



**STRATEGY
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**A CASE FOR A COMPREHENSIVE
WMD DETERRENCE STRATEGY**

BY

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A Case for a Comprehensive WMD Deterrence Strategy

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ABSTRACT

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The WMD threat continues to increase despite worldwide efforts to restrain WMD proliferation. As a result, preventing WMD employment must become an international priority. A blueprint for this strategy is available in the form of traditional nuclear deterrence tenets. In order to deter WMD attack, the US must be able to survive a first strike, retain the capability for overwhelming retaliation, cultivate national will, and maintain irrefutable credibility.

With nuclear deterrence theory as a benchmark, this paper focuses on bolstering US credibility by identifying inconsistent areas within current US strategy and offering recommendations. Critical areas include highlighting US engagement and communication as key steps to effective worldwide WMD deterrence; appropriately demonstrating US national will to potential WMD users; and communicating a flexible targeting strategy that holds at risk an adversary's valued elements.

A coherent WMD deterrence strategy's goal is complete prevention of WMD use. However, failure must be anticipated and resulting actions should prevent future WMD attacks and contribute to US credibility while strengthening the deterrent strategy. With absolute credibility the US will be able to continue to exert international leadership in an increasingly hazardous future.

TABLE OF CONTENTS

ABSTRACT III

A CASE FOR A COMPREHENSIVE WMD DETERRENCE STRATEGY 1

 THE WMD THREAT 2

 DETERRENCE TENETS 2

 Disarming First Strike 2

 Capability for retaliation 3

 The will to retaliate 4

 Credibility 4

 Communication 4

 Responsibility 5

 Summary 5

 INCONSISTENCY WITHIN CURRENT US WMD DETERRENCE STRATEGY 5

 Communication 5

 Capability, will, and communication 6

 Responsibility 8

 COHERENT WMD DETERRENCE STRATEGY 8

 World Leadership 9

 International Consensus 9

 Facilitating WMD Responsibility 10

 Communicate the US WMD Deterrence Strategy 10

 Shaping the Threat via WMD Deterrence 11

 RESPONDING TO A MANIFESTED WMD THREAT AND PREPARING NOW FOR THE FUTURE 14

 Respond 14

 Prepare Now (For an Uncertain Future) 15

 CONCLUSIONS 16

ENDNOTES 17

BIBLIOGRAPHY 21

A CASE FOR A COMPREHENSIVE WMD DETERRENCE STRATEGY

US National Security Strategy (NSS) and US National Military Strategy (NMS) stress the immediate Weapons of Mass Destruction (WMD) threat to US citizens and national interests. The very nature of WMD--indiscriminate destruction and ability to inspire terror--mandates firm action to deter this specific class of weapons. The threat is complicated by the range of state and non-state actors with access to WMD, the projected rate of proliferation, and the lack of controls available to moderate these actors. However, despite the profound consequences of the WMD threat, both the NSS and NMS fail to articulate a coherent WMD deterrence strategy that clearly communicates US intentions to current and future adversaries.

This paper presents a case for a coherent WMD deterrence strategy; one based on a successful deterrent theory that meets the changing demand of current and future threats. Two aspects of deterrence must be resident in US Strategy in order to effectively deal with the WMD threat. The first is a non-proliferation campaign designed to minimize worldwide presence of WMD by limiting the number of WMD equipped actors in order to lower the probability of WMD use. The second aspect of WMD deterrence focuses its effort on preventing those actors with an established WMD arsenal from using their capability. These two aspects of WMD deterrence are wedded and must mutually support each other in both action and goals. The non-proliferation campaign has been effective, but despite the effort, both the number of actors with WMD capability and the spectrum of weapons are increasing. As a result of this alarming trend, this paper focuses its attention on the issues associated with deterring a WMD equipped international actor's first use of WMD.

Traditional nuclear deterrence strategy provides a blueprint to guide creation of a coherent WMD strategy. Likewise, the current US strategy of "Engagement" via a "Shape, Respond, Prepare Now" approach provides an effective means of implementation.¹ Capitalizing on these two "ways" and aggressively implementing a coherent WMD deterrence strategy will decrease the likelihood of a WMD attack, guarantee proper US response should deterrence fail, and maintain deterrence as a credible strategy for future use following a WMD incident.

The objective WMD strategy blends an "ends - ways - means" analysis of the current WMD environment with US National Security and National Military Strategy. The paper begins with a short review of the WMD threat to reinforce the need for the strategy. Next, classic deterrence tenets are reviewed using traditional nuclear deterrence as a means to examine and develop workable tenets for WMD deterrence. The next section highlights several inconsistencies in current US strategy by using expected challenges as a means to identify requirements that must be met by a successful WMD deterrence strategy. Finally, the paper recommends numerous refinements to US WMD deterrence strategy via the US "Shape, Respond, Prepare Now" approach by testing each WMD deterrence tenet with its adherence to deterrence precepts and its contribution to an acceptable end. The paper concludes with a summary of the criteria and characteristics of an effective and coherent WMD deterrence strategy.

THE WMD THREAT

"Proliferation of advanced weapons and technologies threatens to provide rogue states, terrorists and international crime organizations the means to inflict terrible damage on the United States, its allies and US citizens and troops abroad."² "The acquisition of these inhumane and indiscriminate weapons by some 25 countries, many of them in regions of endemic conflict, poses a serious and growing threat to US and global security. In recent years, awareness of the dangers of (WMD) proliferation has increased in the wake of the Iran-Iraq War of 1980-88 in which Iraq employed chemical weapons on a large scale, and the revelations by the United Nations inspectors about the vast scope of Iraq's biological arsenal prior to the 1991 Persian Gulf War. Libya's efforts in 1993-96 to construct the world's largest chemical weapons plant southeast of Tripoli also raised public awareness of (WMD) proliferation. Finally, the March 1995 terror attack with a chemical nerve agent on the Tokyo subway revealed the nightmarish potential of (WMD) in the hands of terrorist groups."³

These events highlight both the threat and potential consequences of the current state of WMD proliferation today. US security depends on deterring use of these weapons in order to protect US national interests.

