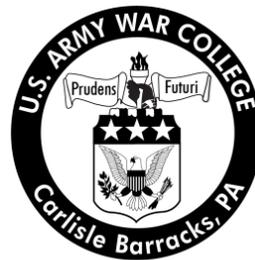


Post Cold War Nuclear Weapons Policy

by

Lieutenant Colonel Timothy P. Fischer
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United States Army War College
Class of 2012

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USAWC STRATEGY RESEARCH PROJECT

POST COLD WAR NUCLEAR WEAPONS POLICY

by

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Nuclear weapons have been a central element of the United States strategic arsenal since the time they were first developed during World War II. During the Cold War they prevented war with the former Union of Soviet Socialist Republic, U.S.S.R. and helped to defend Europe from Soviet aggression. The collapse of the U.S.S.R. and the end of the cold war has changed the balance of power in the world and caused the U.S. to reexamine its policy for the use of nuclear weapons. This paper examines U.S. policy options for nuclear weapons employment after the fall of the Berlin wall and the end of the Cold War. After a brief overview of the Cold War era, it examines the problems of the present day by assessing the post Cold War actors who threaten stability, and by evaluating the threat posed by both present-day nuclear states and aspiring nuclear powers, and, finally, by evaluating the threat posed by chemical weapons. The essay argues the advantages of an ambiguous nuclear policy to maximize deterrence.

POST COLD WAR NUCLEAR WEAPONS POLICY

Nuclear weapons have been a central element of the United States strategic arsenal since the time they were first developed during World War II. During the Cold War they prevented war with the former Union of Soviet Socialist Republic, U.S.S.R. and helped to defend Europe from Soviet aggression. The collapse of the U.S.S.R. and the end of the cold war has changed the balance of power in the world and caused the U.S. to reexamine its policy for the use of nuclear weapons. This paper examines U.S. policy options for nuclear weapons employment after the fall of the Berlin wall and the end of the Cold War. After a brief overview of the Cold War era, it examines the problems of the present day by assessing the post Cold War actors who threaten stability, and by evaluating the threat posed by both present-day nuclear states and aspiring nuclear powers, and, finally, by evaluating the threat posed by chemical weapons. The essay argues the advantages of an ambiguous nuclear policy to maximize deterrence.

When the Americans dropped nuclear bombs in Japan they demonstrated to the world the destructive nature of nuclear weapons and the power maintained by the U.S. as long as they were the only nation that possessed such weapons. Additionally, after the destruction caused by nuclear weapons in Japan, the United States realized that nuclear weapons were unlike any other weapon and that they would change strategic policy in the world. The end of World War II resulted in the emergence of the Soviet Union as a potential threat to the rest of Europe and, by extension, as a threat to the U.S. The U.S. used the threat of nuclear weapons to offset the size and capabilities of the large Soviet army for the defense of Europe. After the war the U.S. now had the

ability to strike the Soviet Union with long range bombers staged from the U.K. and armed with nuclear weapons; it relied on this strategy as a deterrent against Soviet aggression. The U.S. maintained this strategy as long as it held a monopoly on nuclear weapons.¹ Once the Soviet Union acquired nuclear weapons the U.S. had to change its strategy for the defense of Europe.

From the initial use of the atom bomb against Japan until well into 1947, the limits of the weapon governed its use in U.S. strategy. Their limited numbers and the cost to produce them, as well as the range limits of the delivery vehicle, the B-29 bomber, meant the U.S. still needed to rely on a conventional force in its strategy.² Additionally, the U.S. realized that the atom bomb was unlike any other weapon in its arsenal and that the destructive nature of the atom bomb meant it could not be employed like other weapons; it was considered to be a weapon of last resort. This concern was illustrated by President Truman when he commented:

I don't think we ought to use this thing unless we absolutely have to. It is a terrible thing to order the use of something that is so terribly destructive beyond anything we have ever had. You have got to understand that this isn't a military weapon. It is used to wipe out women, children and unarmed people, and not for military use. So we have to treat this differently from rifles and cannon and ordinary things like that.³

