence-based countervalue doctrine, should not be done unilaterally. Reducing US strategic nuclear totals should parallel force reductions in Russia and the other nuclear capable states. This is a tremendous challenge for several reasons. First, as the US continues to increase its influence through an expanded North Atlantic Treaty Organization and other unilateral military activities around the now depolarized world, Russian leaders might cling to their nuclear arsenal as a final defense against the threat of US hegemony. In addition, Russian leadership, which has still not ratified START II, may be reluctant to dramatically reduce a robust nuclear arsenal, possession of which confers international prestige and superpower status.

How To Get There

There are several measures the US could undertake to begin the process of reshaping its forces to mirror a pure deterrence doctrine.

First and foremost, the US would have to declare to ally and potential adversary alike, both its deterrent-based doctrine and its ultimate force structure goals. The clear explanation of doctrine must take place prior to any steps affecting force structures so potential adversaries do not equate force reductions with a lack of will. A perceived lack of will would undermine one of the requirements of deterrence, perceived willingness to respond.

Second, to show its commitment to this new deterrent doctrine the US could quickly remove significant forces from full alert status. This could be done in similar fashion to President Bush's de-alerting of the Minuteman II and bomber alert forces in 1991. This step would not only show US resolve to reduce force totals, but, with sufficient explanation to allies and potential adversaries, could reinforce perceptions that the US has the will to target its smaller forces on countervalue targets in support of a deterrence-based doctrine.

Third, immediately following the unilateral measures taken above, the US should challenge Russian leaders to respond to US unilateral measures with similar initiatives. This could lead to sweeping point, counter-point initiatives similar to those undertaken by Bush and Gorbachev/Yeltsin in 1991 which helped "cut through the rhetoric of arms control."[13]

Fourth, if both superpowers agree to pursue dramatically smaller arsenals in-line with the announced US deterrence doctrine, then serious talks must begin to get force

levels down to end state needs as quickly as economically and safely feasible. This will undoubtedly require much monetary and technical help from the US, in much greater amounts than we are currently spending to help the Russians dismantle and safeguard their arsenals.[14]

Finally, regardless of Russian reciprocation, US leaders must be prepared to follow-through with significant reductions in alert force levels to achieve congruency between their force structure and deterrence-based doctrine. This could be accomplished through a combination of de-alerting some forces and decommissioning others. This controversial step would have to be preceded by careful analysis of necessary survivable alert force levels to maintain a credible deterrent and clear communication of our political will to use these smaller forces against countervalue targets.

Notes

[1] "Officials Caution Against Nuclear Cuts." *Air Force Times,* 17 February 1997, Volume 57, Issue 29: 33.

[2] Ibid.

[3] Ibid.

[4] Beckman, 94.

[5] Beckman, 93 and 98.

[6] Holdren, et al., 43.

[7] Turner, 35-37.

[8] Holdren, et al., 68.

[9] Brookings Review, Fall 1995, Volume 13, Issue 4, 14.

[10] "Russian Roulette." *US News and World Report*, 6 February 1995, Volume 118, Issue 5: 26.

[11] Senator (ret) Alan Cranston, The Bulletin of Atomic Scientists, November/December 1996, Volume 52, Issue 6, 4.

[12] International Court of Justice Judgement on Nuclear Weapons, The Hague, Netherlands, 8 July 1996, n.p.; On-line, Internet, 4 February 1998, available from http://www.prop1.org/2000/icj.htm.

[13] Paulsen, 28-36.

[14] Brookings Review, 14.

Chapter 7

Conclusion

> *The principal source of doctrine is experience…Thus, doctrine is a constantly maturing and evolving thing.*[1]
>
> —Col. Dennis Drew and Dr. Donald Snow

As mentioned earlier, President Clinton's new strategic nuclear guidance was a result of expressed concerns from the former Chairman of the Joint Chiefs and CINC USSTRATCOM. Upon reviewing strategic nuclear force structure, they realized that the doctrine that underwrote deterrence during the Cold War and the resultant targeting strategy could no longer be supported with current force levels.[2] The President's solution was not to throw more weapons at the SIOP, but to restructure our policy to better reflect today's geopolitical reality. In stating that the purpose for our strategic nuclear force is to deter, he has seemingly taken the first step toward abandoning the Cold War, war winning doctrine that has mandated the maintenance of high force structure levels and opened the door for US nuclear doctrine to shift.

If we agree with Col Drew and Dr. Snow that doctrine does evolve and mature, then we have the obligation to use this "respite" following the Cold war to do more than peer through the door opened by the 1997 PDD. We must critically examine what we've learned about the deterrent role of nuclear weapons, establish a doctrinal base upon which to build, and then make the force structure decisions that support that doctrine.

This bold step would take the US through the door opened by the 1997 PDD and would demonstrate not only our understanding that the nuclear weapon is a unique class of weapon, but would also demonstrate our resolve to lead the world through the next phase in the evolution of strategic nuclear doctrine.

Notes

[1] Drew and Snow, 164.

[2] Steven L. Meyers "U.S. 'Updates' Nuclear War Guidelines," *New York Times*, 8 December, 1997.

Glossary

ACTS	Air Corps Tactical School
AWPD-1	Air War Planning Document 1
CINC USSTRATCOM	Commander in Chief, US Strategic Command
GNP	Gross National Product
ICBM	Intercontinental Ballistic Missile
MIRV	Multiple Independently Targetable Reentry Vehicle
MIT	Massachusetts Institute of Technology
NATO	North Atlantic Treaty Organization
NSC	National Security Council
NSDD	National Security Decision Directive
PDD	Presidential Decision Directive
SAC	Strategic Air Command
SIOP	Single Integrated Operational Plan
START	Strategic Arms Reduction Talks
USSR	Union of Soviet Socialists Republics
WMD	Weapons of Mass Destruction

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