DETERRENCE TENETS

Deterrence strategy was perfected during the cold war to prevent nuclear weapons employment. As such, it represents an example of an enduring, successful deterrent strategy among major competitors. This section individually discusses the classic deterrence tenets, describes their use in deterring employment of nuclear weapons, and proposes relevant concepts for full spectrum WMD deterrence.

Broadly defined, deterrence induces restraint (of particular actions) by an adversary through the capability and threat of retaliation.⁴ The classic "end" for nuclear deterrence is to create a prohibitive consequence mindset in a nuclear equipped opponent in order to prevent a nuclear attack on US territory or citizens.⁵ Traditional nuclear deterrence theory implies a nuclear retaliatory response to the adversary's attack. Similarly, the "end" or goal of WMD deterrence must prevent the use of any WMD by state or non-state actors.

The successful US nuclear deterrence strategy required systematic development, refinement and consideration of the following elements of deterrence: ensuring a low probability for the adversary to inflict a *disarming first strike*; guaranteeing the *capability* to retaliate following an adversary's first strike; reinforcing the *will* to retaliate; and maintaining irrefutable *credibility*.⁶ Finally, for the entire strategy to be effective, each of these elements must be accurately *communicated* to every adversary. As a result of the dire consequences, deterrence then forced potential adversaries to assume *responsibility* for the development, control, and use of their arsenals of mass destruction. These tenets are equally applicable in the quest to deter an adversary's use of the spectrum of WMD and are discussed sequentially below.

Disarming First Strike.

This element of deterrence depends on the adversary's capability. In the case of nuclear weapons, if an adversary has the means to inflict a disarming first strike on a nation's retaliatory capability then deterrence through strength / reprisal is not possible. The United States relies on its nuclear triad to ensure survival of retaliatory capability should a preemptive attack be considered or attempted by an adversary.⁷ In effect, a disarming first strike must be an aggressor's military goal if thwarting a retaliatory response is necessary to achieve their strategic objective.

Current WMD equipped world actors have little hope of accomplishing a disarming US first strike. However, this fact may not restrain an adversary's actions should they be able to accomplish their objectives through first use of WMD. In other words, the US objective or target for a WMD first strike would not be the US nuclear or retaliatory military capability but some other US or international vulnerability. An adversary becomes more likely to use WMD when there is a high probability of achieving their objectives despite a subsequent US response. In order to achieve an acceptable level of deterrence, US WMD policy must ensure the adversary is unable to determine their ability to attain their strategic objective through use of WMD.

Capability for retaliation.

In nuclear deterrence parlance, this refers to the ability to inflict an unacceptable level of damage on an aggressor following their first use of WMD. As mentioned previously, the US nuclear triad provided a relatively secure and robust force available to wage nuclear war following first use. Following a nuclear event, the US must retain the ability to command and control responding forces. Intelligence must be able to identify appropriate targets for retaliatory operations. Weapons systems must meet a minimum level of reliability, accuracy, and provide the necessary weapons effects to ensure target destruction. Finally, the operation must be directed at targets of value to the adversary.⁸

Expanding the concept to WMD deterrence also requires the possible employment of the full spectrum of national power to insure successful retaliatory response. Nuclear deterrence restricted itself to a nuclear response as the means of inflicting unacceptable damage. However, the US no longer retains a capability to respond in kind with chemical or biological weapons—the remaining choices are either nuclear, conventional, or through some other instrument of national power. Fortunately, the US enjoys huge technological advantages in both nuclear and conventional forces reducing the need for the use of weapons with indiscriminate effects. Additionally, WMD employment short of nuclear war will have little effect on US command, control, intelligence, and retaliatory weapons designed during the cold war to operate across the full spectrum of military environments. In other words, US forces are likely to remain functional and fully capable of responding to an aggressor's first use of WMD.

However, this is not to say the US has the capability to successfully retaliate to all scenarios. The specific target and desired military and political consequences of a retaliatory strike will ultimately determine the retaliatory force requirements. In order to deter an adversary's WMD employment, appropriate target(s) for response must be determined by the US and communicated to the adversary while appropriate elements of power are clearly maintained to facilitate retaliation.⁹

The will to retaliate.

A nation must unambiguously demonstrate it has the will to retaliate in order to effectively deter WMD employment. The effects of nuclear attack are so destructive that it's credible the US would have the national will to respond in kind. However, the same national conviction may not be generated following employment of selected WMD with potentially reduced destructive impact. Thus, the need to marshal and demonstrate national will for appropriate retaliation becomes an important issue.

The public requires a logical argument for each WMD attack to mandate an appropriate retaliatory response. As previously stated, current force structure may inhibit a response in kind; therefore, national will must be marshaled to support appropriate retaliation that sufficiently punishes an adversary and deters future WMD employment. Steps must be taken early in a crisis to demonstrate and reinforce national will before the adversary commits to a course of action. The adversary must perceive a united America resolved to respond to possible WMD use in order to maximize the deterrent effect.¹⁰

Credibility.