The emergence of the Soviet Union as a threat to Europe in 1948 caused the U.S. to drastically change its strategy. By this time the range limitations were removed with the introduction of the B-36 bomber, and advances in fissionable materials meant the U.S. could produce far more atom bombs, removing constraints of scarcity. The main focus for the employment of nuclear weapons starting in 1948, code-named Half Moon, involved two main objectives: slowing down advancing troops, and striking economic targets to compel surrender. Although there was debate about the political

effects of employing nuclear weapons, American policymakers relied on nuclear bombs as the best alternative to the threat of a much greater conventional Russian military.⁴

The role of nuclear weapons was largely as a deterrent against Soviet aggression.

MAD and Cold War Stability

When the Union of Soviet Socialist Republics, U.S.S.R., detonated an atomic bomb in August 1949, the U.S. lost its monopoly and the arms race began. Although it took a number of years for the U.S.S.R to build an arsenal of atomic weapons, their acquiring the atom bomb did not cause the U.S. to back away from its strategic policy; instead, the U.S. increased the destructive capabilities of its nuclear weapons.⁵ By the 1960s, this increase in both the number and destructive capabilities of nuclear bombs ultimately lead to a bipolar Cold War standoff, and to the policy of “Mutual Assured Destruction” (MAD). Under MAD, the robust second strike capability of each side means that neither one can “prevail” in a nuclear exchange: both sides will suffer unacceptable damage. Historian Gerard J. DeGroot described “MAD” by saying, “If you want a stable nuclear world . . . it requires . . . an understanding that if either side initiates the use of nuclear weapons, the other side will respond with sufficient power to inflict unacceptable damage”.⁶

This ‘balance of terror’ led to the world enjoying a period of stability with regard to nuclear weapons employment. Although each side maintained a sufficient arsenal of nuclear weapons to combat the other, the threat of retaliation prevented either side from using them. It was understood that each side, if attacked, maintained the ability to launch a counter strike. The ability to launch a counter attack was assured by hardening launch facilities and maintaining multiple launch sites, and, by 1961, included the ability to launch nuclear weapons from a submarine force.⁷ The threat of a counter strike acted

as a deterrent which prevented either side from launching a first strike with nuclear weapons. Each side understood that any nuclear first strike would result in a counter strike that would bring about the annihilation of both combatants'. But, it also led to an arms race resulting in each side acquiring numerous weapons. At the height of the race the U.S. nuclear arsenal numbered over 32,000 weapons and the U.S.S.R. over 45,000, including strategic missiles, tactical bombs, artillery shells, land mines, torpedoes, and anti-ballistic missiles⁸.

Although other nations, including the United Kingdom, France, and China had nuclear weapons, the stalemate between the U.S. and the U.S.S.R. dominated the nuclear environment. As the two super powers aligned against each other, they built alliances with other nations to assure their mutual defense and prevented either side from employing a first strike with a nuclear weapon. This balance stayed in place until the fall of the Berlin Wall. While it was a frightening and nerve-wracking balance, especially in terms of crises, it produced a rough parity that preserved the Cold War peace.⁹

Even with this balance of power the world understood the destructive capabilities of nuclear weapons. The UN implemented a policy to control the spread of nuclear weapons, with the ultimate goal of eliminating all nuclear weapons, through the Nuclear Non-Proliferation Treaty, (NPT) which was brought into force in 1970.¹⁰ When introduced, the NPT aimed to reduce the number of nuclear weapons maintained by nuclear states and to prevent other nations from acquiring them. As noted by the 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the NPT is a landmark international treaty designed to prevent the

spread of nuclear weapons and weapons technology, and to promote the peaceful uses of nuclear energy with the ultimate goal of eliminating all nuclear weapons. “The NPT represents the only binding commitment in a multilateral treaty to the goal of disarmament by the nuclear-weapon States.”¹¹

The fall of the Soviet Union in 1989 created emerging nations, shifting the balance of power and leading other states and non-state actors to decide that they also needed nuclear weapons. Indeed, the end of the Cold War and the dissolution of the former Soviet Union changed the balance of power in the world as well as the stability held by the two super powers. This change resulted in other nations acting on their desire to acquire nuclear weapons, and it has presented new challenges for the U.S., including nuclear proliferation, and nuclear terrorism.

