

2015

Deterring Nuclear Attacks on Japan: An Examination of the U.S.-Japan Relationship and Nuclear Modernization

Alyssa M. Minamide
Claremont McKenna College

Recommended Citation

Minamide, Alyssa M., "Deterring Nuclear Attacks on Japan: An Examination of the U.S.-Japan Relationship and Nuclear Modernization" (2015). *CMC Senior Theses*. Paper 1165.
http://scholarship.claremont.edu/cmc_theses/1165

This Open Access Senior Thesis is brought to you by Scholarship@Claremont. It has been accepted for inclusion in this collection by an authorized administrator. For more information, please contact scholarship@cuc.claremont.edu.

CLAREMONT MCKENNA COLLEGE

**DETECTING NUCLEAR ATTACKS ON JAPAN: AN EXAMINATION OF THE
U.S.-JAPAN RELATIONSHIP AND NUCLEAR MODERNIZATION**

SUBMITTED TO

PROFESSOR JENNIFER TAW

AND

DEAN NICHOLAS WARNER

BY

ALYSSA MINAMIDE

FOR

SENIOR THESIS

SPRING 2015

APRIL 27, 2015

ACKNOWLEDGEMENTS

I would like to thank my reader, Professor Taw, for a wonderful four years of critical thinking about international relations, doodle sessions, and cats. Professor Taw is one of the most caring, supportive people I have met at CMC, though I know she hates compliments. Her guidance will continue to inspire me as a strong, independent woman.

I would also like to thank my parents for teaching me the importance of self-motivation and for being my cheerleaders through the highs and the lows. Their patience and encouragement only provide further incentive for me to succeed.

TABLE OF CONTENTS

I.	Introduction.....	1
II.	Extended Deterrence and the U.S. Superpower.....	13
III.	Origins of the U.S.-Japan Alliance.....	25
IV.	Shifts in the U.S.-Japan Alliance.....	31
V.	The Alliance Today.....	54
VI.	Evaluation of the Nuclear Deterrence Fulfillment.....	71
VII.	Conclusion.....	78
VIII.	Works Cited.....	82

I. INTRODUCTION

On April 5, 2009, in the crowded Hradcany Square of Prague, U.S. President Barack Obama delivered the most compelling speech on nuclear weapons in the last decade. He described the nuclear arsenal's Cold War legacy, the U.S. role as a leading nuclear power, and the two main U.S. commitments for the future. The first commitment was the aim to reach nuclear zero:

“I state clearly and with conviction America’s commitment to seek the peace and security of a world without nuclear weapons. I’m not naïve. This goal will not be reached quickly – perhaps not in my lifetime. It will take patience and persistence. But now we, too, must ignore the voices who tell us that the world cannot change. We have to insist, ‘Yes, we can’.”¹

As leader of the only country in history to ever use nuclear weapons, and successor in a line of presidents who very clearly voiced a pro-nuclear stance, Obama made a monumental declaration. He then followed the statement with a backtracking effort to prevent diplomatic panic:

“Make no mistake: As long as these weapons exist, the United States will maintain a safe, secure, and effective arsenal to deter any adversary, and guarantee that defense to our allies – including the Czech Republic.”²

The U.S. has promised to defend allies all over the world with nuclear forces, and consequently has been forced into a delicate and precarious position. Obama wants to reach nuclear zero, which would make the world safe from nuclear destruction in the future; yet he also wants to provide security for allied nations in the present, using the very weapons he has marked for destruction. There are also potential problems of “rogue” nuclear states that are unbound by any international treaty, non-state actors bent on

¹ Barack Obama, “Remarks by President Obama as Delivered,” The White House, April 5, 2009, http://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered.

² Ibid.

nuclear terrorism, and the extremely difficult and essentially impossible task of convincing the other nuclear states to simultaneously disarm.

