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A NATIONAL POLICY FOR DETERRING THE USE OF WEAPONS OF MASS DESTRUCTION

A Research Paper

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Preface

This research project addresses the important issue of the spread of weapons of mass destruction (WMD) in the post–Cold War era. With the end of the Cold War, so went many restrictions to the conduct of states and non-state actors, including the acquisition and use of WMD. The United States' responsibility as the world's only remaining superpower requires its leaders to address its policies and capabilities to protect the United States and its vital national interests against WMD.

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Abstract

Since the advent of the nuclear arms race, the US has developed and maintained a policy and associated capabilities to deter offensive use of these weapons against US forces, citizens and allies. With the end of the Cold War and the proliferation of nuclear, biological and chemical weapons, the threat posed by weapons of mass destruction has changed dramatically. The viability of traditional deterrence strategy is now questionable with respect to these new WMD threats and actors. However, the military will continue to play a key role in any deterrent strategy because of the inherent nature of its capabilities. This paper examines those capabilities and presents recommendations to modify and strengthen US WMD deterrent strategy.

Chapter 1 describes the post–Cold War international context in which deterrence must be achieved, limits the scope of the study to the use of military forces in deterrent roles, and describes the threat currently posed by WMD. Chapter 2 presents key terms, describes key concepts of deterrence theory and describes the methodology used to complete the study. Chapter 3 addresses the spectrum of deterrent capabilities provided by military forces, ranging from the extreme of a massive nuclear strike to less lethal options such as Special Operations Forces employment and defensive systems. Chapter 4 discusses US deterrent policy, including nonproliferation and the use of military options. Chapter 5 concludes with recommendations regarding the use of military forces and policies to deter WMD use.

Chapter 1

The New International Context

Introduction

> *Weapons of mass destruction—nuclear, biological and chemical—along with their associated delivery systems, pose a major threat to our security and that of our allies and other friendly nations. Thus, a key part of our strategy is to seek to stem the proliferation of such weapons and to develop an effective capability to deal with these threats.*
>
> —President William J. Clinton
> *A National Security Strategy of Engagement and Enlargement*

When the Cold War ended with the collapse of the Soviet Union, many hailed the event as the beginning of a new era of peace and stability. Yet within a few short years, the world's attention was focused on a new set of problems. The Soviet menace had been replaced by the specter of regional instability, a threat made more alarming by an increasing number of state and non-state actors attempting to acquire or develop weapons of mass destruction (WMD). Though some of these actors had long pursued WMD development programs, their efforts and the regional or local quarrels in which they might be used were restrained by the dynamics of the Cold War and the influence of its major protagonists—the United States and the Soviet Union. Without this restraining influence,

long-simmering animosities now threaten to disrupt regional and international stability with the growing fear that WMD may be used in such conflicts.

In this new context, many have begun to question whether or not strategic deterrence—inextricably linked to the nuclear standoff between the US and the Soviet Union—still has utility as a foundation of US national security policy. First, there is a perceived decline in the utility of nuclear weapons, as evidenced by the superpowers' efforts to reduce their arsenals. Second, the growth in the number and diversity of potential actors and types of WMD to be deterred has led strategic thinkers to look at new concepts on which to base future US security strategy. Such concepts run the gamut from reliance on nonproliferation programs, to stop the spread of WMD, to preemptive counter-proliferation actions, such as destroying an adversary's WMD before they can be used. Others urge greater reliance on defensive measures or a shift to policies of "non-use" or coercive diplomacy.[1]

While all of these concepts deserve more attention and study, deterrence remains a significant element of both the US national security and national military strategies. For example, the *National Military Strategy of the United States of America* lists "deterrence and conflict prevention" as one of the three major components of the strategy of flexible and selective engagement. It also specifies "counter[ing] weapons of mass destruction through deterrence" as a principle of force employment.[2] Therefore, this paper does not attempt to add to arguments over whether deterrence is still a viable policy. Instead, it attempts to examine how deterrence of WMD will operate in the new international environment. In particular, it focuses on US military capabilities and policies and how they may be used to deter the use of WMD.

Scope

In developing a national strategy for deterrence, US leaders must consider approaches employing all instruments of national power: political, economic, informational, and military. It is unlikely any one of these instruments used by itself can be enough of a deterrent; they must be used together to effectively prevent state and non-state actors from using WMD against the US, its forces and its allies. The scope of a project addressing all of these instruments, however, would be voluminous. The purpose of this paper is to focus more narrowly on one of these instruments—the military—as part of an overall national deterrent strategy.

Additionally, examining deterrence in the new international environment can take two basic approaches. One is to examine what might be called the psychology of deterrence, that is, to try to determine how deterrence operated in the past and how it may differ with the new set of actors. This would involve a study of each of the many actors involved to determine such things as their strategic personalities and susceptibility to deterrence. Such a study—or studies—would again be voluminous and would duplicate much of the work already being undertaken in the US policy, academic and intelligence communities.

This paper will instead focus on a second approach, which might be termed the capabilities to deter. Assuming that deterrent mechanisms will work according to classic theory, it is useful to look at how US military policies and capabilities can be applied to deter WMD use in the new international context. Given the widely held belief in the declining utility of nuclear weapons, it is relevant to examine what capabilities the military can bring to bear to supplement or replace the threat of nuclear retaliation as the

basis of US deterrent strategy. It is also relevant to examine the utility of US military capabilities as they relate to the growing range of threats and adversaries rather than to the superpower—adversary dynamic of the Cold War. This kind of study supports Secretary of Defense William Perry's contention that effective deterrence in this new international environment requires an understanding of "what particular combination of declaratory policy, force posture, and other political and diplomatic signals can best dissuade proliferant states."[3]

The Threat

The current threat environment can be categorized in terms of the kinds of weapons available and in terms of the actors involved. In recent years, weaponry and associated technologies have matured and spread, increasing the chance of a WMD event.

Biological weapons (bacteria, rickettsiae, viruses, fungi, and toxins), though not technologically sophisticated, are very difficult to detect. This is especially true while in production, transmission or employment since they require limited infrastructure in terms of specialized equipment, facilities or material inputs. For example, a 1984 French police raid on a German Red Army Faction safe house revealed a bathtub filled with flasks of the botulism microorganism. Also, published reports say Iranian pharmaceutical plants are using tons of castor beans to make a protein toxin called ricin.[4]

Chemical weapons (vesicants, choking agents, blood agents, and nerve agents) on the other hand, generally require a more robust infrastructure and some specific precursor ingredients. However, many of the equipment items and precursor chemicals have legitimate industrial use (so called "dual-use" items) and thus are generally available

through commercial channels. This was how Iraq could produce the nerve agent tabun which it used during the Iran-Iraq war. Another more recent example occurred in 1995 with the Aum Shinrikyo religious cult attack in the Tokyo subway system using the nerve agent sarin.[5]

Nuclear weapons technology is very complex, requiring significant infrastructure, technical expertise, and specialized equipment and material. This makes undetected acquisition or development of nuclear weapons relatively difficult. Although it is unlikely that a non-state entity could develop this type of infrastructure, the breakup of the Soviet Union did increase fears that such groups might be able to purchase a weapon or weapons material on the black market.[6] Additionally, there are a number of state actors, such as Iraq and North Korea, which were or are pursuing nuclear weapons acquisition through indigenous covert nuclear weapons programs.

Though not in themselves weapons of mass destruction, ballistic missiles must also be considered as part of the WMD threat. Ballistic missile systems and technology are proliferating at an increasing rate to a growing number of states, raising fears that they may become the WMD delivery system of choice for regional state actors.

This leads to considering the threat in terms of actors. The first obvious category is state actors, often referred to as "rogue" states or proliferant states, who are attempting to develop or acquire WMD and missile delivery systems. According to Secretary of Defense Perry, "at least 20 other nations have acquired or are attempting to acquire WMD—nuclear, biological, or chemical weapons—and the means to deliver them."[7] Even more worrisome, Secretary Perry noted, is that many of these regimes are located in

areas of instability in the world where the US is most likely to get involved.[8] They include countries such as Iran, Iraq, Libya, North Korea and others.

Another group of actors includes subnational or transnational non-state entities, such as terrorist groups and religious cults, seeking to advance their causes through violent means. As demonstrated by Aum Shinrikyo's sarin attack, these groups can and have crossed over into the WMD arena. Non-state terrorist groups continue to grow in number, with 45 groups active enough in 1994 to warrant a listing in the US Department of State's *Patterns of Global Terrorism 1994.* They range from the Abu Nidal organization headquartered in Libya to the Tupac Katari Guerrilla Army in Bolivia.[9] Of these groups, two have delved into WMD, Aum Shinrikyo and the Red Army Faction.

Some of these groups are state sponsored. In 1994, the US State Department listed Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria as state-sponsors of international terrorism.[10] On the other hand, many non-state actors operate in countries not sponsoring them. These countries have sometimes been targets of these groups' attacks, but most often act as the unwilling "hosts" to the terrorists or religious cults.