Often cited as the most essential element of nuclear deterrence, credibility is ultimately the total impression created in an adversary's mind of the potential consequences resulting from their actions.¹¹ It includes the previous three elements and is reinforced by a nation's history, rhetoric, and willingness to act.¹² These factors combine to form an overall perception that a nation will follow its stated national policies. In nuclear deterrence strategy, credibility is achieved by adversaries recognizing US ability and resolve to respond according to stated retaliatory doctrine. Unequivocal world leadership, demonstrated ownership of the strategy, flexibility in application, and worldwide visibility of commitment, expectations and intent each contribute to a nation's credibility.

The WMD aspect of deterrence must flow from the same tenets. Credibility must be absolute and the US must seek to obtain international acceptance for possible and actual retaliatory measures. Essentially, all requirements for nuclear deterrence translate directly to the WMD scenario with additional emphasis on developing a flexible policy relevant to a wide range of actors and potential WMD threats.

Critical to deterrence is the perception created in an adversary's mind. Two additional (often overlooked) requirements exist for deterrence to succeed in theory and practice. These requirements are effective communication and assumed responsibility.

Communication.

The deterrence strategy must be effectively communicated to the adversary. Hiding retaliatory capability or failing to demonstrate the necessary will to even articulate the strategy reduces the deterrent effect on the opponent. Every opportunity to reinforce the deterrent policy must be seized. Traditional nuclear deterrence focused on a single adversary...red phones on president's / premier's desks / academic discussions / demonstrations of capability all contributed to open communication with the goal of disseminating the strategy and reinforcing its tenets.

WMD deterrence requires the same communication but is much more problematic. Given the range of possible actors and potential for proliferation, the strategy must be communicated worldwide. Additionally, traditional nuclear deterrence must be retained and perhaps expanded (due to the appearance of additional major nuclear competitors) simultaneously with the incorporation of WMD deterrence strategy into US policy. The overarching problem is ensuring the worldwide audience receives and understands the US WMD deterrence message. Any strategy promulgated must be coherent, unequivocally stated, and targeted to the worldwide audience including the leadership of all international actors.

Responsibility.

Responsibility was highlighted throughout nuclear deterrence strategy because national leadership was held accountable by their human population for the nuclear capability they created. This resulted in rational actions by nuclear capable nations regarding appropriate security, control, operational plans and restraint in foreign policy affairs.

Nations seeking and attaining WMD must understand the responsibilities associated with their possession...including the liabilities. Without responsibility, nations are likely to abrogate requirements for weapons security; fail to participate in the rational dialog that is the hallmark of deterrence; and ineffectively control their nation's WMD arsenal. In essence, a nation that abrogates responsibility for their WMD effectively loses control and potentially could cause a WMD event through negligence.

Summary.

The tenets of deterrence theory developed during the cold war to prevent nuclear conflict remain the bedrock of the only modern, successful deterrence strategy achieved. These same tenets—low vulnerability to a first strike, capability to retaliate, will to retaliate, credibility, communication, and responsibility—are applicable with slight modifications from their nuclear genesis to achieving a coherent WMD deterrence strategy. Each of these will be used throughout the rest of the paper to gauge current actions and to benchmark recommended changes to US strategy.

INCONSISTENCY WITHIN CURRENT US WMD DETERRENCE STRATEGY

This section begins by highlighting an impression of a current lack of clarity in the NSS and NMS with regard to WMD deterrence. Next, an inconsistent thread woven through capability, will, communication and the desired end state is shown to detract from credibility. Finally, the failure to force actors to accept responsibility for WMD development and capability is briefly discussed in order to highlight errors in US / UN international discourse. The goal of this section is to highlight several inconsistent messages which do not contribute to the "ends" of WMD deterrence strategy: preventing all state / non-state actors from employing any of the complete range of WMD. The results support the need for a comprehensive, coherent US strategy.

Communication.

The US provides information for world consumption via numerous means...officially promulgated documents (NSS, NMS), congressional / presidential agendas, academic discourse, and diplomatic communications are a few examples. The focus here is on the cornerstone US strategy documents—the NSS and NMS. The first US core objective according to the NSS is “to enhance our (US) security.”¹³ Nuclear deterrence is highlighted as “one of the most visible and important examples of how US military capabilities can be used to deter aggression and coercion...a hedge against an uncertain future, a guarantee of our security commitments to allies and a disincentive to those who would contemplate developing or otherwise acquiring their own nuclear weapons.”¹⁴ These words are echoed in the NMS with one important distinction: US strategic nuclear forces combine with conventional capability to yield a broader (yet wide-open and undefined) concept of “Strategic Deterrence.”¹⁵ However, no similar dedicated section is devoted to WMD deterrence despite the fact both documents put significant emphasis on WMD as the rising threat through 2010.¹⁶ Deterring WMD is mentioned time and again throughout the documents but it’s left to the reader to piece together a US strategy and make the needed connections between the NSS and the supporting NMS. This is the first error...failure to unequivocally communicate US WMD deterrence strategy to adversaries, allies, and neutral parties.

This failure to communicate relinquishes a golden opportunity for the US to lead the international community by articulating the limits of US tolerance towards those actors who may choose to pursue and employ WMD. Additionally, the ambiguity in the NSS can potentially lead to misperception of US intent (thereby reducing the credible threat of certain and devastating US retaliation) and cause an adversary to consider the first use of WMD as a viable course of action.¹⁷ Finally, inclusion of a WMD deterrence strategy will prepare the international community for US retaliation to the inevitable WMD event.

Capability, will, and communication.

The US no longer maintains the ability to respond in kind to many types of WMD. Therefore, US retaliation is limited to some combination of asymmetric response or a militarily (conventional or nuclear) reprisal. Since Operation DESERT STORM an unlikely connection between WMD employment against US forces and a subsequent nuclear response has been maintained as an unwritten and perhaps unintended norm. This occurred during Operation DESERT SHIELD when the US alluded to a nuclear response should Iraq use chemical weapons on coalition forces.¹⁸ Fortunately, deterrence was effective but linkage now remains between WMD use and US nuclear response. In essence, the statements during the Gulf War communicated a policy that currently undermines credibility and thus hamstring WMD deterrence.