In the midst of this debate is the U.S. capacity to efficiently maintain and replace the existing numbers of nuclear weapons and delivery systems. Amy Woolf, a Specialist in Nuclear Weapons Policy at the Congressional Research Service, states that during the New START ratification process in 2010, the Obama Administration submitted a budget of \$210 billion, over a ten-year period from 2011 to 2021, in order to “maintain and modernize the U.S. nuclear arsenal”.³ The Administration supports a comprehensive nuclear triad, and so does newly instated Secretary of Defense Ashton Carter, though both face difficult choices as conventional capacity updates take precedent over nuclear ones and modernization plans look more and more implausible to fund.⁴ After all, an investigation by the Congressional Budget Office in 2013 discovered that due to complications of funding allocation between the Department of Defense and the Department of Energy, as well as an omission of spending estimates for procuring future generations of weapons and delivery systems, the budget would be closer to \$355 billion from 2011 to 2021.⁵ Some have argued that the nuclear triad is no longer necessary, proposing alternative plans that eliminate one or two of the legs, while others call for complete nuclear disarmament so the U.S. can set the precedent toward global nuclear zero.⁶ In short, the U.S. is debating three major aspects of its nuclear triad: the physical

³ Amy F. Woolf, “U.S. Strategic Nuclear Forces: Background, Developments, and Issues,” Congressional Research Service, March 18, 2015, <http://fas.org/sgp/crs/nuke/RL33640.pdf>.

⁴ Jeffrey Lewis, “The Nuclear Trials of Ashton Carter,” *Foreign Policy*, February 5, 2015, <https://foreignpolicy.com/2015/02/05/nuclear-triad-modernization-strategic-defense-ashton-carter-pentagon/>.

⁵ *Ibid.*

⁶ The nuclear triad is composed of intercontinental ballistic missiles (ICBMs), bombers, and submarine-launched ballistic missiles (SLBMs).

totals of nuclear warheads and missiles; the proportions of its arsenal dedicated each leg of the nuclear triad; and the overall cost it will take to complete modernization proposals.

With these circumstances in mind, how exactly does the U.S. create the minimal “safe, secure, and effective [nuclear] arsenal”, which will intimidate all foes and protect all allies? How well does the existing U.S. nuclear arsenal meet its foreign security commitments? What triggers allies to respond to changes in U.S. nuclear policy? And how well does the U.S. adapt its nuclear strategy to each allied country’s unique geographical, political and cultural circumstances?

This paper connects these questions specifically to the U.S. security relationship with Japan. While not as volatile as regions like the Middle East and Eastern Europe, the East Asian region is full of its own unique tensions. Japan, one of America’s most significant allies in that part of the world, is surrounded by potentially harmful nuclear states, including China and North Korea. It has considered the potential to nuclearize in the past, and it employs nuclear energy as a source of power. In lieu of Obama’s mission toward nonproliferation and an eventual nuclear zero, it is essential that countries like Japan are protected so they do not feel threatened enough to attain nuclear weapons of their own. But how much do U.S. nuclear weapons really play a role in these security commitments? Are they effective in strengthening the alliances? And if the role of nuclear weapons is to be reduced in future U.S. nuclear policy, how will it affect the response and interests of the alliance itself?

Chapter 1 will explain the concept of extended nuclear deterrence in the context of the U.S., from the evolution of the first atomic bomb in the 1940s to the current arsenal. This will relate to the specific factors influencing the decision to extend U.S. nuclear

deterrence beyond its own borders, as well as the major changes in the structure of the force over the past century, and the most up to date status of the arsenal and its missile systems.

Chapter 2 will discuss the initial U.S.-Japan security arrangement and the major historical influences that have shaped the two countries' relationship through modern times. Emphasis will be placed on how the initial interests of both states manifested themselves through nuclear security policy, from the development of the 1947 Japanese Constitution to the establishment of the Yoshida Doctrine and the Three Non-Nuclear Principles, on which the bilateral relationship is based.