These new actors have varying motivations for acquiring and possibly using WMD than did the US and Soviet Union during the Cold War. State actors not only want WMD for deterrence and defense, but in some cases to intimidate, gain prestige, or serve as a weapon of last resort. For non-state actors, use of WMD may be seen as advancing the group's interests, increasing the stature of the group, or gaining publicity for its cause. The Gulf War also taught many actors direct confrontation with the United States and its coalition allies in conventional warfare will be ineffective at best and that WMD might be the only "great equalizer" to counter the West's conventional superiority. Finally, for

most state and non-state actors, cost is an important consideration—biological and chemical weapons can be acquired or developed at a fraction of the cost of nuclear weapons. As Iranian Prime Minister Rafsanjani noted in a speech on 19 October 1988, a chemical weapon is a "poor man's atomic bomb."

To analyze the WMD threat posed by an actor, it is necessary to look at that actor's will and capability. Appendix A contains a visual representation of international actors and their potential hostile will and ability to use WMD. This model aids in identifying and evaluating the WMD threat the US must be ready to deter. Once the threat posed by an actor is correctly identified, an appropriate course of action can be developed. This paper focuses primarily on the category of Rogue Actors—whether states or non-state actors.

The WMD threat to the United States, its allies, and deployed forces is growing in terms of both the number and kinds of actors and the type of weapons they possess. The military must remain ready and capable to deter the use of WMD across the spectrum of weapons and actors.

Notes

[1] See for example, Barry R. Schneider, *Radical Responses to Radical Regimes: Evaluating Preemptive Counter-Proliferation* (Washington D.C.: National Defense University, May 1995) and Fred Charles Ikle, "The Second Coming of the Nuclear Age," *Foreign Affairs* 75, no. 1, January/February 1996.

[2] *National Military Strategy of the United States of America* (Washington D.C.: The White House, February 1995), ii.

[3] William J. Perry, *Annual Report to the President and Congress*, Department of Defense, Washington D.C., 1995, 25.

[4] Lt Col Terry N. Mayer, USAF, "The Biological Weapons: A Poor Nation's Weapon of Mass Destruction," *Battlefield of the Future: 21st Century Warfare Issues*,

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Air War College Studies in National Security No. 3, Maxwell AFB, AL, September 1995, 211.

[5] "Cultist Admits Producing Sarin Gas," *The Montgomery Advertiser*, 23 January 1996, 7A.

[6] Office of Technology Assessment, US Congress, *Proliferation of Weapons of Mass Destruction: Assessing the Risks*, Washington D.C., August 1993, 111.

[7] Perry, 25.

[8] Ibid.

[9] Department of State Publication 10239, *Patterns of Global Terrorism 1994*, Washington D.C., April 1995, 33-62.

[10] Ibid, 19.

Chapter 2

Definitions, Concepts and Methodology

Introduction

Before proceeding to the discussion of US military capabilities and policies to deter WMD use, it is important to define terms used in this paper, clarify major concepts and explain the approach used to perform this study.

Definitions

The following definitions are provided to ensure the ideas and concepts presented in this paper are clearly understood.

Weapons of Mass Destruction (WMD). Nuclear, chemical, and biological weapons. "The large-scale and indiscriminate nature of their effects, particularly against unprotected civilians, differentiates mass-destruction from conventional weapons."[1] This paper addresses all three types of weapons as a group under the collective terminology "WMD," though it will differentiate among them where necessary.

State or state actor. "A geographically bounded entity governed by a central authority that has the ability to make laws, rules, and decisions, and to enforce those laws, rules, and decisions within its boundaries. A state is also a legal entity, recognized under international law as the fundamental decision-making unit of the international legal system."[2]

Non-state actor. An organization or entity which plays a role in the international political system, but is not recognized as a sovereign state. Examples of non-state actors include international governmental organizations (IGOs), nongovernmental organizations (NGOs), multinational corporations (MNCs), transnational political parties, transnational religious organizations, terrorist groups, and ethnic groups.[3]

State sponsor. A state which knowingly supports or harbors groups committing terrorism.

Rational actor. A state, state-sponsored group, or independent actor that performs a cost-benefit analysis based on its particular value structure to ensure gains of an action exceed its potential costs. This characteristic makes an actor susceptible to influence by one or more instruments of national power.

Irrational actor. A state, state-sponsored group, or independent entity that does not perform a cost-benefit analysis and, therefore, is not susceptible to being influenced by one or more instruments of national power.

Proliferant/proliferator. An entity, usually a state or state-sponsored organization, that is actively working to develop weapons of mass destruction.

Nonproliferation. The full range of actions—political, economic and military—taken to prevent the acquisition of weapons of mass destruction by state and non-state actors.

Counterproliferation. The full range of actions—primarily, though not only military—taken to counter weapons of mass destruction once acquired by state and non-state actors. The Department of Defense (DOD) has special responsibility for counterproliferation.

Concepts of Deterrence

According to Joint Pub 3-07, "deterrence stems from the belief by a potential aggressor that a credible threat of retaliation exists, the contemplated action cannot succeed, or the costs outweigh any possible gains. Thus, a potential aggressor is reluctant to act for fear of failure, cost, or consequences."[4] These three concepts or strategies—fear of failure, cost, and consequences—each by itself or in any combination, are key in formulating options, including application of military power, to deter WMD use.

"Fear of failure" convinces the enemy that the planned action will not succeed. In the WMD arena, strategies raising the fear of failure may include enhancing protective and defensive measures, such as protective gear or missile defenses. It may also be specific training of US and allied forces to defend themselves from WMD and/or to operate in a WMD environment. Improving intelligence capabilities and sharing may also increase the fear that capabilities or attack plans may be discovered in enough time to take defensive measures or offensive military actions against WMD use.

Cost and consequences are closely related aspects of deterrence. Cost addresses the cost-benefit analysis of the potential WMD user by making sure the perceived costs of using WMD outweigh the gains. Some of the costs associated with WMD include those for development, security, infrastructure, and transportation. Additionally, potential loss of lives, equipment, support, and time, as well as the actor's ultimate goal, all factor into an actor's decision to try to acquire and/or use WMD. Finally, costs to the adversary encompass specific military consequences, as discussed below.

The concept of consequences addresses what has traditionally been accepted as the heart of deterrence—the credible threat of retaliation should an adversary use WMD. It focuses on military capabilities for responding to threats or actual use of WMD. Specific military consequences include punitive or restrictive measures such as: (1) inspections, should an adversary be defeated in a conflict; (2) military and economic isolation, including controls or curbs on arms sales, imports, exports, etc.; (3) international condemnation and sanctions and, most traditionally; (4) military response with WMD, conventional forces, or unconventional options, such as Special Operations Forces (SOF). Deterrence is achieved when the adversary believes its actions will not succeed, fears the threat of retaliation, and/or perceives the costs of WMD use outweigh the gains.

Traditional Deterrence Theory

Traditional formulations of deterrence include aspects of both capability and will in assessing the credibility of a deterrent threat. They also require that the deterrent threat be communicated to the party being deterred. The above discussion of the types of deterrence strategies focuses primarily on US *capabilities*. *Will* is much harder to analyze, but can be deduced at least partly from stated policies on how the US will

respond to WMD use. These policies serve to communicate the general deterrent threat to WMD users, though they are usually supplemented by specific communications with regard to each deterrent situation.

Deterrence Framework

Combining the Joint Pub 3-07 view of deterrence with traditional deterrence theory provides a framework for looking at current and potential US deterrent strategies. In discussing applications of military power to deter the use of WMD, alternatives can be evaluated in terms of fear of failure, costs, and consequences. This paper focuses primarily on fear of failure and consequences as the aspects of deterrence most easily influenced by military forces. It will review available capabilities and policies and address any capabilities gaps needing to be filled as well as policy changes required to make US deterrence strategies more effective.

Methodology

The methodology used to complete this study was a qualitative analysis. As described by University of Nebraska Professor John W. Creswell, the characteristics of a qualitative research problem include: "a notion that the available theory may be inaccurate, inappropriate, incorrect, or biased; a need exists to explore and describe the phenomena and develop theory; or the nature of the phenomenon may not be suited to quantitative measures."[5] These characteristics each apply when researching the application of military power in deterring WMD use. An adversary is either deterred or not deterred—there is no quantitative or numerical value for measuring the level of deterrence achieved.

The three means of gathering the qualitative information found in this study include personal interviews, audiovisual materials, and document reviews. The people interviewed for this study included experts such as Air War College, Air Command and Staff College and Air Force Judge Advocate School faculty members as well as DOD and Department of State (DOS) officials. Among the audiovisual materials used were television news broadcasts and news periodicals. Document reviews included books, magazines, newspapers, Internet materials and reports, DOD and DOS papers and publications, and Air University academic materials. A complete bibliography and listing of additional sources are included as part of this study.

Notes

[1] US Congress, Office of Technology Assessment, *Proliferation of Weapons of Mass Destruction: Assessing the Risks*, Washington D.C., August 1993, 12.

[2] Daniel S. Papp, *Contemporary International Relations: Frameworks for Understanding*, 4th ed. (New York: Macmillan College Publishing Company, 1994), 30.

[3] Ibid, 150.

[4] Joint Pub 3-07, *Joint Doctrine for Military Operations Other Than War*, 16 June 1995, 5.