Since the end of the cold war, the strategic situation has changed in fundamental ways. *The Nuclear Posture Review*, April 2010 states; “With the advent of U.S. conventional military preeminence and continued improvements in U.S. missile defenses and capabilities to counter and mitigate the effects of CBW, the role of U.S. nuclear weapons in deterring non-nuclear attacks – conventional, biological, or chemical – has declined significantly.”¹²

It goes on to say that “To that end, the United States is now prepared to strengthen its long-standing negative security assurance by declaring that the United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT and in compliance with their nuclear non-proliferation obligations”.¹³

Currently, the U.S. is relying on its conventional forces as a response to any WMD attack other than nuclear.

Post Cold War Actors

The U.S is now in an era where nuclear technology is open to more actors with the effect of destabilizing the world. According to a 2007 study by the Center for the Study of Weapons of Mass Destruction, “today we are in a more complicated situation than we were at any other time in the nuclear era. Nuclear knowledge, technology, and materials capacity and potential are accessible to a growing number of states and non-state actors whose goals and ambitions are unknown.”¹⁴ This instability threatens the success and future of the NPT. According to scholar Joseph F. Pilat,

While the vision of a nuclear-weapon-free world is powerful, both existing nuclear powers and proliferators are unlikely to forego nuclear weapons entirely in a world that is dangerous and uncertain. Moreover, the emerging world would not necessarily be more secure and stable without nuclear weapons. Even if nuclear weapons were given up by the United States and other nuclear-weapon states, there would continue to be concerns about the proliferation of nuclear, chemical and biological weapons, which would not disappear and could worsen. WMD terrorism would remain a concern that would be largely unaffected by U.S. and other nuclear-weapon-state decisions.¹⁵

To date the Nuclear Proliferation Treaty (NPT) has failed to prevent the spread of nuclear weapons. Although one could argue the NPT has slowed the proliferation of nuclear weapons since the time it was brought into existence until today, additional states have nonetheless become nuclear states. In 1970, there were only five nations with nuclear weapons: the U.S., the former U.S.S.R., the United Kingdom, France, and China.¹⁶ Since that time, four additional states have acquired nuclear weapons; India, Pakistan, South Africa (although the latter has now demilitarized their nuclear stockpile), and North Korea.¹⁷ Additionally, Israel is believed to possess nuclear weapons but has not conducted any documented tests to reveal its status, nor has it admitted to owning

nuclear weapons.¹⁸ Another three states have actively sought to acquire nuclear weapons: Iraq, Libya, and Iran.¹⁹

In addition to the nations that have acquired nuclear weapons, some terrorist organizations, Al Qaeda specifically,²⁰ have expressed a desire to acquire nuclear weapons. Al Qaeda's former leader, Osama bin Laden, stated it was a "holy Duty" to acquire nuclear weapons. Currently the threat of a terrorist attack against the U.S. or an ally is more likely than a deliberate attack by a state.²¹

With the current changes in the governments of Iraq and Libya it is unclear if they still desire or will pursue nuclear weapons technology. It is clear that Iran and other non-state actors still desire a nuclear weapon. The desire by Al Qaeda is fueled by its mission of causing terror; it sees a nuclear weapon as the means to inflict mass casualties and mass terror.²² There are several reasons why Iran wants to join the other nuclear armed states. Three of these, according to author Alexander Shalashniy, are: 1) a desire to become the preeminent power in its natural sphere of influence and inherent competition with Saudi Arabia and Israel; 2) a desire for immunity to international sanctions and any effort at regime change; 3) a counterweight to regime weakness and internal divisional infighting.²³ Another justification used by Iran and noted by Giora Eiland is the fact that there is no Shiite Muslim state with nuclear weapons: "In the eyes of Iranians, everyone has nuclear weapons: Christians, Hindus (e.g., India), Buddhists (in other words, China), Jews (Israel), and even Sunni Muslims (Pakistan). Why is it just the Shi'ites that are not allowed to have nuclear weapons?"²⁴