This high-end (nuclear weapon) response may be effective in an active conflict scenario with a centrally run nation; however, the numerous issues listed later in this section limit the use of nuclear weapons against a non-nuclear WMD attack. Ultimately, the fact that an adversary can also predict possible US nuclear employment limitations for responses to WMD use creates a chink in the US’

deterrence armor by reducing US credibility. In other words, when stated US retaliatory policy is unlikely or infeasible, credibility is jeopardized and deterrence is uncertain.

One impediment to employing nuclear weapons in response to a non-nuclear WMD event is international acceptance and effects. When responding to WMD the US must be prepared to act alone; however, international acceptance of US actions is a critical factor to achieving a desired end state.¹⁹ A coalition response to WMD employment is preferable and at least tacit UN approval smooths international acceptance of the response. Automatic retaliation does little to build an international image of leadership and restraint and may play into the hand of the adversary. A historical example of this occurred during the Korean War following the Chinese Intervention. During a 30 November 1950 press conference, when President Truman was asked if the "atomic bomb (was) under active consideration" he responded by saying that it "always has been, it's one of our weapons." This exchange prompted passionate debate in London resulting in Prime Minister Clement Attlee flying to Washington to "obtain assurance from the president that he had no intention of using the bomb in Korea."²⁰ Presumably, the Chinese believed the dissension among the coalition precluded nuclear weapons employment and thus served to assuage the fear of their use.

Nuclear weapons also pose international environmental concerns not only for the adversary but also downwind nations (many of which may be US allies) who may receive fallout from the nuclear weapon attack. Regional and cultural effects likewise cannot be ignored. Since nuclear weapons have not been released in over 50 years, a stigma will be attached to whatever group is attacked. As a result, the nuclear reprisal will likely engender US hatred throughout the population empathetic to their plight and may create long-standing opposition for future regional goals. The overall effect from an unrestrained US retaliatory response may be a world much harder for the US to lead and create consensus during future international crisis.

An additional limitation is proportional response. In order to ensure a positive end state, the US should not make the mistake of responding to terror with terror. Adversaries attacking the US military during combat or deployed operations should anticipate limited success due to military preparations to deal with chemical and biological weapons. Indiscriminate WMD attacks on foreign civilians--while capable of inflicting serious damage--will not likely cause the US irreparable long-term harm. In both cases, a US nuclear response (essentially an unlimited event) could play into the adversary's aims by abrogating US world leadership and violating the US public's sense of proportionality and values. Clearly discernable by potential adversaries, these inconsistencies reduce credibility.²¹

Finally, the US National Command Authority (NCA) is not likely to convene following a WMD attack and rubber stamp an ill conceived policy of nuclear response to any WMD event without regard to the potential effects on the desired US end state. Additional courses of action will be required and all options will be evaluated based on their contribution to US national interests and their effect on the future of WMD deterrence. The end result of directly tying a nuclear response to a chemical or biological WMD attack reduces the credibility of a WMD deterrence strategy.²²

Therefore, the US should base its deterrent strategy on "weapons that can be used without fear of self-deterrence or of breaking up coalition forces that provide political legitimacy and military capability."²³ This logic pushes the US WMD deterrence strategy in the direction of conventional capabilities.²⁴ However, throughout deterrence theory a general rule states, "only nuclear weapons can deter the use of nuclear weapons."²⁵ As probably the most significant part of the WMD family, nuclear weapons must be retained as a cornerstone of WMD deterrence, not only to deter nuclear weapons use but for the positive contribution they make throughout a WMD deterrence strategy.²⁶ The key is to not promulgate a strategy that relies solely on or unintentionally adds emphasis to nuclear capability.

A useful term used throughout deterrence strategy is *purposeful ambiguity*. This refers to intentionally discussing ideas in vague terms in order to magnify the uncertainty in the mind of the listener. Appropriate use of *purposeful ambiguity* in deterrence strategy reduces an opponent's ability to calculate effects based on their knowledge of the anticipated response. The current WMD deterrence strategy fails to fully capitalize on *purposeful ambiguity*. An effective WMD deterrence strategy must lay out a range of potential responses with enough specificity to enhance credibility while portending severe consequences for the first use of WMD. However, the strategy must also be ambiguous enough to prevent the enemy from exploiting a predictable US response. The current strategy does neither.

Responsibility.

The final area revolves around US diplomacy and the treatment of nations seeking to develop, or having developed WMD. US policy tends to treat these states as pariahs as a result of their refusal to support non-proliferation. The reasons a nation / actor develops WMD are varied. Assuming they are rational actors, it is likely a logical and necessary development from their perspective. The tragic loss for US diplomacy at the juncture of WMD production is the loss of opportunity to engage in active discourse with the nation and delineate the responsibility they've chosen to shoulder.

Failure of non-proliferation must be expected in the varied world environment as less powerful nations feel threats the US can scarcely imagine. However, the act of including a nation into a pool of responsible WMD equipped actors allows the US to ensure responsibility is accepted. Diplomatic measures should ensure access for the US (or a reputable world leader) into an emergent WMD capable country to make contact with and assess their leadership and controls while ensuring the terms and liabilities associated with the acquisition of WMD are ruthlessly communicated and understood. Should emergent WMD actors decline the opportunity for discourse, their lack of cooperation and intransigence lends legitimacy to the implementation of sanctions and the range of possible WMD employment responses inherent in an effective WMD deterrence strategy.