[5] John W. Creswell, *Research Design: Qualitative and Quantitative Approaches* (Thousand Oaks, CA: Sage Publications, 1994), 146.

Chapter 3

A Spectrum of Deterrence Capabilities

Introduction

During the Cold War, deterring nuclear weapons use by adversary nations was virtually synonymous with strategic nuclear forces. Deterrence of chemical weapons was covered by "response in kind" policies, and the use of biological weapons was hardly contemplated at all. Though past deterrent policies relied heavily on US WMD, in today's changing environment it is likely the US will have to rely to a greater extent on conventional military capabilities as well as other military options to provide a credible deterrent to proliferant states. The US must rely on a "spectrum" of capabilities which may be mixed and matched as needed to provide both general deterrence as well as a specific deterrent tailored to a particular threat.

This chapter briefly explores a range of military capabilities possessed by the United States and examines how these capabilities can be used as deterrents. It explains how each contributes to deterrence by presenting a potential user of WMD with an increased probability of failure or extreme consequences. It discusses US will to use these capabilities, making them not only viable but credible deterrent threats.

Nuclear Forces and Response Options

Since the US has no offensive biological weapons capability and is in the process of dismantling its chemical weapons, nuclear weapons are the only remaining WMD possessed by the US. Despite reductions and eliminations, the US still retains a large arsenal of both strategic and tactical nuclear weapons. At the strategic level, US nuclear forces include the triad-land-based intercontinental ballistic missiles (ICBM), submarine-launched ballistic missiles and strategic bombers. Tactical nuclear forces include nuclear-tipped sea-launched cruise missiles and nuclear-armed fighter-bombers.

According to doctrinal statements, the purpose of the strategic triad is to "[deter] any future hostile foreign leadership with access to *strategic* nuclear forces from acting against our vital interests."[1] US nuclear forces, therefore, remain the backbone of deterrence, at least against other major nuclear powers such as China or a resurgent Russia. Short of direct nuclear attack on the United States, however, it is questionable whether the US will retaliate or threaten retaliation with strategic nuclear weapons. Though the use of even tactical nuclear weapons against a similarly—equipped regional state adversary raises questions, such use is conceivable and the option must be preserved. In addition to their deterrent role, nuclear weapons also have an important element of military necessity. Nuclear weapons may be the only means currently available to damage or destroy well-hardened WMD—related facilities, such as deep underground command and control bunkers or production and storage sites.

US nuclear forces primarily act as a deterrent to nuclear weapons use by a state actor. They have limited utility in response to an adversary's use of chemical or biological weapons or against non-state actors due to legal, political and feasibility considerations.

Despite the questions raised over the political viability of the use of US nuclear forces, as long as strategic and tactical nuclear forces remain deployed in the active military inventory, they must at least give pause to an adversary contemplating the use of WMD, particularly against the US itself. In the last analysis, such forces still provide the US with the ultimate deterrent threat—the possibility of nuclear retaliation for the use of WMD against the United States, its forces and its allies.

Conventional Military Forces and Response Options

US conventional forces provide the next most lethal deterrent options and play an important role in deterring WMD use when US nuclear response would not be appropriate. They also offer a more credible capability for acting preemptively than nuclear forces, thus presenting proliferant actors with a potentially more compelling threat than nuclear forces. This section discusses US conventional military force capabilities and options involving the explicit use of US military forces to show US resolve or to directly threaten an adversary's WMD programs. These include use of conventional military forces and special operations forces.

Conventional Forces

A range of conventional deterrence options is afforded by modern, high-tech weapons having a theater strategic capability for both denial and punishment missions. According to Dr. Gary L. Guertner of the Army War College, some critics may argue that the sheer number of wars throughout history is reason to discount conventional forces as a deterrent, but the response to this critique is threefold.[2] First, conditions now exist (and were demonstrated in the Gulf War) in which the technological advantages of American

conventional weapons are superior to the capabilities of all conceivable adversaries. Their deterrent value against direct threats to US interests is higher than at any period in American history. Second, technological superiority and operational doctrine now allow conventional forces to perform many missions previously monopolized by nuclear forces. Today, conventional forces have a combination of range, accuracy, survivability and lethality to execute strategic attacks across a wide spectrum of target sets to include counterforce, countervalue, command and control and economic targets. Third, while any form of deterrence may fail over time, such failures provide the opportunity to demonstrate the cost of aggression, to rejuvenate the credibility of deterrence and to establish a new period of stability.[3]

To ensure stability, security and influence in the world, the US can use the conventional military prowess it demonstrated in the Gulf War to good advantage. However, using that force effectively, or threatening to use it, requires the formulation of a coherent strategy of "conventional deterrence" and the prudent planning of general purpose forces credible and capable of supporting this military strategy. The strategic concepts appearing to have the greatest synergistic value in supporting conventional deterrence are "strategic agility" and "technological superiority."[4]

Strategic agility reflects the ability of US forces to assemble for rapid movement from wherever they are to wherever they are needed. According to *Global Presence 1995*, strategic agility "enables military forces, far removed from any target, to deliver aid or combat capabilities within minutes or hours of a national decision to act."[5] The US military has a demonstrated capability to rapidly project power across great distances to demonstrate US resolve or defend its allies and interests throughout the world. The US

Navy and embarked Marine Expeditionary Units can threaten the type of rapid response which may deter adversary use of WMD. Additionally, long-range bombers equipped with precision guided munitions (PGMs) provide a significant strike capability. This may be especially useful when the US does not have significant deployed forces or a foothold in a threatened region, or when countering attacks on the US itself.

According to some analysts, the B-2 bomber is extremely well suited for this role. In addition, B-1Bs and B-52s can be used to attack targets located deep behind enemy lines when they are equipped with long-range precision-strike munitions such as the HAVE NAP missile or Conventional Air Launched Cruise Missile. The strategic agility of such a robust bomber force gives the US the ability to bring massive firepower to bear on any adversary nation threatening to use WMD. As proof of this concept, stealthy F-117 fighters equipped with precision munitions proved highly effective and suffered no losses in the Gulf War in their attacks against suspected Iraqi WMD sites.

Technological superiority and exploitation of technology to obtain economies of force require investments to achieve a payoff in battlefield lethality. Reductions in force also make the force-multiplying effects of technology more important than ever. These technologies can include component upgrades for existing delivery platforms to use PGMs, avoiding costly generation of new platform replacements, and new precision strike conventional weapons with increased range and lethality.

Precision strike systems represented the cornerstone of US offensive conventional warfare capabilities during the Gulf War. US forces used some 17,000 air-delivered PGMs and several hundred air- and sea-launched cruise missiles to attack a wide variety of Iraqi targets.[6] Because of the decisive nature of these weapons, they represent a critical

element in a US response to the threat of WMD use. These systems provide a surgical means of destroying and disrupting an adversary's WMD capabilities before they are targeted against US forces.

Conventional military forces provide a strong deterrent capability by threatening either to deny the adversary the ability to use its WMD or to punish the adversary for doing so. An adversary can be deterred from using WMD if convinced of the potential effectiveness of such strikes and US willingness to carry them out. Additionally, if the US can neutralize a large portion of an adversary's WMD early in a conflict through the use of precision strikes, it can greatly ease the burden placed on US defensive systems.

Another element to the application of conventional military forces which must be considered in their use as a deterrent force is the timing of military strikes. Some, such as Dr. Barry R. Schneider of the Air War College, argue in favor of a strategy of "preemptive counterproliferation." In his work, *Radical Responses to Radical Regimes: Evaluating Preemptive Counter-Proliferation*, he notes on December 7, 1993 Secretary of Defense Les Aspin announced a new program designed to add "a military dimension in the fight to prevent the spread of weapons of mass destruction" called the Counter-Proliferation Initiative (CPI).[7] In addition to providing funding, equipment, training, weapons programs, and diplomatic initiatives preparing US and allied forces for future battlefields against enemies armed with WMD, the CPI also includes a secondary aim of providing "the tools to disarm an adversary unilaterally if necessary, before the adversary can initiate the use of WMD."[8]

An example of a successful preemptive attack against a state actor trying to obtain weapons of mass destruction occurred during the Second World War. The allies were

afraid of the Germans developing the capability of using an atomic bomb. Crucial to the development of the atomic weapon was the world's only commercial source of heavy water under Nazi control in Norway.[9] After an attack by six Norwegian saboteurs disrupted production for two months, the Royal Air Force and the American Eighth Air Force bombed the factory. These attacks caused the Germans to decide to move the heavy water operation to Germany. A single Norwegian saboteur, with help from British intelligence, sank a ferry transporting the 600 kilograms of heavy water needed for testing and development, and with it effectively the entire Nazi WMD program.[10]

A more recent example was provided by the Coalition actions during the Persian Gulf War. Attacks on Iraqi WMD facilities were among the first of the war; their goal was to ensure the Iraqis could not use these weapons against Coalition forces. Targeted facilities included chemical production sites near Al Fallujah and Samara, research centers such as Salman Pak and suspected munitions storage facilities.[11]

Both of these examples occurred within the context of major world or regional conflicts and were against state actors. While they demonstrate the effective use of military force in a preemptive or denial strategy against a state actor, they do not necessarily provide a precedent for the use of preemptive force against a non-state actor or in a situation in which a conflict is not ongoing. The use of a preemptive conventional military strike in all situations will hinge on questions of vital interests, hostile ability and will, other failed courses of action, and friendly capabilities, as well as on issues of legality and political support.