Chapter 3 will examine three specific time periods in which the U.S.-Japan security relationship experienced particularly heightened levels of tensions and uncertainty with relation to the U.S. nuclear arsenal, in order to determine what types of challenges the alliance faced and to assess the reactions of both parties in response to these challenges. The analysis covers the circumstances surrounding the 1960s Chinese nuclear tests; the implementation of the Nixon Doctrine under the supervision of Secretary of State Henry Kissinger; and the rise of the North Korean nuclear program in the 1990s. All three of these sections will provide essential background as the focus of the paper turns to modern day and the important changes that are occurring within the Japanese and U.S. security paradigms.

Chapter 4 brings these historical background events into context with the present, in order to understand how well the nuclear relationship between Japan and the U.S. is faring today. Current negotiations and diplomatic strategies will be evaluated within the

limits of the existing U.S. nuclear arsenal and posture, as well as the security-related concerns held by both nations.

Chapter 5 will transition to the future plans for the U.S. nuclear arsenal, keeping in mind the New START Treaty reductions, the changing security environment, and the nuclear modernization proposals being discussed in Washington. Understanding these changes is a requirement for determining how effectively the U.S. nuclear arsenal will fulfill its security commitments with Japan. Given the historical and modern factors that contribute to the development or regression of alliances, will there be more or fewer bilateral crises in the future? Are there still triggers, such as those from previous periods of tension, which could complicate the bilateral relationship?

With this paper, the author hopes to contribute a work of practicality and depth on U.S.-Japan relations to further understanding of the stakes involved in nuclear deterrence, not just for the U.S. protection of its own borders, but also for the protection of countries around the world. South Korea and other major allies are also dependent on the protection of U.S. nuclear weapons, and therefore pertain just as strongly to U.S. interests and strategy throughout the process of modernizing and shifting the nuclear arsenal. Discussing nuclear weapons in a post-Cold War age is still highly relevant, as these weapons will be maintained in the arsenal, the budget, and the diplomatic relations of the U.S., and make up an aspect of national security that has become a priority item in recent U.S. policy discussions.

Definition of Deterrence

Deterrence is a term best understood when compared with defense, and can be clearly illustrated through a Tolkienian lens. When Rohan is threatened by Saruman's

Uruk-hai, King Theodred of the horse nation moves his people to the fortified Helm's Deep, prepares his armies as best he can, and settles down to wait for the enemy to attack. This is a *defense* strategy, because it is designed to repel the enemy *once the attack commences*. On the other hand, in the hypothetical situation that Smaug the dragon were still alive, in Rohan, and sworn to destroy all enemies of the horse nation, Theodred and his people could have stayed where they were and convincingly threatened the Uruk-hai that if they attacked, they would face fiery retribution, enough to wipe out the entire Uruk-hai population. This move would force the enemy to *forfeit the attack entirely*, exemplifying the strategy of *deterrence*. Schelling postulates that while defense strategy is mainly concerned with an enemy's physical strength, deterrence, or "the coercive use of the power to hurt," relies more heavily on an assessment of an enemy's "wants or fears," in other words, enemy interests.⁷ This does not mean that deterrence entirely neglects the opponent's physical capabilities; rather, it strives to find targets that would cause the enemy so much suffering that the thought of it overpowers the possible launch of a physical offensive. Both defense and deterrence are aspects of U.S. joint security policy with Japan, but this paper will look specifically at deterrence for protecting Japan from external threats. Nuclear weapons, like Smaug the dragon, prioritize the prevention of attacks by giving potential foes compelling reasons not to attack.

Literature on Deterrence and the Introduction of Nuclear Weapons

The field of deterrence theory is complex and, at times, even contradictory. This section will briefly discuss pertinent academic assumptions about the requirements for successful deterrence, and the uniqueness of nuclear deterrence compared to conventional deterrence.

⁷ Thomas C. Schelling, *Arms and Influence* (New Haven: Yale University Press, 1966), 3.