COHERENT WMD DETERRENCE STRATEGY

WMD employment threatens each category of US interests: national, important, and humanitarian. National interests are affected by the direct threat of injury to US citizens and property. This is complicated by the fact terrorists and other non-state actors can act directly on US soil while taking refuge

in a host or unwitting nation. Important interests are also at stake when WMD is used to threaten or attack allies, not only by virtue of direct effects but also by the impact on international treaties and conventions. Humanitarian interests are jeopardized whenever WMD is used on civilian targets, potentially creating mass casualty situations requiring complex international assistance for resolution. Few issues touch all US (and the international community's) interests as profoundly as WMD employment. Thus, an effective WMD deterrence strategy is critical to deter, respond, and prepare for the future. The following sections combine to achieve the basis for a coherent WMD deterrence strategy.

World Leadership.

Dr. R. Craig Nation comments on the status of the United States in his unpublished manuscript *Regional Studies and Global Strategy*: "American leadership is less a goal than a fact...Maintaining US status and using the advantages of preeminence to good ends have become primary responsibilities for US security planners."²⁷ In the matter of a couple of sentences, Dr. Nation captures the current responsibilities of the US in today's world order. Developing and championing a WMD deterrent strategy is both in the US interest and required of the US by the less powerful nations of the world.

As the premier superpower, the US must take the lead on all issues pertaining to nuclear weapons and other WMD whether or not the US is the formal chair.²⁸ This lends credibility to US actions and provides a forum for the US to exert influence for the development of both effective non-proliferation and deterrence policies. Commitment to an effective WMD deterrence policy should be an international priority. However, the US should make it clear that it is willing and able to retaliate unilaterally when US national interests are threatened by WMD. This action serves to strengthen *credibility*, marshal national and international *will*, and ensures *communication* between all actors.

International Consensus.

The magnitude of the WMD threat has spawned significant international discourse for decades. Nuclear, chemical, and biological weapons accords restricting development or use of WMD each serve to demonstrate a degree of international consensus. The following four international agreements provide the foundation for determining an international norm regarding WMD.

- *The Geneva Protocol* (for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare). 17 June 1925, Ratified by 145 Nations.²⁹
- *The Treaty on the Non-Proliferation of Nuclear Weapons*. 5 March 1970, 181 Treaty Signatories.³⁰
- *The Biological Weapons Convention* (on the Prohibition of the Development, Production and Stockpiling of Bacteriological, Biological, and Toxin Weapons and on their Destruction). 10 April 1972, 159 Signatories.³¹

- *The Chemical Weapons Convention* (prohibits the development, production, acquisition, stockpiling, retention, transfer, and use of chemical weapons). 29 April 1997, 165 Signatories.³²

While international law is fuzzy at best, the tone set by these treaties and conventions is clear... the world order is moving towards outlawing these munitions.

As a result of this demonstrated international consensus, the case can and should be made to hold the leadership of any nation responsible for their violation(s) of international WMD policies. Leadership that permits or directs the first use of WMD is guilty of violating international norms and should be subject to the rule of international law. Likewise, supporting organizations are equally guilty given their knowledge of and tacit agreement for WMD development and use. An international agreement based on existing international law should specify standards of conduct for WMD capable nations / actors and firmly *communicate* the range of possible responses to WMD use.

The NSS reinforces the requirement for development of a united strategy. It specifies the US must ensure "justice is done" with regard to nations, terrorists, and other non-traditional actors that choose to attack the US or its citizens.³³ Once the US responds in "administering justice," the WMD deterrence strategy becomes stronger as national *will* and *credibility* are increased. If retaliation is supported multilaterally, international organizations also gain credibility and serve to deter both proliferation and possible future WMD use.

Facilitating WMD Responsibility.

US diplomatic measures must focus on nations / actors with WMD capability in a rational manner and not as pariahs. The typical judgmental, sequestering actions displayed as a result of a failed non-proliferation policy have no place when the consequence is a potential, avoidable WMD event. In particular, appropriate diplomatic engagement facilitates the type of *communication* that proved beneficial during the cold war and helped deter global thermonuclear war. Additionally, active diplomacy will aid to inculcate the implications and responsibility inherent in obtaining WMD capability while stimulating development of appropriate control measures. US credibility and influence are also enhanced by this rational, involved approach.³⁴

Communicate the US WMD Deterrence Strategy.

Engagement requires active communication with allies and adversaries alike. Each of the three previous engagement aspects will increase international communication. The US must continue the process by articulating the strategy in keystone publications. The NSS currently devotes one third of its content to regional approaches but scatters deterrence strategy throughout. Dedicated sections should be created to succinctly document US deterrence policies and to avoid unwanted ambiguity and misunderstanding. Additionally, WMD deterrence should be addressed separately from traditional nuclear deterrence. While the two are similar in many aspects (as discussed earlier), they are markedly

different in scope and range of responses. Again, this action serves to minimize confusion for emerging adversaries with regard to US interests, strategies and potential responses, thus ensuring the appropriate message is communicated.

Shaping the Threat via WMD Deterrence.

The WMD deterrence tenets discussed earlier provided a useful method to outline the needed structure for US engagement via an effective, coherent WMD deterrence strategy. As a result, significant but necessary changes in strategic direction are needed to facilitate the goals of WMD deterrence and guide US shaping efforts.

First, revise the perceived US WMD deterrence policy from an emphasis on nuclear response and implement the technique of *purposeful ambiguity* in order to provide retaliatory flexibility while maximizing the threat of retaliation perceived by the adversary. The US should define a response in terms of "suitable weapons from the range of US capability" allowing the adversary to visualize the range of possible consequences. This keeps the nuclear option available for those situations in which it might be appropriate but prevents the adversary from working against US interests by trying to provoke a politically disastrous response.