While often considered to signal the failure of deterrence, preemption can in itself have a deterrent effect by threatening the adversary with further destruction if it attempts

to use any remaining WMD or to rebuild its arsenal. Additionally, preemption may make a significant impression on other proliferant actors, thus deterring them from WMD use. Preemption is most feasible against proliferant state actors, but might also be considered against a terrorist group on the threshold of using WMD.[12]

Finally, employing a military show of force is designed to influence the behavior of states or non-state actors by demonstrating US resolve and capability to take more decisive action, if necessary. A show of force provides a relatively cost effective way for the US to demonstrate its interest in a region or issue and communicate its ability and willingness to take immediate action in response to a WMD threat. Such efforts may, therefore, have a deterrent effect on potential aggressors. Examples of shows of force include aircraft flyovers; increased exercise activities, schedules, and scope; increased naval port calls or air squadron visits to an area; opening and movement of pre-positioned stockage facilities and ships; and the deployment of tactical fighter squadrons, AWACS (Airborne Warning And Control System), Surface Action Groups, Carrier Battle Groups, Marine Amphibious Readiness Groups, or contingency ready brigades.[13]

In the case of non-state actors, a show of force may be aimed against a state sponsoring such groups. By making known the desired behavior sought (the termination of sponsorship and capture of the group's weapons, support, or personnel), the means we plan to use (military), and the will to use it (by demonstrating the show of force), some deterrent effect can be gained. If the non-state actor operates without a state's support, a show of force might be used to reinforce other cooperative initiatives we have ongoing with the unfortunate "host" country.

Conventional deterrence combining attempts to dissuade, capabilities to neutralize or capture, credible threats to retaliate and military shows of force dramatically reduces the coercive potential of a proliferant state's WMD programs and offers a significant deterrent to their use.

Special Operations Forces

Another conventional force asset with significant deterrent capability is Special Operations Forces (SOF). SOF provide a wide range of flexible options and highly sophisticated operational capabilities found nowhere else within the US military, making them one of the most flexible and responsive counterproliferation tools in the inventory. SOF provide both a "transparent" presence as well as the operational "punch" to accomplish many extremely dangerous, politically sensitive, and highly technical missions. They are organized with a regional orientation allowing them to develop and maintain an intimate knowledge of specific areas of operation. It is because of the dual nature of global employment and regional orientation that SOF are well suited to operate in the post–Cold War world against adversaries threatening our national interests.

SOF have a number of capabilities and missions contributing to deterrence of WMD. In addition to its traditional missions, United States Special Operations Command (USSOCOM) was specifically assigned counterproliferation of WMD as its newest mission in May 1995. Under this charter, USSOCOM plays a key role in enhancing the effectiveness of other US government and military efforts. For example, SOF may provide a viable response option long before conventional military force may be authorized. Additionally, USSOCOM's worldwide expertise and ability to conduct a range of operations from foreign training to lethal strikes on WMD facilities provide

national planners with a broad tool in combating proliferation and use of WMD.[14] They enhance conventional military operations and support other US national policies by allowing the US military to maintain the initiative and employ a measured military response to the spectrum of WMD threats.

Among the most effective means of military deterrence of WMD use is SOF psychological operations (PSYOP). PSYOP can be employed effectively to deter WMD use because, when integrated with other operations, it can morally dissuade potential WMD employment, separate proliferant actors from their sources of support or communicate to potential adversaries a firm national commitment against such employment. While many military activities are reactionary in nature, PSYOP provides precisely the type of measured response that can be employed preemptively.

All missions of SOF can help deter WMD use, whether by PSYOP to destroy the will to use WMD or lethal, pinpoint operations to destroy the capability. Across the spectrum, deterrence is increased by raising the consequences of WMD use.

Force Enhancement and Protection

At the "lowest" or non-lethal end of the spectrum are those capabilities and options that might be termed force enhancement and protective measures. This category includes capabilities which can enhance all deterrent options or provide the US and its troops and allies with defensive or protective measures reducing the effectiveness of WMD use.

Intelligence/Intelligence Sharing

Robust intelligence capabilities enhance US deterrent posture by increasing an adversary's fear of failure. They can raise his concern his capabilities and/or attack plans

may be discovered in enough time for the US to take protective measures or offensive actions against the WMD attack. However, this effect is indirect—intelligence enhances the deterrent effect of other capabilities by targeting those capabilities more effectively against an adversary's leadership, WMD production capabilities and operational weapons. In most cases, it cannot deter directly because the need to protect information and sources prevents communication of this capability to an adversary state or non-state actor.

However, overt cooperation between intelligence agencies or publicizing the existence of intelligence sharing agreements with allies and international organizations may, in itself, act as a deterrent. A case in point is the assistance provided in March 1996 in response to terrorist activity in Israel. Members of the high-profile delegation sent to assist Israel included both the Director of Central Intelligence and the Secretary of Defense, who were tasked to formulate programs for further cooperation between Israeli and US intelligence and defense agencies to combat terrorism in the region.[15]

The US is also continuing to improve its intelligence sharing programs with international organizations. A new intelligence situation center at the United Nations, for example, may provide one avenue for such efforts.[16] Such overt intelligence sharing arrangements, whether bilateral or multilateral, can have deterrent value by communicating US interest and resolve to act in response to threats to allied or friendly nations and increasing the fear of early detection of WMD capabilities or intentions to employ WMD. Such exchanges may be particularly useful in helping a friendly nation combat the threat from a non-state actor within its borders or from a belligerent neighboring state.

Intelligence exchanges can, and often do, include military intelligence agencies and officers acting as liaisons or exchange officers. Additionally, the US intelligence community, including its military components, is working diligently to improve its collection and analysis of WMD programs. Intelligence on WMD programs is very difficult to collect because proliferators go to great lengths to hide or disperse their programs and because the technologies which underpin WMD programs also have many uses in legitimate industries.[17] In fact, a review of potential intelligence indicators yields precious few definitive signs of WMD research, development, production, or deployment activities, especially if an adversary is determined to hide its programs.[18] The US intelligence community, including its military components, does, however, have formidable resources to bring to bear on the proliferation problem.

In accordance with the US government's goal to develop "tailored, actionable intelligence" on WMD proliferation, the intelligence community has taken several steps to improve the coordination of its collection, analysis, dissemination, and sharing of proliferation intelligence.[19] At the national level, perhaps the most important step was the establishment of the Nonproliferation Center under the Director of Central Intelligence to consolidate intelligence efforts and provide better coordination between the intelligence and policy communities. Operational-level military intelligence efforts may also be improved by the recent release of Joint Publication 2-0, *Joint Doctrine for Intelligence Support to Operations*, which provides doctrinal guidance on intelligence collection, analysis, dissemination, and sharing in joint and combined operations.[20]

WMD Protective Measures

Protective measures enhance US deterrent posture by raising doubts in the mind of the adversary about the efficacy of WMD use. If US and allied forces can protect themselves from the effects of such weapons, the adversary may not be able to accomplish its goals. Therefore, an improved defensive posture for US and allied forces enhances US deterrent strategy. The *1994 Report on Nonproliferation and Counterproliferation Activities and Programs* defined "defense" as "responding to a potential adversary armed with WMD or missiles to deliver them by employing active and passive defenses that will mitigate the effects of these agents and enable US forces to fight effectively even on a contaminated battlefield."[21]

According to several sources, Desert Storm revealed significant inadequacies in US nuclear, biological, and chemical defensive capabilities, in particular, inadequate inventories of chemical and biological warfare (CBW) equipment, detection capabilities and vaccine production.[22] Since defensive measures are a key part of the Defense Counterproliferation Initiative, the US military is currently involved in numerous efforts to correct these deficiencies. Among the noteworthy efforts listed in the annual *DOD Report to Congress on Nuclear/Biological/Chemical Warfare Defense* are improved CBW ground and aircrew ensembles, improved biological and chemical agent detection systems, equipment contamination detectors, radiation detection and measuring devices, CBW agent monitors for water, and improved vaccine production capabilities.[23] Additionally, recently released Joint Pub 3-11, *Joint Doctrine for Nuclear, Biological, and Chemical (NBC) Defense*, which prescribes doctrine for joint NBC operations and training, should help improve the US defensive posture against WMD.[24]

The DOD is also working to upgrade border controls preventing terrorist attempts at unconventional delivery of WMD.[25] While the burden of defending the US against a terrorist attack with WMD falls primarily to other US government agencies, such as the Department of Justice via the Federal Bureau of Investigation, and the Department of Treasury through the Coast Guard, DOD has a role through the US Special Operations Command. USSOCOM, assigned the task of dealing with terrorist incidents abroad, may play an advisory and training role in selected operations within the US when specifically approved by the National Command Authority.[26]

Ballistic Missile Defense

Ballistic missile defense (BMD) may also play an important support role in deterring WMD use by increasing an adversary's fear of failure, i.e., concern that its weapons may not reach the intended target. Although a potential aggressor will not likely be deterred from using WMD solely because of the deployment of BMD, it can serve as a force protection measure. A robust and capable BMD system, used in concert with credible retaliatory options, enhances US deterrent strategy.