Although the Iranians declare several justifications for their acquiring a nuclear weapon, the possibility of a nuclear Iran strikes fear in other Middle Eastern states like

Saudi Arabia. Author David Cortright has written: “The development of nuclear weapons in Iran also strikes fear in the hearts of conservative Sunni government leaders and might prompt Saudi Arabia, Egypt, and other countries to reconsider their nonnuclear status, sparking a nuclear arms race to complicate the region’s already troubled political relations”.²⁵

A nuclear armed Iran is also troubling for Israel. Iranian leaders have often stated their desire to rid the world of Israel. In 2001 the former president Akbar Hashemi Rafsanjani stated: “If one day the Islamic world is also equipped with weapons like those that Israel possesses now, then the imperialists’ strategy will reach a standstill because the use of even one nuclear bomb inside Israel will destroy everything. However, it will only harm the Islamic world. It is not irrational to contemplate such an eventuality.”²⁶ Naturally the Israelis hear such arguments as reinforcement of the idea that Iran will use a nuclear weapon against them if Iran acquires them. Jewish Holocaust history causes the Israelis to take sweeping threats very seriously. Iranian possession of a nuclear weapon could prove to be highly destabilizing; it could threaten the NPT and lead to even more states gaining nuclear status. The Israelis concern is shared by the U.S., as demonstrated by Secretary of Defense Leon Panetta’s speech to the American Israel Public Affairs Committee. In his speech Secretary Panetta stated, “No greater threat exists to the security of Israel, to the entire region and, indeed, to the United States than a nuclear-armed Iran.”²⁷

The increase in the number of both state and non-state actors who are, or desire to become, nuclear states is shifting the terrain on which U.S. nuclear policy rests. When the former Soviet Union collapsed, “loose Nukes” became a possible source of

obtaining a nuclear weapon. “Loose Nukes” is the term originally used to describe the nuclear weapons that were poorly guarded in the former Soviet Union. The term also refers to the materials or know-how that may fall into the wrong hands as well as the possibility former Soviet nuclear scientists might sell their skills to the highest bidder.²⁸

The growing danger from nuclear weapons is not only caused by the proliferation of capabilities to regimes but also from the continuing issues surrounding “loose nukes” in the former Soviet Union. In the areas within the original U.S.S.R the possibility of profiting from the remnants of the Cold War is irresistible to would-be nuclear smugglers. Currently there are hundreds of tons of bomb-grade material that remain under less-than-secure conditions.²⁹ Even though major steps have been taken to secure former Soviet weapons and nuclear material, this material remains a target for the acquisition of a nuclear devices and increases the likelihood that either a nation states, (like Iran), or a non-state actors (like Al Qaeda) will become nuclear capable.

Future Stability

How will this increase in the number of nuclear capable states and actors affect stability throughout the world? There are two schools of thought prevalent in this regard. One side believes that the increase in the number of nuclear states increases the stability of the world, while the other side believes this increase in nuclear armed states increases the possibility of a weaker state employing a nuclear weapon in a first strike attempting to use it before it loses it. Which view turns out to be correct is yet to be determined. What is clear is that the future of nuclear weapons and their role in policy is changing.

Those who believe that more nuclear states are better, like Kenneth N. Waltz, point out that the reason nuclear weapons were not used during the Cold War was the

threat of retaliation against whoever used nuclear weapons first.³⁰ They believe that the fear of new states acquiring nuclear weapons is unwarranted and that additional states should be welcomed as nuclear armed states because such weapons are actually a source of stability. Waltz argues that the likelihood of nuclear war decreases as deterrent and defensive capabilities increase. Nuclear weapons make it hard for a nation to miscalculate the stakes involved when going to war, and the gradual spread of nuclear weapons is therefore more to be welcomed than feared.³¹ He provides three main reasons for this belief: 1) International politics is a self help system and parties determine their own fate; 2) nuclear weaponry makes miscalculation difficult; 3) new nuclear states will feel the same constraints that present nuclear states have experienced, and will not enter into war.³² Waltz understands that actors tend to become cautious when the stakes are very high. And stakes get no higher than when nuclear weapons are concerned.³³