Second, as in nuclear deterrence, define the subject or target of the retaliatory response. Actions previously explained as part of the US engagement strategy should logically point to an expected target and clearly articulate possible consequences. Responsible leadership, support organizations and facilities must be held accountable and be placed at risk by US response. These targets would be developed and refined through a coordinated and effective information operation supported from throughout the international community. Additional, but less important targets are the WMD stockpile and supporting military infrastructure contributing to the production or delivery of the weapons.³⁵ These critical actions will make WMD development and responsibility clearly discernable and ensure the consideration of possible adverse consequences when an adversary considers conducting a WMD attack. Incidentally, President Reagan established a precedent for this type of policy in 1981 by saying: "Our targeting policy...places at risk those political entities the Soviet leadership values most: the mechanisms for ensuring survival of the Communist Party and its leadership cadres, and for retention of the Party's control over the Soviet and Soviet Bloc peoples."³⁶ There is a direct relation between President Reagan's deterrence effort and this paper's assertion that an adversary's leadership and support structure are the proper targets for a retaliatory strike. This can ensure the greatest deterrent effect by holding the adversary's leadership and the continuance of their strategy at risk.

Whenever a nation's leadership is discussed as a military target the idea is immediately trumped by the international norm of placing leadership outside the scope of the conflict and off limits to attack. Lieutenant Colonel Ralph Peters rationally examined this issue in his summer 1996 Parameters article "A Revolution in Military Ethics." He concluded the US allows opponents to operate with great latitude in environments unconstrained by laws, internationally recognized treaties, civilized customs, or by approved military behavior.³⁷ As a result of this minimal deterrence (US failure to prosecute a direct

attack against responsible leaders), criminal leadership is able to pursue their strategic ends at the expense of their population. The only way to break this chain of events, Peters emphasizes, is to stress the accountability aspects and to target the criminal leadership, their "paladins," and their enabling infrastructure.³⁸ These are the only ethical targets when conflict is conducted outside international norms.

Finally, national responsibility is maintained via this type of specific targeting strategy. The US is able to retain the moral high ground as efforts are made (as part of the strategy) to inform all actors of their responsibilities as a WMD owner. Likewise, the range of possible responses minimizes the impact on innocent citizens and thereby strengthens US national will while not alienating (or marshaling) will in the adversary's own country.

Third, cultivate national will, including both national will as perceived by the adversary and displayed national resolve as demonstrated by adequate preparation for retaliatory operations.

National will is strengthened by a coherent WMD strategy in numerous ways. First, the professional analysis and public debate that accompanies the development and implementation of a WMD deterrence strategy automatically lends credibility to the policy. Second, US public opinion usually supports a strategy developed through national discourse that logically explains proposed retaliatory responses and justifies corresponding funding requirements. Third, communicating the possible responses to WMD employment in public documents ensures the US civilian leadership and the American public are familiar with planned US actions before they are required. In essence, a fully communicated strategy provides complete transparency for the nation and international community. Additionally, it serves to prepare both for the possibility of a WMD attack while ensuring tacit approval of possible US responses.³⁹

Displayed national resolve refers to those actions a nation takes as the threat escalates to emphasize the seriousness of the situation, magnify US credibility, and identify the consequences of an adversary's WMD activity. One approach is to develop a series of protocols for use in situations where WMD capable adversaries threaten US / allied interests. These protocols should provide a series of escalating measures available for use by the NCA and Commander in Chiefs (CINCs) to respond to emerging threats and thus complicate the adversary's estimate of success while highlighting national resolve.⁴⁰ Additionally, articulating a range of protocols available allows the NCA the opportunity to marshal national will and tailor the possible consequences to avert and deter an identified aggressor.⁴¹ The following menu of military oriented, WMD deterrent protocols are similar to flexible deterrent options currently employed by regional CINCs to deter aggressive actions by nations in their area of responsibility. While by no means a complete list, the protocols presented are representative of the options available to deter an emergent WMD threat.

1. *Extend US retaliatory response and protection to threatened allies.* US peacetime engagement activities must reinforce US commitment to assist allies in their defense against regional WMD equipped adversaries. This WMD "extended deterrence" has its roots in the Cold War as the US nuclear "umbrella" was "extended" to US allies in the North Atlantic Treaty Organization.⁴² The reinforcement must be

unequivocal and imply full US support and response. Numerous studies suggest deterrence measures must be emphasized early in a crisis before an adversary commits to a course of action and becomes less responsive to warnings.⁴³

2. *Employ US security systems within the threatened theater.* As the threat escalates, the US must deploy appropriate theater warning and missile defense systems within the theater to inhibit an adversary's WMD attack via conventional air launched means.⁴⁴ If appropriate, US military forces should deploy to heighten security at the allied nations entry points (ports, airfields, major land arteries). The potential range of assets could include Coast Guard and Naval forces, Military and Security Police, Special Forces, and needed expertise and technology to raise the probability of detection of WMD devices.

3. *Employ consequence management and force protection capability within the theater.* As US assets are deployed into theater, force protection measures must be employed and highlighted. Specifically, those measures designed to allow US forces freedom to operate in a chemical or biological environment will have the greatest effect to impress on the adversary the futility of attempting a WMD attack.⁴⁵ US foreign military sales / assistance programs should be initiated to also increase the capability of allied forces to operate in contaminated environments.