Ballistic missile defense includes both theater missile defense (TMD) and national missile defense (NMD). Theater systems are presently the priority since the current threat to US forces, allies, and interests comes primarily from states fielding short or intermediate range (theater) missiles. Non-state actors do not now have the capability to deliver WMD via ballistic missiles and are not likely to in the near future.

The Clinton administration plans to upgrade currently fielded TMD systems. Additionally, over the next six years the administration is pursuing a $10 billion TMD system made up of two types of point defenses and one area defense system. These

systems are the Army's Patriot Advanced Capability and the Navy Lower Tier Sea-Based system for point defense, and the Army's Theater High Altitude Area Defense for area defense. [27]

In terms of national missile defenses, the likelihood of Iran, Iraq, Libya, or North Korea launching a large scale WMD attack against the US using ICBMs is currently extremely small and will remain remote for the foreseeable future. US national intelligence estimates contend these countries are still ten to fifteen years away from developing an ICBM that can hit targets in the continental US. [28] The US should use these ten to fifteen years to research and develop a more capable NMD system than is currently planned. For example, the Ballistic Missile Defense Organization is financing part of Israel's Arrow TMD system.[29] While the Arrow experienced some problems in its first phase of testing, the US still may be able to glean some useful fire control and ground radar technology from phase two testing, and incorporate it into a US NMD system. This time can also be used to settle the 1972 US/Soviet Union Anti-Ballistic Missile (ABM) Treaty disagreements. Once the applicability of the ABM treaty is settled, US scientists can begin to develop a robust NMD system capable of shooting down all incoming warheads.

The small number and limited capabilities of existing TMD systems, and the fact that BMD systems cannot now, and may not ever be able to, boast a 100 percent kill rate, significantly decreases their "standalone" deterrent value against a determined aggressor. However, BMD coupled with other military capabilities can provide a credible deterrent to WMD use.

Foreign Training and Equipment Sharing

The provision of WMD-related or terrorist-related equipment and training to friendly countries also enhances deterrence. By training our allies to defend themselves against WMD, we also help protect our own forces, citizens, and interests overseas. Such aid communicates US resolve and demonstrates US capabilities to counter WMD use. Cooperation with friendly nations also demonstrates worldwide concern and helps create an environment of international condemnation and solidarity with regard to WMD use.

Training and equipment sharing can take place under several scenarios, such as assisting a friendly nation dealing with non-state actors within its own borders, with groups operating from other states or with neighboring belligerent nations. Thus, such assistance takes the form of foreign internal defense (FID) programs or simple military exchanges and cooperation. Foreign training and equipment exchanges are often carried out by military forces, which may assist in the employment of in-place assets, participate in military exchanges and staff visits to an area or provide specialized mobile training teams.[30] Though almost any military component may carry out such exchanges, USSOCOM is postured to provide specialized training of this nature.

The purpose of FID is to "assist another government in any action program taken to free and protect its society from subversion, lawlessness, and insurgency, provide US government interagency activity to foster internal development of economic, social, political, and military segments of a nation[']s structure, and train, advise, and assist host-nation military and paramilitary forces."[31] Assistance can include training on techniques and procedures effective in interrupting the flow or use of WMD, as well as the provision of equipment, supplies, intelligence, and transportation to counter the WMD threat.[32]

Training may also cover basic military instruction in weapons proficiency, unit discipline and integrity, military standards of conduct, patrolling, interrogation, and defensive security measures for potential targets of WMD attack. Assistance in host country offensive measures such as raids on suspected production, storage, or WMD support areas are also possibilities, depending on the situation. While this can help neighboring nations combat a regional proliferant state, it is most effective in assisting states having groups with WMD operating within their territory but without their sponsorship.

These actions increase the fear of failure of any group planning on using WMD by mitigating the effects of such weapons. Additionally, they raise the cost of the WMD operation in terms of security and concealment. Finally, consequences of WMD use would rise due to the increased capability of host nations to locate the weapons, support, infrastructure, and personnel and take swift action against them.

Summary

The US has significant military capabilities to bring to bear in deterring the use of WMD. While still retaining nuclear options, new conventional force and SOF options can fill the gap in deterring those actors and situations in which nuclear deterrence may not be credible or feasible. These options rest on US capability to project power throughout the world to deal with a variety of possible WMD threats. Additionally, force protection and enhancement measures strengthen deterrence by improving US and allied forces' abilities to operate against and target WMD threats.

Notes

[1] *A National Security Strategy of Engagement and Enlargement* (Washington D.C.: The White House, February 1995),15, emphasis added.

[2] Dr. Gary L. Guertner, "Deterrence and Conventional Military Forces" (Unpublished Report, Carlisle Barracks, PA: Strategic Studies Institute, Army War College, 1992), 5.

[3] Ibid, 3.

[4] Ibid, 4.

[5] Department of the Air Force, *Global Presence 1995*, 14.

[6] Thomas A. Keaney and Eliot A. Cohen, *Gulf War Air Power Survey Summary Report* (Washington D.C.: Department of the Air Force, 1993), 226.

[7] Barry R. Schneider, *Radical Responses to Radical Regimes: Evaluating Preemptive Counter-Proliferation*, (Washington D.C.: National Defense University, May 1995), v.

[8] Ibid.

[9] Ibid, 9.

[10] Ibid, 10.

[11] Keaney, 80-81.

[12] Interview with Dr. James E. Winkates, Air War College, Maxwell AFB, AL, 13 December 1995.

[13] AFSC Pub 1, *The Joint Staff Officer's Guide 1993*, 6-16.

[14] United States Special Operations Forces, *Posture Statement*, 1994, 16-17.

[15] "Arabs Join Israelis at Peace Summit," *Montgomery Advertiser*, 14 March 1996, 2A.

[16] Brenda Connors, "Mission Possible: Making United Nations Peace Operations More Effective," Research Report (Newport, RI: Naval War College, 17 June 1994), 16-18.

[17] John M. Collins, Zachary S. Davis and Steven R. Bowman, *Nuclear, Biological and Chemical Weapon Proliferation: Potential Military Countermeasures* (Washington D.C.: Congressional Research Service, 5 July 1994), 4.

[18] Ibid, 4-9.

[19] Department of Defense, *Report on Nonproliferation and Counterproliferation Activities and Programs*, Washington D.C.: Office of the Deputy Secretary of Defense, May 1994, 19.

[20] Joint Pub 2-0, *Joint Doctrine for Intelligence Support to Operations*, 5 May 1995.

[21] *Report on Nonproliferation and Counterproliferation Activities and Programs*, 5.

[22] Steven M. Kosiak, *Nonproliferation and Counterproliferation: Investing for a Safer World?* (Washington D.C.: Defense Budget Project, April 1995), 33-34.

[23] Department of Defense, *Nuclear/Biological/Chemical (NBC) Warfare Defense*, Annual Report to Congress, June 1994, Chapters 2 & 3.

[24] Ibid, 9-10.

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[25] *Report on Nonproliferation and Counterproliferation Activities and Programs*, 5.

[26] John M. Collins, *Weapons of Mass Destruction: The Impact of Proliferation on US Military Posture* (Washington D.C.: Congressional Research Service, 2 June 1995), 33.

[27] Kosiak, 41.

[28] Joseph Cirincione and Alisa Miller, "Missile Myths," (The Stimson Center Publications) [electronic bulletin board] (Washington, D.C., 1995 [cited 18 January 1996]) available from (www.stimson.org); INTERNET.

[29] W. Seth Carus, *Ballistic Missiles in the Third World, Threat and Response*. (Washington D.C.: The Center for Strategic and International Studies, 1990), 51.

[30] USSOCOM Fact Sheet Number 17-7-1293, Public Affairs Office, 1.

[31] Ibid.

[32] Interview with Col William E. Hudspeth, Special Operations Forces Chair at Air War College, Maxwell AFB, AL, 18 January 1996.

Chapter 4

Deterrence Policy in a Post–Cold War World

Introduction

The final element of this study is reviewing US policy to determine whether it clearly communicates the deterrent capabilities of the US military and determining what policy best serves US deterrent needs in this new international environment.

In the past, US deterrence policies were focused primarily on deterring nuclear weapons use by the Soviet Union. Although the US exercised all of its instruments of power in this effort, the most visible tool of this policy was the military, in particular US nuclear forces, which provided the ultimate deterrent threat—massive retaliation. This policy was articulated in strategies such as "mutually assured destruction" and "flexible response" and was clearly communicated to the Soviet Union. While perhaps the strategic nuclear triad deters the declared nuclear powers from initiating nuclear warfare, this elite class of nations no longer represents the greatest threat to US security. A critical issue for the decision-maker is determining how to reshape the US deterrent strategy to deal with the new range of threats in the post–Cold War environment.