Waltz outlines three specific parameters for the physical requirements of deterrence. The first is that “a part of the force must appear to be able to survive an attack and launch one of its own.”⁸ The second is that “survival of the force must not require early firing in response to what may be false alarms.”⁹ Proponents of the full nuclear triad argue that only with a stable system of nuclear submarines, bombers, and ICBMs can the U.S. resist the temptation to “prompt launch,” a term describing the early firing of nuclear weapons in response to potential false alarms. Waltz’s final parameter is similar to the second in that “weapons must not be susceptible to accidental and unauthorized use.”¹⁰ This requires a strong showing by the deterring country to demonstrate that its nuclear weapons are being kept at the highest level of monitoring and care. The U.S. failed this principle in August 2007, when Air Force workers accidentally loaded six live nuclear warheads into a set of air-launched cruise missiles scheduled for retirement; the B-52 bomber carrying the missiles had flown across the continental U.S. before the mistake was realized.¹¹ Huth sums these points up by suggesting that the success of deterrence is determined by whether or not the potential attacker ends up using sustained military force, and whether or not the defender capitulates to the demands of the potential attacker.¹² If no force is used *and* the defender has refused to yield, deterrence has worked; if the attacker resorts to force *or* if the defender is coerced into agreeing with the attacker’s terms to avoid war, deterrence has failed.

⁸ Kenneth Waltz, “The Spread of Nuclear Weapons: More May Better,” *Adelphi Papers* no. 171 (1981), http://polsci.colorado.edu/sites/default/files/10B_Waltz.pdf.

⁹ *Ibid.*

¹⁰ *Ibid.*

¹¹ Woolf, *op. cit.*

¹² Paul K. Huth, “The Extended Deterrent Value of Nuclear Weapons,” *The Journal of Conflict Resolution* 34, no. 2 (Jun. 1990), http://www.jstor.org/stable/174195?origin=JSTOR-pdf&seq=1#page_scan_tab_contents.

Wohlstetter is more stringent and explicit than Waltz in describing the physical stipulations for deterrent forces. Looking pragmatically at the situation, the number one priority for deterrence goes not to survivability but to the stable operation of the force during peacetime, particularly with feasible budgets and fail-safe mechanisms.¹³ This advice was given in 1958, but it still has merit today, especially with the current modernization plans for the U.S. arsenal. The argument goes that if a force can withstand an enemy attack but is financially and technically inefficient in the long run, it needs to be altered immediately in order to prevent long-term consequences, such as a higher chance of accidents and unnecessary political tensions. After this hurdle, the next priority is surviving attacks, followed by improving communication measures in the case of retaliation, and creating a force with the accuracy and power to both defend against aggressive advances and overcome enemy defenses to reach targets.¹⁴ Wohlstetter's analysis was limited by his concentration solely on the Soviet threat, and his work predated the great strides in weapons technology that have occurred over the past fifty years. However, his alignment of priorities is still important to consider when assessing the effectiveness of the U.S. deterrent force for Japan and South Korea.

Practicalities aside, there are some basic theoretical conditions needed to establish a successful deterrent force. First, the enemy must understand exactly what will cause (or prevent) the pain and destruction it desperately fears. According to Schelling, "the pain and suffering have to appear *contingent* on his behavior."¹⁵ If the U.S. wants to avert a war with Russia, for example, it has to make clear to Russia that any decisive attack it

¹³ Albert Wohlstetter, "The Delicate Balance of Terror," *Foreign Affairs* 37, no. 2 (Jan. 1959), <http://www.jstor.org/stable/20029345>.

¹⁴ *Ibid.*

¹⁵ Schelling, *op. cit.*, 4.

makes will result in its own death and destruction, while no attacks will mean that Russian lives and resources are saved. This leads to the other requirement for deterrence, involving an overlapping of interests between states. In a hypothetical situation where Russia's sole interest was to destroy the U.S., and its only cause of suffering was a U.S. victory, there would be no way to reach a proper deterrent solution, because any compromise in which the U.S. is not destroyed would be a U.S. victory, which would cause Russia pain and suffering. However, realistically this scenario is not the case, and there are some general overlapping economic and political interests between the U.S. and Russia, as well as other countries with tense relations. Therefore, deterrence is merely a bargain, "arranging for [the opponent] to be better off doing what we want – worse off not doing what we want – when he takes the threatened penalty into account."¹⁶ With all of this in consideration, the most important measure of a deterrent force's success is that its threats never actually come into fruition.