4. *Deploy US retaliatory capability to the theater.* With any force deployment as a result of a WMD threat, the US must deploy response capable military forces (preferable on the ally's soil) to improve and amplify US / allied response capability, demonstrate the will to respond, and enhance credibility. These forces must be both visible and capable of successful retaliation in accordance with promulgated US WMD deterrence policy. The scope and capability of deployed forces will signal clear resolve to respond and increase the credibility of possible retaliatory actions.⁴⁶

5. *Announce strategic nuclear re-targeting and / or deployment of tactical nuclear weapons.* Nuclear posturing actions should be conducted at the appropriate point to emphasize the range of capability the US enjoys when confronted by an aggressive WMD equipped adversary. These actions could include publicly announcing targeting changes to strategic nuclear weapons and / or forward deploying tactical nuclear weapons as visible support to US / allied national interests and commitment to WMD deterrence.⁴⁷

6. *Conduct an information campaign highlighting potential responses to a WMD attack.* Throughout the escalating WMD threat, the US must reemphasize WMD deterrence strategy to the UN, US public, allied leadership / citizens, and the adversary in order to enhance credibility and prepare the international environment for an expected retaliatory response. This information operations campaign must center on international law and promulgated US WMD deterrence strategy. These responses should be coordinated with the "at-risk" allies and international organizations to increase their deterrent effect.

7. *Conduct selective pre-emptive strikes to neutralize the threat.* With reliable intelligence information, conduct pre-emptive conventional attacks on the adversary's WMD infrastructure, or in other

words, conduct "deterrence by denial."⁴⁸ Appropriate targets include research and production facilities, storage areas, employment means, and command and control. The US and other nations have already set precedents for such attacks, the most recent being the 1998 US cruise missile attack on a pharmaceutical plant in Khartoum, Sudan. Defense Secretary William Cohen stated the "facility produced the precursor chemicals that would allow the production of a type of VX nerve agent...that was sufficient connection for us (to conduct the attack)."⁴⁹ An example of a US ally conducting a similar strike to prevent WMD production is provided by the 1982 Israeli F-16 attack on the Osirak nuclear facility near Baghdad. Intelligence sources confirmed Iraq's intent to produce nuclear weapons at the facility. Timing for the raid was driven by the reactor's startup date in order to limit danger to the surrounding community.⁵⁰

A combination of perceived and displayed US national will serves the strategy by guaranteeing an appropriate US response to a WMD attack and thereby causing an adversary to reassess their potential for success.

Summarizing, a coherent WMD deterrence strategy depends upon the credibility of the articulated and likely retaliatory consequences. Each of the recommendations above, developed with careful attention to each deterrent tenet, is designed to show firm US commitment to a strategy of deterring WMD attack. However, WMD deterrence may still fail due to the magnitude of WMD proliferation or due to some unpredictable action by an irrational WMD capable adversary. At some point, the US will need to respond to a WMD event.⁵¹

RESPONDING TO A MANIFESTED WMD THREAT AND PREPARING NOW FOR THE FUTURE

The previous section outlined the necessary requirements for a coherent WMD deterrence strategy. However, the strategy will be ineffectual if the US cannot adequately respond to an actual WMD attack. The remaining portions of this paper examine how WMD deterrence should influence the final two tenets of the current US engagement strategy "Shape, Respond, Prepare Now."

Respond.

The purpose of a retaliatory response must be measured against achieving the desired US end state: maintaining US international leadership; maintaining viability of the WMD deterrence strategy; and preventing future WMD use by the adversary. The focus for the response should be the adversary's leadership, support organizations, and WMD production / delivery means. The means of response will be defined by the situation. There must be consistency with the response, current deterrence strategy and future credibility. However, a broad range of US actions are needed to complement the retaliatory response.

In all cases, international condemnation for the WMD attack must be sought, and if possible, international support marshaled for the response. An aggressive information operations campaign conducted immediately after the attack should justify possible US responses and emphasize the long-term precedents set by a weak or inadequate response. Response should occur as rapidly as possible to

take advantage of international condemnation of the adversary's "smoking gun." Depending on the situation, the response may not involve military action. On occasion, the Justice Department or in-country law enforcement agencies should be charged with the responsibility for bringing the leadership to justice, uncovering and neutralizing the support structure, and seizing WMD assets for civil trial / disposal. When appropriate to the circumstances, a military response is a viable means of ensuring national interests are served. In all cases, international visibility of the response must be ensured to lend continued credibility to future WMD deterrence. Guertner makes the point that deterrence is perishable... "It wears out and must periodically be revived. Failures of deterrence provide the opportunity to demonstrate the price of aggression, rejuvenate the credibility of deterrence, and establish a new period of stability."⁵² In other words, failure to deter a WMD attack provides the opportunity to deter future attacks through effective retaliation.

Prepare Now (For an Uncertain Future).

Effective response must be guaranteed throughout future scenarios. The first requirement is to identify needed improvements in both the ways and means of future deterrent strategies. Defensive actions must continue to mature in the areas of consequence management, military force protection, and area defense. Fortunately, each area is receiving substantial attention although missile defense has suffered as a consequence of unreliable technologies.⁵³

Second, the ability to effectively deter a future aggressor depends on identifying the responsible leadership, support structures, and their values in order to tailor an appropriate response.⁵⁴ This, to a large extent, is dependent upon Human Intelligence (HUMINT) sources of information. However, US intelligence capabilities have receded in the area of HUMINT due to budget constraints. Consequently, an effective strategy may dictate improvement in HUMINT capability for the US military, Central Intelligence Agency, and Federal Bureau of Investigation. At a minimum, improvements and prioritization for limited funds should be directed towards improving HUMINT programs in current or potential WMD adversaries.