Since the end of the Cold War, US policy with regard to the proliferation of WMD has placed a greater emphasis on non-military instruments of power and has shifted to

focus on preventing the spread of WMD. Nonproliferation policies have included one or more of four elements: (1) obstacles like export controls to impede actual acquisition of WMD; (2) punitive measures to punish proliferants, including economic sanctions or diplomatic isolation; (3) rewards such as technical and financial assistance to encourage states to forego WMD development or acquisition; and (4) global or regional security agreements to reduce the perceived need for WMD. The US currently plays an active role in diplomatic initiatives limiting the spread of WMD technology and continuously pursues full implementation of existing arms control agreements, including the Strategic Arms Reduction Treaty (START), Biological Weapons Convention (BBC), Chemical Weapons Convention (CPC) and the Intermediate Range Nuclear Forces (IF) Treaty.

While nonproliferation efforts and policies are clearly necessary to stem the tide of WMD proliferation, there is also a need to deter states and non-state actors which have acquired WMD from using them. This chapter examines current US policy in terms of how it articulates and communicates US deterrent strategy.

Current Policy Guidelines

Since modern warfare has limited exposure to WMD, decision-makers are challenged in their ability to articulate a cogent national deterrence policy. The US presently lacks a definitive policy addressing a means to deter each potential state and non-state actor from employing WMD. However, because the possibility of WMD employment now pervades all aspects of US national security planning, decision-makers must develop a policy articulating a full range of options for each threat. Such a policy must address the entire spectrum of actors, from nation states to non-state actors.

National Policy

In 1995, President Clinton stated, "we are devoting greater efforts to stemming the proliferation of weapons of mass destruction and their delivery means, but at the same time we must improve our capabilities to deter and prevent the use of such weapons and protect ourselves against their effects."[1] Thus, our current national policy highlights deterrence as the firewall to proliferation, both in terms of nonproliferation and counterproliferation. However, unlike the clear policy statements and the unending rhetoric of the Cold War, what appears to be lacking in the current national strategy is a clear determination and statement of how employment of WMD will be regarded by the US and how the US will respond to such use.

The National Security Strategy of Engagement and Enlargement states, "weapons of mass destruction—nuclear, biological and chemical—along with their associated delivery systems, pose a major threat to our security and that of our allies and other friendly nations."[2] This implies their employment against one or more of these security interests will constitute at least an act of aggression, if not war. Similar proclamations regarding terrorism have been made, yet terrorist acts are widely perceived as criminal actions. However, terrorist use of WMD could also be considered an act of aggression or war, rather than just a crime. To develop a coherent response to WMD of all types, employment of such weapons should have a universal definition, (i.e. an act of war, aggression or a criminal act).

Military Policy

Current policy guidelines relative to the military response to WMD proliferation and employing military forces in general come from two sources—Secretary of Defense

William J. Perry and the Weinberger Doctrine. Secretary Perry has set forth a range of government options with eight possible responses to WMD proliferation. The first five responses deal with nonproliferation. They include: (1) dissuasion, to convince non-WMD states that their security interests are best served through not acquiring WMD; (2) denial, to curtail access to technology and materials for WMD through export controls or other tools; (3) arms control efforts, to reinforce current treaties and confidence and security building measures and allow deployment of theater missile defenses; (4) international pressure, to punish violators with sanctions and heighten awareness of the proliferation problem; and (5) defusing potentially dangerous situations by reducing the threat from WMD already in the hands of selected countries through agreements to destroy, inspect, convert, monitor, or even reverse their capabilities.

The final three response options proposed by Secretary Perry fall into the arena of counterproliferation and are of even more relevance to this paper. These include: (1) deterring use of WMD by retaining the capacity to retaliate against those who might contemplate its use so that the costs of such use be seen as outweighing the gains; (2) maintaining military capabilities and readiness to seize, disable, or destroy WMD in time of conflict if necessary; and (3) improving defensive capabilities, both active (theater missile defenses) and passive (protective gear and vaccines), that will mitigate or neutralize the effects of WMD and enable US forces to fight effectively even on a contaminated battlefield.[3] This policy guidance provides the basis for current military deterrence efforts. Secretary Perry writes "policy guidance and goals are clear—preventing proliferation and protecting US forces, vital interests, allies, and homeland from opponents with WMD and missile capabilities."[4]

While Secretary Perry addresses the specific issue of WMD proliferation, the Weinberger Doctrine currently shapes the employment of US military force. In the decade since January 1985, when former Secretary of Defense Caspar W. Weinberger published "The Uses of Military Power," his ideas have become the foundation of military force employment doctrine and *de facto* national policy. His precepts for the employment of military force have formed the basis for a declarative policy on the employment of US forces. Secretary Weinberger listed six essential criteria that must be met before the military should be committed to combat. They are: (1) a situation deemed vital to US national interests or those of allies, (2) whole-hearted commitment with the clear intention of winning, (3) clearly defined political and military objectives, (4) right-sized forces to meet the objectives, (5) broad national support, and (6) commitment of forces as a last resort.[5]

The statements of Perry and Weinberger are not hard and fast rules, but are basic guidelines which should guide the formulation of a specific policy for employing military forces to deter WMD use. Although the basic guidance is there, the US must more clearly define and communicate deterrence policy, and delineate how it will be implemented.

Policy Options

Seth Cropsey, Director of the Asian Studies Center at the Heritage Foundation, offers three options for the US to deal with emerging nuclear states. The options he provides are, "to persist in [the] current policy, which uncertainly presumes that America will extend its nuclear arsenal to regional allies and retaliate in kind against any nuclear

attack; to withdraw its nuclear protection and ignore the dangers of regional nuclear conflicts as being of limited strategic interest; or to try to deter a regional nuclear aggressor through America's new conventional weapon technology." [6]He states that, "only the third option offers a credible strategy that adheres to American interests. Since the end of the Cold War, the idea that the United States will use nuclear weapons to defend allies in peripheral regions has lost credibility and cannot protect either the United States or its allies from attacks by rogue states."[7] Cropsey feels nonproliferation does nothing to deter, and the US must project a punishing deterrent strategy against states that would use nuclear weapons. He states, "The objective of US policy should be both to deter nuclear danger and to contain and defeat a possible aggressor."[8] Cropsey advocates an effective "shield" to defend the US against "rocket-borne nuclear or chemical weapon attack." But, he further states, "US policy-makers must assume that any defensive shield against a missile attack is imperfect. Thus the United States must concentrate equally on fashioning an effective sword—one that will discourage attack without using the nuclear force that would turn an increasingly unstable world into a certifiably violent one."[9] This proposal clearly coincides with the concept of raising the "consequences" to an actor using WMD.

US policy must address three potential employment scenarios. The first is the use of WMD by a nation state against the US or its allies. This encompasses the "traditional" concept of interstate warfare escalated to a level of WMD employment. The second scenario addresses WMD use against US interests by state-sponsored non-state actors. These might include terrorist groups, crime syndicates, or any group not directly affiliated with the host nation government but supported or protected by it or possibly even used to

execute host state policy. The third scenario is WMD use by an actor within a state or staging from a state without host nation consent.

Under the first scenario, the military spectrum of response could range from conventional weapon technology, as advocated by Cropsey, to retaliation using elements of the vast US nuclear arsenal. However, nuclear retaliation may not be suitable in each circumstance. For example, if the attacker initiated the confrontation with chemical or biological weapons, nuclear retaliation would probably constitute an escalation in the conflict, a near certainty if it were against another nuclear power that had yet to employ nuclear weapons. Thus the US must rely more heavily on the spectrum of conventional, SOF and defensive options discussed in Chapter 3.

US policy response in the second scenario should be more precise than the first. This scenario postulates that a state-sponsored actor employs WMD against the US or its allies. Again, however, application of military force must be applied to the sponsoring nation. Military action against a non-state actor, in addition to being potentially very difficult and very risky, might even legitimize the actor's "cause." Additionally, preventing future support or attack will only be guaranteed by detaching the sponsor from the actor. In addition to military force application, economic sanctions and political isolation aimed at the state sponsor may also prevent future occurrences. These options also provide flexibility in the US response and may limit further escalation or the harshness of a military response.

Although the third scenario—WMD use by a non-sponsored non-state actor—is perhaps the most difficult to deal with, it is the only scenario which has occurred in recent history. Aum Shinrikyo's attack revealed a possible WMD threat to US interests and

citizens abroad. While Japan was never perceived as culpable for the attack, and is extremely willing and capable of protecting US interests, the US must develop a policy to provide assistance for nations without the resources and/or political will to handle similar situations. When a nation lacks the resources, the US should offer a complete response package to assist the nation in neutralizing the threat, as the US did with a terrorist—assist package for Israel in the wake of the March 1996 Palestinian suicide bombings. When the nation lacks the political will to combat the threat, or refuses to accept US assistance, policy must require that nation to certify the security of US citizens and interests or face harsh US economic and political sanctions. Such a policy is presently employed against drug producing nations, and may be appropriate for WMD scenarios as well.

A military policy to deter the use of WMD must follow the established national security strategy and objectives. It must clearly limit the latitude an actor may pursue when challenging the policy. Additionally, directing military policy toward nation states is the most viable way to use the military to influence a WMD situation. By working within an accepted and legitimate international framework, such a policy provides the US with a number of flexible deterrent options based upon the threat. Future deterrent policy, to be cogent, credible and complete, should be more responsive to both threats and actions, more decisive in nature and not restrictive or dogmatic. It should support both flexible deterrent options and decisive military response.