Jervis, while acknowledging the importance of deterrence theory from writers like Wohlstetter, Waltz, and Schelling, provides additional insight from what is deemed the "third wave" of deterrence theory. Jervis argues that these third-wave scholars take into consideration five factors not included in earlier forms of the theory: 1) the paradox that statesmen must face between taking more risks and forcing an enemy retreat, versus taking fewer risks to make the situation safer; 2) the utility of rewards and positive reinforcement when negotiating potentially violent circumstances with aggressive states; 3) the array of psychological factors that influence deterrence, including misunderstandings of the opponent's values, strategies, worldviews, and intentions; 4) the problem of rationality and calculations in the context of statesmen's decision making; and

¹⁶ Ibid.

5) the complications of domestic and bureaucratic politics, from individual authorities to large group interests.¹⁷ These observations establish a more nuanced approach to deterrence theory, allowing analysts to examine more factors than merely a state on state realist perspective. Rather than look only at how the billiard balls of deterrence interact with each other, Jervis argues that what is going on inside the billiard balls matters just as much.

Historically, deterrence was reinforced by conventional means, usually by large armies using weapons from bows and arrows to swords and shields to guns and tanks. These deterrence tools were capable of committing large-scale destruction, but they were expensive to maintain in terms of lives and resources. The introduction of nuclear weapons to the international battlefield changed this. When the atomic bomb dropped in Hiroshima on August 6, 1945, and thousands of people, the majority of them civilians, were extinguished by one single weapon, a message was sent to the rest of the world that humanity had reached a point at which it could completely destroy itself. This has led to new meanings for deterrence, for as Schelling stated: “Deterrence rests today on the threat of pain and extinction, not just on the military defeat.”¹⁸ With the touch of a button, causing no harm to its own forces, a state could flatten its opponent.

Walzer interprets nuclear deterrence as “a kind of bluff;” after Hiroshima and Nagasaki, no nuclear bombs have ever been dropped on a population as a strategy of war, and as such nuclear weapons states have fallen into a pattern of “not only don’t we do anything, we also don’t believe that we will ever have to do anything,” thus the common

¹⁷ Robert Jervis, “Deterrence Theory Revisited,” *World Politics* 31, no. 2 (Jan. 1979): 289-324, http://www.jstor.org/stable/2009945?origin=JSTOR-pdf&seq=1#page_scan_tab_contents.

¹⁸ Schelling, *op. cit.*, p. 23

conception that nuclear deterrence works.¹⁹ Schelling also attributes this state of mind to beliefs:

“If everybody believes, and expects to believe, that things get more dangerous when the first nuclear weapon goes off, whatever his belief is based on he is going to be reluctant to authorize nuclear weapons, will expect the other side to be reluctant, and in the event nuclear weapons are used will be expectant about rapid escalation in a way that could make escalation more likely.”²⁰

This sort of thought process, in which nuclear deterrence works to prevent attacks from enemy states but, if an attack occurs, will lead to rapid violent escalation, continues to influence modern day assumptions concerning the use of nuclear weapons. These in turn affect the strategies and modernization policies of nuclear weapons states, as well as the attitudes of the non-nuclear weapons states that seek protection under extended deterrence.

Allison et al. wrote an intriguing piece on the ways in which policymakers address the issue of nuclear deterrence and the possibility of nuclear war. The authors categorize policymaker attitudes into three distinct camps. Hawks, the first type, have the motto of “peace through strength;” they are not afraid to take risks in order to appear legitimate and unmoving toward state opponents, and they are highly supportive of military might.²¹ Hawks see nuclear nonproliferation as a sign of weakness in the international anarchic system. Doves support “reassurance and compromise,” taking a

¹⁹ Michael Walzer, *Just and Unjust Wars: A Moral Argument with Historical Illustrations* (New York: Basic Books, 1977), 271.