Taking a contrary position are those, like Scott D. Sagan, who believe that more nuclear armed states contribute to instability and a greater potential for nuclear war.³⁴ They believe that one state may use nuclear weapons against an opponent in an attempt to prevent the opponent from acquiring nuclear weapons. Currently, there is the possibility that a state may take aggressive conventional action against an opponent to prevent them from acquiring nuclear weapons.

If the aggressor state does not have a strong enough conventional force to take action, but does have nuclear weapons, they might use a nuclear strike to prevent an opponent from becoming a nuclear-armed state. Another concern is the possibility that two lightly armed nuclear states who were considering war might initiate the war with a

nuclear strike because they do not have a retaliatory strike capability and they fear the actions of their opponent. Under either of these scenarios, more is not better, but indeed far worse for the stability of the world (and in direct conflict with the NPT). According to Sagan and those who agree with him more nuclear armed states will lead to even more proliferation as new nuclear states attempt to establish retaliatory strike capabilities by growing their stockpiles and hardening their launch facilities.

Current Nuclear Threat

According to Robert S. Norris in *Global Nuclear Stockpiles 1945-2006*, Russia leads the world in the number of nuclear weapons possessed. It is followed by the United States, France, China, the United Kingdom, Israel, Pakistan, India and North Korea.³⁵ As the U.S. considers future policy for employing nuclear weapons it is important to look at the threat of attack by both nuclear armed states and non-state actors who seek a nuclear weapon. Although only a few states have published their nuclear employment policy, it is possible to estimate the likelihood of an attack by nuclear armed states and non-nuclear armed states and non-state actors who desire nuclear weapons. Although France and the United Kingdom are nuclear states, the possibility of confrontation with either is so remote that they are excluded from consideration here.

Although the fall of the Berlin Wall improved relations between the U.S. and Russia, the Russians are unwilling to change their policy toward the use of nuclear weapons. After the collapse of the Soviet Union, the U.S. and Russia started to cooperate on several issues, to include securing loose nuclear weapons. Russia assumed the seat at the United Nations formerly held by the Soviet Union, and is a voting member of the Security Council.³⁶ However; recent tensions led to Russia

declaring, in 2000, that it would continue to rely on nuclear weapons. In the document, Russia specified that it would use nuclear weapons in response to both nuclear and conventional attacks.³⁷ This policy clearly states that Russia is not limiting nuclear retaliation to nuclear attacks, but may also use nuclear weapons if attacked by conventional forces. Although Russia continues to rely on their nuclear arsenal as a deterrent, there is no indication that a U.S. - Russia nuclear confrontation is likely. However, several European allies feel vulnerable to Russian military coercion and are dependent of Russia for energy needs. Russia no longer believes it has a large enough conventional force to defend its territory or interests and is putting increased emphasis on its tactical nuclear weapons. Russia is believed to have roughly 3,800 operational tactical warheads with a large number in reserve that could threaten a regional conflict.³⁸

China is taking aggressive economic and military steps on the world stage. It has moved into new economic areas and expanded its military capabilities. After the fall of the Berlin Wall relations between the U.S. and China improved and in 2001, then - President George W. Bush granted China permanent trade status and “most-favored-nation treatment”; this status opened the door for better bilateral economic relations and trade between the two countries.³⁹ China became a signature state to the NPT in 1992 and was the first state to adopt a nuclear “no first use” policy. Additionally, China, in its 2010 Defense White Paper, declared it would not use a nuclear device against a non-nuclear state.⁴⁰ This policy implies China will only use nuclear weapons in retaliation for an attack by nuclear weapons and will not use them to respond to either conventional

attacks or attacks by other WMDs. Although the possibility of conflict with China is low, the U.S. and China have many differences over Taiwan and it is a potential flashpoint.