Notes

[1] *A National Security Strategy of Engagement and Enlargement*, February 1995 (Washington D.C.: The White House), 9.

[2] Ibid, 13.

[3] Department of Defense, *Annual Report to the President and the Congress*, 1995, 72-73.

[4] Ibid, 82.

[5] Richard P. Hallion, *Storm over Iraq: Air Power and the Gulf War* (Washington D.C.: Smithsonian Institution Press, 1992, 90.

[6] Seth Cropsey, "The Only Credible Deterrent." *Foreign Affairs* 73, no. 2 (March/April 1994): 14-20.

[7] Cropsey, 14.

[8] Ibid, 18.

[9] Ibid, 18.

Chapter 5

Recommendations & Conclusions

Introduction

This paper has reviewed current military capabilities and policies which lay the foundation for US deterrent strategy in the post–Cold War era. The US has a wide range of military capabilities which can be brought to bear on this problem. Additionally, national leaders have established the basic policy guidance under which the military must operate. What follows are specific recommendations to strengthen the ability of the US to deter WMD use.

Recommendations

Deterrence Policy

To deter any actor from using WMD against the United States, its allies and its deployed forces, the US needs to communicate a strong policy on how it will respond to WMD use. While general policy guidance is clear, it must now be formally communicated in a declarative policy allowing for the employment of military force commensurate with the threat. Such a policy could be similar to National Security Decision Directive 221, signed by President Reagan in 1986, which essentially launched the "war on drugs."

The policy must provide a definitive concept of what employment of WMD means to US decision makers. If WMD employment is universally regarded as an act of aggression, an act of war, or a threat to national security regardless of who employs the WMD or what it targets, it simplifies the policy debate that decision makers must go through before the US will respond to a specific WMD threat. Additionally, a credible deterrent WMD policy will include "traditional" deterrence with aspects that compel or communicate coercive strategy. It must be declarative in nature, communicating that the employment of WMD by any actor against the US, its allies, or vital national interests is an act of aggression to which the US will respond. It should be clearly stated to the world community, emphasizing that US capabilities can be employed quickly and with great lethality. RAND Corporation analysts Dean Wilkening and Kenneth Watman assert the US can increase the perception of its resolve through traditional diplomatic and military activities. By emphasizing its military capabilities such as force deployment, power projection, and precision weaponry, possible perceived consequences could deter a state from using its WMD. [1]

US deterrent policies should be aimed primarily at state actors. As explained in the three scenarios described in Chapter 4, the US should either try to deter another state or work through or with a state to prevent a non-state actor from using WMD. In *Challenge and Response: Anticipating US Military Security Concerns*, Lt Col Bradley Davis, USAF, suggests that "military strikes set a precedent for other countries to launch their own attacks against suspected sites on the territory of adversaries."[2] This makes working with legitimate governments all the more important. When non-state actors are involved, this might mean withholding aid or using other instruments of power to encourage the

state to take action, or allow the US to take action, against the actor. In the case of Japan and Aum Shinrikyo, the state government was willing and able to deal with the perpetrators. Other nations who refuse to exert pressure on terrorist groups operating from within their borders will necessitate a different approach. This can be taken by having a state "certified" to guarantee protection of US citizens and allies should a WMD event occur within its country. Coercive diplomacy, the combining of force with diplomacy, will be the primary means of dealing with unfriendly regimes hesitant to take action against WMD groups working within their borders.

Should the US have to respond with military force, the response should be prompt. To facilitate this process, the Congressional and Executive branches should already have agreed on a framework for appropriate action. One way of providing this fast reaction capability is through the use of a knowledgeable crisis action staff as described by Robert Kupperman, writing as chief scientist at the US Arms Control and Disarmament Agency. According to Kupperman, this staff cannot be put together overnight but requires a great deal of training and specialization on the variety of WMD threat possibilities and responses. Through such training, when a threat does arise, the various response options could be explored more "exhaustively" and quickly. This team must address "problems of control, containment, and restoration" and be supported by a "highly sophisticated command, control, and communications system" with access to the National Command Authority.[3]

Finally, the Weinberger Doctrine will continue to be a de facto *guideline* for military use. By following his precepts, the US would have a policy agreed to by all parties—the President, Congress and the American people. Once this policy has been declared and

agreed upon, the Weinberger criteria of continued public support will have been met for the entire WMD response spectrum. This political support would preclude the requirement for specific and time-consuming public approval when each individual potential WMD event arises, allowing the appropriate force to be used in a timely manner. Weinberger's reference to "right-sized force," should be interpreted not as "overwhelming force," but as the force necessary to accomplish the desired action as quickly as possible. It may mean only a PGM on a specific target, the use of SOF conducting PSYOP or the deployment of a carrier battle group to a potential hot spot.

Use of Military Force

Lt Col Davis identifies the relationship of military force to the other instruments of national power with respect to WMD deterrence: "The use of military force should not and cannot be the first option explored in response to a threat."[4] Nonetheless, both national and military policy clearly delineate a major role for the US military in preventing the proliferation of WMD and deterring its use. Military forces provide a measure of general deterrence simply due to their existence and inherent capabilities. Additionally, they provide a tailored response capability to each specific deterrence situation.

Once the decision to use military force has been made, national decision makers need to methodically evaluate the military options. By examining the motives and capabilities of the actor to be deterred and the context of the specific WMD threat, the decision on whether to use military force and subsequently what type of force to employ can be reached rationally. Appendix B lists a set of questions which can help decision makers determine if the military instrument is appropriate in a given situation and if so, some

considerations in selecting which military capabilities should be employed in that situation.

As presented in Chapter 3, the US has a wide range of military capabilities which can be brought to bear on this problem. It is important to note, however, that there is no one-size-fits-all "boilerplate" solution for employing the military instrument to prevent an entity from using WMD. The range of options discussed in previous chapters is available for every situation, but the individual circumstances must be evaluated to determine the most appropriate action. Each individual case of deterring an actor from using WMD will require situation specific responses.

Capabilities

The United States has to make a commitment to itself and the world to become the leader in fighting WMD. A heavy investment in intelligence, especially human intelligence (HUMINT) directed toward state and non-state actors, is a necessity to increase the effectiveness of other military options. HUMINT needs to be increased because potential adversaries the US will be working against are "low tech" in nature. Their potential factories and laboratories are not going to be readily identifiable using current national technical means. For example, Libya is a building a suspected nerve gas plant in the side of a mountain near Tarhunah, "where no spy-satellite eyes could see the factory inside and no American jets could destroy it."[5] Despite such instances, the US must still determine who has WMD or the potential to obtain them, and locate the production, assembly, or storage facilities. The US cannot rely solely on high-tech surveillance to confirm low-tech efforts to acquire, produce or deliver WMD. Although

gathering and sharing intelligence data cannot be viewed as a deterrent in itself, it will be a contributing factor in developing other deterrent military options.

Additionally, the US needs to revisit the issue of designating a lead agency or CINC to coordinate plans for using military forces to deter WMD use. The government should establish one defense agency dedicated to or specializing in developing military options against WMD use. One joint command should have the responsibility for developing plans and controlling military responses when called upon by the civilian leadership. This command should have the funding to acquire weapons and intelligence systems needed to counter WMD. Although it may not be the command that does the actual attacking or intelligence gathering, it should be the "clearing house," ensuring operational units have the best possible resources available if and when called upon. It should also have the requisite manpower to ensure planning is accomplished on a continuing basis. Not only should deliberate planning be done to cover as many possible WMD use/response scenarios as can be envisioned, but it must also include discussion of future systems and funding needed to protect the US.

Another important aspect of military deterrent options is the continued investment in and upgrading of PGMs. In harmony with the intelligence investment, PGMs give the military the "punch" needed to inflict a quick and decisive blow to a WMD actor. Not only did the US use such capabilities against Iraq during the Gulf War, but these assets can also be used to assist states which request US help in eliminating non-state actors' WMD facilities within their borders.

A successful precision-strike capability depends on much more than acquiring and employing effective PGMs. It also requires the possession of effective command,

control, communications, and intelligence assets, including reconnaissance, target acquisition and battle damage assessment capabilities. Although the US demonstrated all these capabilities during the Gulf War, further improvements are needed for each.

A final, key capability is the continued development of BMD. While ballistic missile defenses do serve more as a defense than a deterrent, an effective system can provide protection and also raise the fear of failure for the WMD user. Scientist Tom Mahnken explained the advantages of a missile defense system in an American Association for the Advancement of Science symposium. "On a military level, theater defense could provide the ability to negate those characteristics of the ballistic missile which make it the ideal weapon of surprise attack: its speed, accuracy, and penetrativity. It could protect US and allied forces and facilities under threat."[6]

Another aspect of missile defenses needing emphasis is the regional security dimension. The US can use such a system as a bargaining chip to discourage states from pursuing their own WMD programs, believing they are needed for their security. Decreasing the number of state-owned WMD programs, in turn, would possibly impact non-state actors. The costs for a non-state actor to acquire WMD technology would be increased since they would be forced to develop their own program instead of being able to acquire the technology from a state actor.