Finally, the US must continue to emphasize conventional weapons capability as adversaries dig deeper into the earth in an attempt to evade / negate US retaliatory response to their WMD employment.⁵⁵ These hardened facilities are designed and constructed to protect command / control, WMD systems, components, and production facilities from current conventional weapons—essentially the targets recommended as the focus for retaliation.⁵⁶ Future conventional capability must be resident in the US arsenal that ensures detection, identification, and destruction of these protected resources.

Adequate funding for the above areas is critical to the development of the required means necessary to facilitate WMD deterrence strategy implementation. The development, fielding, and demonstration of these weapons and techniques may be sufficient to promote the necessary psychological effect on our WMD equipped adversaries. The overall intent is to raise the consequences

of WMD employment far above the projected benefits while driving the probability of a successful WMD attack closer to zero.

CONCLUSIONS

Despite the international community's best efforts at halting WMD proliferation, the threat continues to increase for a multitude of reasons. As a result, deterrence of a WMD attack must become an international priority. A blueprint for this strategy is available from the tenets of traditional nuclear deterrence. These tenets, applicable with minor modifications, serve to chart the course for US leadership towards a coherent WMD deterrence strategy.

As the preeminent world power, the US must accept responsibility for this challenge. Initial steps include building international consensus for a tacitly approved WMD deterrence strategy while soliciting criminal condemnation of WMD first use. Recognizing nations will still acquire WMD for a variety of reasons, the US must change its methods of dealing with WMD capable nations from one of exclusion to one of engagement in order to build responsible behavior. Part of this transition should include focused, unequivocal communication of the WMD deterrence strategy in a variety of means for both the targeted nation and worldwide consumption. The US can help disseminate this message through the inclusion of these provisions in a revised NSS and NMS.

International engagement towards WMD counter proliferation begins with a sound domestic policy and a nationally accepted deterrence strategy. An effective defense against a WMD attack is the surest means to complicate and avert an adversary's strategy. Recent advances in US ability to conduct consequence management and technological advances to defend against medium range ballistic missile threats are huge strides in this direction. The US currently maintains the capability to retaliate rapidly to WMD attacks but a shift in direction is required. Instead of attempting to deter via the threat of overwhelming response, the US must shift to appropriate, flexible retaliation directed at specific targets: adversary leadership; personnel responsible for developing, acquiring, and using WMD; and the WMD support / production / delivery means. These are the targets with the greatest potential to place at risk what the adversary values most, prevent future WMD attacks, and maintain US credibility while strengthening the deterrent strategy.

Moreover, national will must be cultivated as an integral part of a coherent strategy. The adversary must clearly perceive civilian leadership and public acceptance of the strategy. As situations develop with a manifested threat, specific protocols should be developed and implemented to amplify US credibility, guarantee support for allies, and demonstrate commitment to the strategy.

In essence, each step of a coherent WMD deterrence strategy should contribute to US credibility. With absolute credibility the US is able to deter the WMD threat while retaining the ability to exert international leadership in an increasingly hazardous future.

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ENDNOTES

¹ A National Security Strategy For a New Century. The White House. (Washington DC: October 1998), 6.

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⁶ Ibid., 81.

⁷ Stansfield Turner, Caging the Nuclear Genie, an American Challenge for Global Security (Boulder, CO: Westview Press, 1997), 14.

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¹⁰ Ibid., 10.

¹¹ Peter R. Beckman et al. The Nuclear Predicament: Nuclear Weapons in the Cold War and Beyond (New Jersey: Prentice Hall, 1992), 81.

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¹³ A National Security Strategy For a New Century. The White House. (Washington DC: October 1998), iii.

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¹⁹ Gary L Guertner, "Deterrence and Conventional Military Forces." Washington Quarterly. Vol 16, No. 1 (Winter 1993):, 142.

²⁰ Martin Russ, Breakout: the Chosin Reservoir Campaign, Korea 1950 (New York, NY: Fromm International Publishing, 1999), 251.

²¹ Robert G. Joseph and John F. Reichart, Deterrence and Defense in a Nuclear, Biological, and Chemical Environment (Washington D.C., National Defense University Press, 1996), 23.

²² Ibid.

²³ Gary L Guertner, "Deterrence and Conventional Military Forces." Washington Quarterly. Vol 16, No. 1 (Winter 1993): 143.

²⁴ Ibid.

²⁵ Colin S Gray, "Deterrence in the New Strategic Environment." Comparative Strategy. Vol 11, No 3 (July-September 1992): 258.

²⁶ Keith Payne, "Deterrence and U.S. Force Requirements After the Cold War." Comparative Strategy. Vol 11, No 3 (July-September 1992): 270.

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³⁷ Ralph Peters, "A Revolution in Military Ethics?," Summer 1996; available from <http://carlisle-www.army.mil/usaws/parameters/96summer/peters.htm>; Internet; accessed 8 December 1999.

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⁴⁰ The ideas for this paragraph are based on numerous discussions with USA Colonel Edward Filiberti (of Infantry) during October – December 1999.

⁴¹ Keith Payne, "Deterrence and U.S. Force Requirements After the Cold War." Comparative Strategy. Vol 11, No 3 (July-September 1992): 269.

⁴² Gary L Guertner, "Deterrence and Conventional Military Forces." Washington Quarterly. Vol 16, No. 1 (Winter 1993): 141.

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⁵⁰ The Jewish Student Online Research Center, "Raid on the Iraqi Reactor (1981);" available from <http://www.us-israel.org/jsource/History/Osirak.html>; Internet; accessed 21 February 2000.

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⁵⁵ George H. Quester and Victor A. Utgoff, "US Arms Reductions and Nuclear Nonproliferation: The Counterproductive Possibilities." Washington Quarterly. Vol 16, No. 1 (Winter 1993): 136.

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