China is reported to have a stockpile of approximately 400 nuclear weapons of which roughly 40 are Intercontinental Ballistic Missiles (ICBMs) capable of striking the U.S. Additionally, China maintains roughly 100 medium and intermediate range missiles that can reach U.S. allies in Asia, including the U.S. bases there. China's White Papers include a commitment to enhance and diversify its nuclear force by fielding road-mobile missiles and strategic missile submarines. China's ICBM's could double in size in the next 15 years and its ambiguity about its capabilities and intentions is a significant concern. The U.S. continues to engage diplomatically with China over Taiwan and all parties are committed to a peaceful resolution.⁴¹

North Korea is also a nuclear armed state that causes concern for the U.S., and for the future of the NPT. U.S. diplomatic relations with North Korea are strained at best, and North Korea remains a threat to South Korea, a long standing partner to the United States. North Korea initially signed the NPT but resigned from the treaty, and, in 2006, conducted a nuclear weapons test. North Korea maintains over 100 mobile short and medium ballistic missiles capable of carrying a nuclear warhead; however they are believed to have less than 10 nuclear weapons. Additionally they are in the process of developing liquid-fueled rockets capable of serving as a first-generation long-range missile.⁴² North Korea believes that possessing nuclear weapons grants them greater influence and freedom of action within their sphere of influence.⁴³ North Korean nuclear use policy, if one exists, is unknown as North Korea is an isolationist state that continues to cause concern on the world stage.⁴⁴

The U.S. is and has been committed to Israel since its founding in 1948. The two states have historic and cultural ties and share many interests. The U.S.'s commitment to Israel is well documented and plays an important role in America's involvement in Middle East peace negotiations.⁴⁵ "For the past four decades, Israel has adhered, almost religiously, to the idea of nuclear ambiguity, or opacity. It has refused to either confirm or deny that it has the bomb, and it has repeated the same vague mantra that Israel will not be the first country to use nuclear weapons in the Middle East".⁴⁶ By stating they would not be the first to use a nuclear weapon, they imply that if they do have a bomb, they would only use it in retaliation for a nuclear attack.

The U.S. and Pakistan have shared a troubled history starting in 1947 when they established diplomatic relations. The U.S. attempted to prevent Pakistan from becoming a nuclear state by cutting off economic assistance. This was unsuccessful however and Pakistan became a nuclear state in 1998. In 2004, the U.S. recognized Pakistan as a non-NATO ally. In 2009, the U.S. Secretary of State visited Pakistan and agreed to strategic dialogue. This has opened engagements on several issues to include security and defense.⁴⁷ Pakistan's nuclear weapons policy is unclear but some information has been revealed by prominent officials. They describe four basic tenets for the use of nuclear weapons.⁴⁸ These are: "deter all forms of external aggression; deter through a combination of conventional and strategic forces; deter counterforce strategies by securing strategic assets and threatening nuclear retaliation; and stabilize strategic deterrence in South Asia".⁴⁹ Pakistan is also concerned about an Indian attack with a superior conventional force.⁵⁰ Whether they would use nuclear weapons first, or in

retaliation for a conventional attack is not specified, but it can be assumed they might use nuclear weapons in either capacity.

The U.S. recognizes India as a key strategic player in Asia, and as a fellow democratic state. As with Pakistan, the U.S. attempted to keep India from becoming a nuclear state through sanctions that strained their relationship, but in 1974 India became a nuclear state. In 2001 the U.S. lifted sanctions against India and now sees India as a growing power with shared strategic interests. In 2006, the U.S. passed legislation allowing nuclear commerce with India. In 2009, the U.S. and India entered into “strategic dialogue” which called for the collaboration on several issues to include counterterrorism, climate change, energy and others areas. Currently relations show progress as President Obama visited India as recently as November 2010.⁵¹ India maintains a “No First Use” policy on the employment of nuclear weapons and has publically documented its policy. India’s position is that nuclear weapons will only be used in retaliation for a nuclear strike.⁵²