Conclusion

Though highly capable nuclear, conventional and special operations forces now provide the US with the best capabilities in the world, the US must continue to improve its military forces to effectively confront the growing WMD threat. Particular emphasis

on intelligence programs, PGM capabilities, and ballistic missile defenses is necessary. Additionally, a single specialized joint command should be designated to coordinate planning for military responses to WMD threats

Finally, the US government should establish and communicate its policy on clear and unequivocal responses to WMD threats. Such a policy should provide a definitive concept of how WMD use will be regarded by the US and should focus US responses at state actors. Additionally, the government should constitute a specially-trained crisis staff to facilitate a rapid policy response to WMD threats.

Despite the changes in the international environment and the new range of actors seeking to acquire and possibly use WMD, deterrence remains a valid concept ensuring the security of the United States, its forces and allies. Further, the US military has a spectrum of capabilities to bring to bear in deterring WMD. By clearly stating national policy and supporting it with a variety of military capabilities, the US can effectively deter WMD use. Continued development of military capabilities and development of a clear statement of US policy will further strengthen US deterrence efforts and increase the security of the United States, its allies and deployed forces.

Notes

[1] Dean Wilkening and Kenneth Watman, "Regional Deterrence: The Nuclear Dimension," (RAND Corporation Publications) [electronic bulletin board] (Riverside, CA, 1995 [cited 18 January 1996]) available from www.rand.org.publications/RB/RB24/rb24.html); INTERNET.

[2] Lt Col Bradley S. Davis, *Challenge and Response: Anticipating US Military Security Concerns* (Maxwell AFB, AL: Air University Press, 1994), 109.

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[3] Robert H. Kupperman, "Government Response to Mass-Destruction Threats by Terrorists," *On Terrorism and Combating Terrorism* (Tel Aviv, Israel: Jaffee Center for Strategic Studies, Tel Aviv University, 1985), 159.

[4] Davis, 108.

[5] Douglas Waller, "Target Gaddafi, Again," *Time*, 1 April 1996, 46.

[6] Tom Mahnken, "An Overview of the Political-Military Implications of Missile Proliferation" (Paper presented to the American Association for the Advancement of Science symposium on The Proliferation of Ballistic Missiles: Policy Options for the Future, 19 February 1990), 32.

Appendix A

WMD Actor Model

The international community consists of a variety of state and non-state actors. To analyze the WMD threat posed by an actor, two factors must be considered: (1) the capability of an actor to use some type of WMD; and (2) the desire or propensity of an actor to use WMD. The purpose of this model (Figure 1) is to aid in evaluating the threat of WMD and the subsequent national strategy to deal with this threat. Each actor can be put into the model to identify the threat it poses. It is important to note that there is no definitive line between the four categories presented—any actor can move from one category to another by simply developing WMD technology or the desire to possess/use WMD or by eliminating existing WMD capabilities.

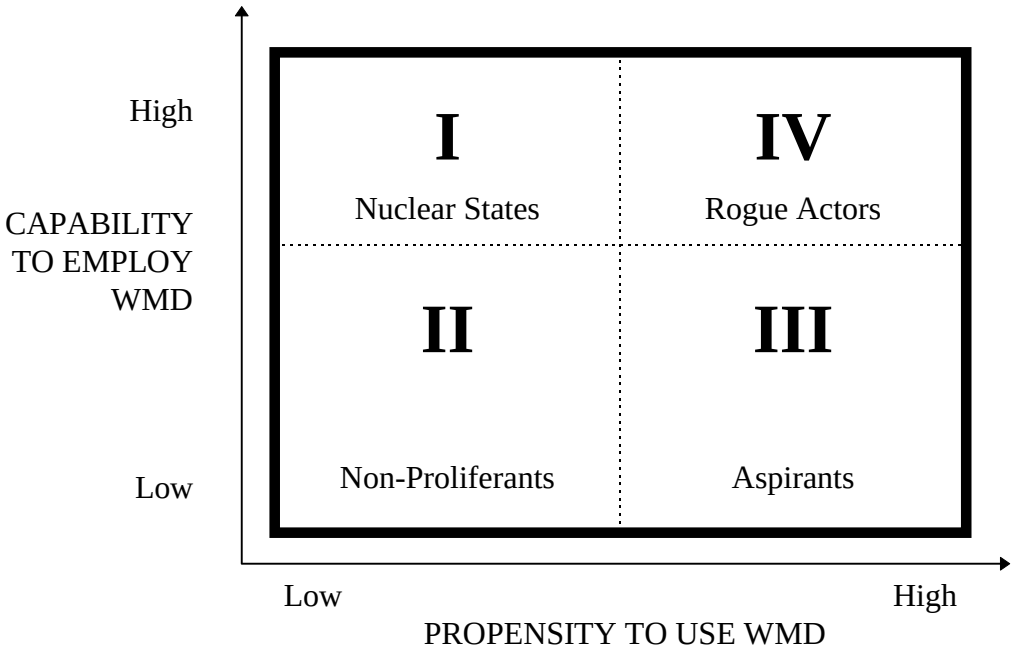

Figure A-1. International Actors and WMD Capabilities

Category I—Nuclear States. An actor in this category is one which possesses a WMD capability, but is not actively threatening to use WMD. For example, the US and Russia both possess nuclear weapons, but with the cessation of the Cold War neither is currently targeting one another with their strategic weapons, i.e., their current propensity for employment is low. For the most part, Category I actors are states which are considered to be rational, and there is a variety of political agreements in place voluntarily reducing their WMD threat.

Category II—Non-proliferants. These actors or "have nots" have neither the resources nor the resolve for acquiring WMD. Pursuing WMD is either too costly or counter-productive in the pursuit of their agendas. Examples might include Third World nations which need aid from developed countries—pursuit of WMD might jeopardize such aid. However, these actors cannot be ignored since once they have developed their

desire to have WMD could change. Most non-state actors, such as religious groups or multinational corporations, would also fall into this category.

Category III—Aspirants. These actors would like to acquire WMD to enable them to achieve their objectives, but currently lack the technology or resources needed to develop this capability. This category could include terrorist or radical anti-government radical organizations that have not yet developed WMD. Such groups are likely to move into Category IV as soon as they possibly can.

Category IV—Rogue Actors. The type of actor in this category is clearly the most dangerous to the international community. "Rogue states" such as Iraq fall into this group—they proved their capability and intent by employing chemical weapons against Iran in the Iran-Iraq war. A non-state example could be the Aum Shinrikyo religious sect which gassed the Tokyo subway. Typically, these actors have volatile leadership and anti-West sentiments.

Although this model groups all WMD together as a general threat, it can further be broken into three distinct diagrams for nuclear, chemical, and biological weapons. For example, the US possesses a large nuclear weapons arsenal compared to other actors, but is not currently on the precipice of using this capability, i.e., Category I. On the other hand, current US policy is to not pursue a biological weapons program. With neither the capability nor propensity for employing such weapons, the US could arguably be classified as Category II. Again, it is important to point out that these categories are not hard and fast but fluid-actors can move from one to another. This model is simply a tool for analyzing potential WMD threats and capabilities. By developing a strategy of

deterring one actor in a given category, there might be policy options that may be used toward other actors in that category.

Appendix B

Use of Military Force

The following set of questions regarding WMD scenarios can help decision makers determine if the military is appropriate in a given situation and if so, which military capabilities may be best employed.

- Why did the actor acquire a WMD program?
- Does simple acquisition present a threat that necessitates a response?
- Why does he want to employ WMD? Are we making assumptions about the adversary's motives based on our own ethnocentric ideas?
- What is the desired effect the actor wishes to achieve (kill people, gain publicity, retaliation, etc.)?
- What is the vital interest threatened by the actor's use of WMD? Is it national survival, territory, military forces, population, economic interests, etc.?
- Are any of these US centers of gravity, and how vulnerable are they? Is there any defensive protection in existence or is offensive protection the only viable means of deterring WMD use?
- What type(s) of technology has the actor acquired or developed?
- What are the centers of gravity of this actor, and are they vulnerable?
- Do we know where the adversary's WMD facilities are located, including actual weapons and delivery systems?

The next eleven questions need to be addressed when considering the use of military force as a preemptive measure. Only if the answer is "Yes" to all questions should such action be taken.[1]

- Is the enemy undeterrable, violent, and a risk-taker?
- Is the enemy on the WMD threshold or beyond it?
- Are vital US interests threatened?
- Are key enemy targets precisely located and vulnerable?
- Is surprise achievable?

- Does the US have a first strike capability?
- Is the US homeland safe from enemy WMD?
- Would the US and its allies be safe from retaliation from the WMD of third parties?
- Have all non-military options been exhausted before considering preemption?
- Does the US have clear objectives achievable by appropriate means?
- Is the US committing enough resources and is it taking all necessary steps to insure victory?

Notes

[1] Barry R. Schneider, *Radical Responses to Radical Regimes: Evaluating Preemptive Counter-Proliferation* (Washington, D.C.: Institute for National Strategic Studies, National Defense University, May 1995), vi.

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