²⁰ Schelling, *op. cit.*, 158

²¹ Graham T. Allison, Albert Carnesale, and Joseph S. Nye Jr., “Hawks, Doves and Owls: A New Perspective on Avoiding Nuclear War,” *International Affairs* 61, no. 4 (Autumn, 1985): 581-589, http://www.jstor.org/stable/2617704?origin=JSTOR-pdf&seq=1#page_scan_tab_contents.

more diplomatic approach than that of the hawks.²² They view the maintenance of military preparation and nuclear arms as undermining peaceful deterrence and are too provoking compared to other tools such as non-military incentives, diplomatic communication, and compromise as proper means of deterrence. While both doves and hawks see war as being started deliberately, owls, the third category, worry about nuclear crises arising from a loss of control over the situation.²³ This fits Jervis's concerns and third-wave deterrence theorists, taking into consideration possible misperceptions of intentions, accidents, irrationality, and bureaucratic complications that arise during times of crisis. Owls, therefore, support deterrence policies that "avoid crises and increase controls" in an attempt to prevent technical and human mistakes from starting a nuclear war.²⁴

As the next section will illustrate, all of these aspects and issues of deterrence have influenced the U.S. development of nuclear strategy and unremittingly shaped the various changes in nuclear policy over the years.

²² Ibid

²³ Ibid.

²⁴ Ibid.

II. EXTENDED DETERRENCE AND THE U.S. SUPERPOWER

As the first country to develop nuclear weapons, the U.S. had to develop a strategy for an entirely new category of warfare. As such, the focus of U.S. nuclear strategy has been constantly evolving through time, based on a steep learning curve through each phase of strategy, adjustments for significant technological advancement, and the dynamics of domestic and foreign relations. Important to note is that extended nuclear deterrence was not part of the plan when the atomic bomb was first conceived. Former President Truman, who authorized the attacks on Hiroshima and Nagasaki, stated in a 1950 press conference that while he did not want to see the nuclear option being used, it was under active consideration to be used in warfare, particularly in the conflict on the Korean peninsula, and was “a matter that the military people will have to decide.”²⁵ Through a combination of steady progress in nuclear warhead and delivery system technology, changing international norms discouraging the use of nuclear weapons, a growing network of allies, and the nuclear proliferation of potential enemies, the U.S. had to adjust its strategy to provide a nuclear deterrent for both itself and the countries it pledged to protect. This chapter will follow the strategies that were implemented in attempt to fulfill these duties, including massive retaliation, flexible response, counterforce, lead but hedge, and new triad, while simultaneously discussing the corresponding structural shifts of the physical arsenal itself. Analyzing these strategies will facilitate an understanding of how U.S. policy strategies and attitudes affect its extended deterrence capabilities and credibility. The chapter will then review the current status of the arsenal in terms of warheads, missile systems, and overarching

²⁵ Harry S. Truman, “295. The President's News Conference,” Harry S. Truman Library & Museum, <http://trumanlibrary.org/publicpapers/viewpapers.php?pid=985>.

nuclear posture. This will show how the security situation today has evolved, and how modern strategies need to take into account the restrictions of nuclear technological advancements, due to international norms concerning the use of nuclear weapons, in order to provide optimal deterrence for both the U.S. and its allies.

Setting the Stage: Early U.S. Nuclear Weapons Policy

Massive retaliation was one of the first strategies for U.S. nuclear weapons as a means of deterrence. Set up in the mid-1950s under the Eisenhower administration, massive retaliation refers to a hypothetical situation where if an aggressor state attacked the U.S. or its allies, the U.S. would respond with an overwhelming display of force, not necessarily proportionate to the level of attack. By the 1950s, the U.S. had already established alliances with Japan, South Korea, and the Nationalist government on Taiwan. Then Secretary of State John Foster Dulles coined the term in a speech to the Council of Foreign Relations in 1954, when he noted (to President Eisenhower's chagrin):

“We need allies and collective security. Our purpose is to make these relations more effective, less costly... Local defense will always be important. But there is no local defense which alone will contain the mighty landpower of the Communist world. Local defenses must be reinforced by the further deterrent of massive retaliatory power. A potential aggressor must know that he cannot always prescribe battle conditions that suit him.”²⁶