Although the possibility of a nuclear confrontation between either the U.S and Pakistan or the U.S. and India is unlikely, a nuclear war between Pakistan and India is possible as the two states have been involved in three wars since 1947 over Kashmir. The two states were created by the withdrawal of the British at the end of the Second World War and were established predominately along religious lines with Kashmir included in India. Because Kashmir is predominantly Muslim, Pakistan believes Kashmir should be within its territory. In 1947 the U.N. called for a resolution based on a vote of the Kashmir population but the resolution was not carried out and the issue remains unresolved. Within the last 11 years approximately 30,000 people have died as a result

of the Kashmir conflict, and it is considered a potential flashpoint for the world's first nuclear war. An attack on the Indian Parliament building in 2001 increased tensions. India accused Pakistan of supporting terrorist groups, and Pakistan pledged support for Kashmiri freedom fighters. With all the rhetoric coming from both sides and the massing of troops on the border, a miscalculation or small incident runs the risk of setting off nuclear war. Even though both sides claim that they would not use nuclear weapons first, there clearly exists the possibility of a nuclear confrontation between the two.⁵³

The Chemical Weapons Threat

Chemical weapons are not a relic of history and remain a threat to the U.S. and its allies. Terrorists have used chlorine gas in Iraq to maim and kill innocent civilians and it is certain that terrorists will use them again if and when they acquire them.⁵⁴ Their use is a reminder that this threat is still real and evolving to take new forms. With the changing political environment, both states and terrorist organizations will have access to chemical weapons. Any actor, state or non-state, may acquire the means to conduct an attack with WMD against the U.S. or its allies. According to the 2010 *Quadrennial Defense Review*

...the United States faces a complex and uncertain security landscape in which the pace of change continues to accelerate. Not since the fall of the Soviet Union or the end of World War II has the international terrain been affected by such far reaching and consequential shifts. The rise of new powers, the growing influence of non-state actors, the spread of weapons of mass destruction and other destructive enabling technologies, and a series of enduring and emerging trends pose profound challenges to international order.⁵⁵

This spread of WMD requires the U.S. to consider its potential response to attacks perpetrated by either states or non-state actors against the U.S. or an ally.

The current U.S. policy on the employment of nuclear weapons is not to use them against a non-nuclear state, nor to use them in a first strike. The purpose, according to the Administration, “is either to assure, dissuade, deter, or defeat”.⁵⁶ Historically, the U.S. maintained a policy of retaliation in kind in regards to WMD. This policy allowed the U.S. the ability to retaliate for any attack with a WMD by an attack with a like weapon. If the U.S. was attacked with a chemical weapon, the U.S. would respond with a chemical weapon. In 1985 when Congress directed the Department of Defense to destroy its entire stockpile of chemical weapons under Public Law 99-145, the U.S. established a policy that included using nuclear weapons in retaliation for any attack with a WMD to include chemical attacks. As pointed out in the 2010 Nuclear Posture Review, “. . .after the United States gave up its own chemical and biological weapons (CBW) pursuant to international treaties (while some states continue to possess or pursue them), it reserved the right to employ nuclear weapons to deter CBW attack on the United States and its allies and partners”.⁵⁷ The U.S. policy was intentionally ambiguous and worked well. The ambiguity included in a policy that includes the possibility of responding to any attack perpetrated with a WMD provides a wide range of options to the President. An intentionally ambiguous policy does not create a condition that requires a nuclear response, but it does provide more options for a response.

Ambiguous Nuclear Policy

The threat of an attack against the U.S. or an ally remains present and should result in the U.S. relying on an ambiguous policy that includes the potential use of nuclear weapons in response to any attack with WMD. Maintaining a policy with ambiguity helps deter aggressive action by all aggressors, both state and non-state