The policy move was a delayed response to the Soviet Union's first nuclear test in August 1949, during a period in which forces were first demobilized in the aftermath of World War II and then remobilized with fears of the USSR. Eisenhower wanted a policy that was both powerful and cost-cutting, because though nuclear weapons were expensive, they were not as expensive as the thousands of soldiers that had been

²⁶ John Foster Dulles, “The Evolution of Foreign Policy,” Nuclear Files, http://www.nuclearfiles.org/menu/key-issues/nuclear-weapons/history/cold-war/strategy/article-dulles-retaliation_1954-01-12.htm.

deployed across the world for the War. It was also thought at the time that once the U.S. had a substantial nuclear deterrent, it could scarcely be denied to its allies, and could in fact be extended with relatively little extra cost.²⁷ Eisenhower reinforced these principles in his 1954 State of the Union address, where he affirmed the “paramount importance to American security of maintaining good relations with its allies,” though he made no explicit commitments to use the nuclear option.²⁸ He did pledge to maintain a “massive capability to strike back,” and emphasized navy and air force power as well as nuclear weapons.²⁹ As a preliminary nuclear strategy, massive retaliation fully embraced the hawkish motto of “peace through strength,” and had little emphasis on dovish or owlsh tendencies, either for maintaining peace through non-violent means or focusing on reducing nuclear accidents.

By the mid-1950s, the number of bomber aircraft and nuclear warheads in the U.S. arsenal had increased dramatically. Nuclear bombers had increased from 15 in 1945 to 1,854 at their peak in 1959, while the number of nuclear warheads during the same time period increased from 6 to 15,468.³⁰ The promotion of massive retaliation brought with it increased focus on the development of ICBMs, since the U.S. was not only looking for maximum “atomic striking power” but was also concerned about a potential “missile gap” in response to the first Soviet ICBM test in 1957. The U.S. sought to create an arsenal of strategic and tactical nuclear weapons forces: strategic forces were aimed at calculated targets including military facilities, nuclear missile bases, factories, and cities,

²⁷ Earl C. Ravenal, “Counterforce and Alliance: The Ultimate Connection,” *International Security* 6, no. 4 (Spring, 1982): 26-43, <http://www.jstor.org/stable/2538676>.

²⁸ Samuel F. Wells Jr., “The Origins of Massive Retaliation,” *Political Science Quarterly* 96, no. 1 (Spring, 1981): 31-52, <http://www.jstor.org/stable/2149675>.

²⁹ *Ibid.*

³⁰ “Table of US Strategic Bomber Forces,” Natural Resources Defense Council, <http://www.nrdc.org/nuclear/nudb/datab7.asp>.; “Table of Global Nuclear Weapons Stockpiles, 1945-2002,” Natural Resources Defense Council, <http://www.nrdc.org/nuclear/nudb/datab19.asp>.

while tactical forces were placed in preparation for direct use on the battlefield in the case of war.³¹ Europe first began cooperating with the U.S. to install forward deployed tactical nuclear weapons in 1954, followed by South Korea in 1958.

Massive retaliation both reassured and terrified the allied states in the East Asian region. Reassurance came from the assumption that the U.S. would obliterate any enemy threatening to attack or preparing to attack an allied state; if China too aggressively endangered Japan's safety, the U.S. would be there to make sure it paid the price with nuclear destruction. At the same time, however, massive retaliation had many potential problems. A worry for Japan was the potential for humanitarian and environmental spillover effects if China was hit by several nuclear strikes. There were also concerns about the accuracy and precision of the still relatively new nuclear technology, though it could be argued from the U.S. perspective that this sort of uncertainty actually increased the strength of its nuclear deterrent.³² Finally, there was the extreme nature of nuclear weapons, which made their use unjustifiable in almost every circumstance. The conflicts in Korea and Quemoy-Matsu were thus resolved without U.S. nuclear retaliation. Policymakers and scholars alike argued that there had to be another strategy for addressing threats to U.S. interests with less extreme means.³³

After increasing criticism by both foreign and domestic voices at the end of the 1950s, the Kennedy administration reasoned that rather than concentrate all hopes and efforts on nuclear retaliation, especially on the tactical nuclear weapons forward deployed

³¹ Hans M. Kristensen, "Non-Strategic Nuclear Weapons," Federation of American Scientists, May 2012, https://fas.org/_docs/Non_Strategic_Nuclear_Weapons.pdf.