actors. Nation states will be far less likely to sponsor any organization whose actions might bring retaliation against state territory. It can be argued that a policy of ambiguity helped prevent the large Soviet Army from occupying Europe during the Cold War, and may well help to prevent attacks by both states and non-state actors. During the Cold War the U.S.S.R. requested that the U.S. sign a treaty that prevented either side from using nuclear weapons first. If the U.S. would have signed that treaty the U.S.S.R., with its larger force, could have launched a conventional invasion into Europe without fear of a nuclear response. The fact that the U.S. maintained the ability to launch nuclear weapons helped to deter the U.S.S.R from initiating an attack. Although it is hard to know exactly what prevented the U.S.S.R from conducting an invasion into Europe during the Cold War, it is clear that the threat of a U.S. nuclear response had to be considered before the U.S.S.R attacked. To retain the ability to respond with nuclear weapons the U.S. must maintain a sufficient arsenal of nuclear weapons within the triad of long range bombers, inter-continental ballistic missiles, and submarine forces, essential to deter others from using WMD against it or its allies.

The U.S. maintains a sufficient arsenal of nuclear weapons to defend against a nuclear attack so including their possible use as a response to other WMD attacks will not cause a need to increase the current arsenal. On 5 April 2009, President Barack Obama made clear in his speech that the U.S. is committed to a world free of nuclear weapons, but that until that time came the U.S. would maintain a sufficient number of nuclear weapons to defend itself from a nuclear attack⁵⁸.

There is no need for the U.S. to unnecessarily limit its options and remove a deterrent that may prevent a chemical or biological attack. Although the U.S. currently

maintains a sufficient conventional force to respond to any attack without nuclear weapons, it makes sense to maintain the ambiguity that only nuclear deterrence can deliver. The possibility of a nuclear response causes greater fear for the enemy leadership and populace than conventional forces do. As Clausewitz points out there are three areas one must consider when determining scale and effort to be employed: the opponent's strength of will, character, and abilities.⁵⁹ Before a state or a non-state actor decides on an attack, it will consider the size and scope of the response. A state or non-state actor is more likely to risk a response from a conventional force, even though it is capable of inflicting an equal or greater amount of pain, than it is from a nuclear force because they do not fear a conventional response as much as they do a nuclear response. Thus, maintaining an intentionally ambiguous policy will caution any adversary against deciding to employ WMD knowing the decision to employ could have consequences that may include the use of nuclear weapons. Nuclear weapons also remove any question about a direct threat to a State or actor's leadership.

By embracing a nuclear retaliation policy the U.S. may prevent attacks as it did under both Mutual Assured Destruction (MAD) and Retaliation in Kind by reducing an opponent's will to conduct an attack. Under those policies, no WMD attacks were perpetrated against the U.S. or its allies. Those policies established a position where every actor knew that any attack would result in nuclear war and their complete destruction including destruction of the leadership. A leader is less likely to miscalculate if he/she understands that the risk extends to himself or herself personally.

The U.S. has the capacity to respond to any attack under the Global Strike Contingency Plan 8022. Contingency Plan 8022 was developed by STRATCOM in

2004 with the Air Force and Navy to give the president a prompt global strike option with nuclear, conventional and information warfare capabilities. This plan is different than previous plans in its intent and capabilities. Global Strike is offensive and preemptive in nature; it is based on the assumption that deterrence will fail. Global Strike is focused on defeating a threat before it launches an attack. Although Global Strike is primarily a non-nuclear mission based on advanced conventional capabilities, space, and information warfare capabilities, it is clear that nuclear weapons could be used with the Global Strike option if decided on by the President.⁶⁰ The U.S. should maintain the flexibility offered to the President under an ambiguous policy.

The best option for a response to any attack by WMD is for the U.S. to maintain a policy that includes the potential employment of nuclear weapons. As noted above, other nuclear states have retained the possibility of a nuclear response to WMD attacks. The U.S. policy should include the possibility of a nuclear response in an attempt to deter aggressive states or non-state actors from initiating an attack against the U.S. or its allies. Although nuclear weapons have the devastating offensive capabilities, their use in deterrence is best demonstrated by the Honorable Andrew C. Weber, *Assistant Secretary of Defense for Nuclear, Chemical and Biological Defense Programs*, who stated, "Some people say we never use nuclear weapons. The truth is we use nuclear weapons every day to keep the world safe..."⁶¹. There is no need to remove a nuclear deterrent against chemical and biological weapons attacks as this would limit the options available to the president.

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