³² "Atlas ICBM," National Park Service, <http://www.nps.gov/mimi/learn/historyculture/atlas-icbm.htm>.

³³ Richard Burns and Joseph Siracusa, *A Global History of the Nuclear Arms Race: Weapons, Strategy, and Politics* (Santa Barbara: ABC-CLIO, 2013), 262, available from <http://claremont.ebib.com/patron/FullRecord.aspx?p=1887851>.

in Europe, the response to a looming crisis should be more spread out between nuclear and conventional capabilities; in other words, flexible response. This strategy did not reject nuclear weapons entirely. If anything, it gave tactical nuclear weapons a priority boost.³⁴ It merely emphasized the need to build up conventional capacities alongside nuclear ones to provide a wider range of military options and control the rate of escalation if a war were to occur. The doctrine of flexible response also reaffirmed the need for a continued presence of deployed US forces within allied states in Europe and Asia, illustrating the impact of alliances on the development of U.S. nuclear strategy.

During this transitional period in U.S. strategy, the Cold War was still in full force. In the five-year period from 1960 to 1965, the U.S. nuclear arsenal was undergoing significant changes as the number of bombers began dropping dramatically, from 1,735 to 807; but ICBMs were picking up the slack in numbers from 12 to 854; and SLBMs made an appearance with 2 in 1960 up to 384 in 1965.³⁵ By 1961, the U.S. had officially established the nuclear triad, and so had the Soviet Union. These increased capacities brought about the first mentions of the term “mutually assured destruction,” as both countries realized that as they developed ever more nuclear weapons and delivery systems, the results of an all-out nuclear war would have growing consequences for them both as well as the international community as a whole.

The main issue with the flexible response strategy was its lack of practicality. President Kennedy had two main complaints: 1) that tactical nuclear weapons were just as “handicapped” as regular strategic nuclear weapons, despite their increased accuracy

³⁴ Ibid.

³⁵ <http://www.nrdc.org/nuclear/nudb/datab7.asp>; “Table of US ICBM Forces,” Natural Resources Defense Council, <http://www.nrdc.org/nuclear/nudb/datab3.asp>; “Table of US Ballistic Missile Submarine Forces,” Natural Resources Defense Council, <http://www.nrdc.org/nuclear/nudb/datab5.asp>

and higher discrimination in terms of targets; and 2) that the probability of the U.S. having any sort of control over escalation once a nuclear attack commenced was highly unlikely, adopting the owlish approach to nuclear policy.³⁶ Flexible response folded nicely into the overarching strategy of limited nuclear war, which assumed that nuclear war could be controlled, and perhaps even won, based on technological advances including deployable tactical nuclear weapons and improved command, control, communication, and intelligence systems.³⁷ However, opponents of the posture argued that once tactical nuclear weapons were used, no amount of technology would be able to control the rate of violent escalation, and total nuclear war would be the only foreseeable conclusion.³⁸ These concerns were just as applicable to allies and extended deterrence, both in Europe and in Asia. If the U.S. president was worried about the lack of control and potential escalation effects of its nuclear arsenal, then its credibility as an effective protection measure could be interpreted as significantly weakened.

As a result, the next U.S. nuclear strategy that evolved through the late 1960s into the 1970s was that of counterforce. Counterforce was essentially a more detailed version of flexible response, providing a retaliation mechanism allowing U.S. administrations to use a fraction of the nuclear force to attack military bases, or “military and control targets,” in order to disarm an opponent by preemptively destroying its nuclear weapons. These included nuclear missile silos, command-and-control, stationary and mobile military forces, and military industrial facilities.³⁹ Counterforce differed from countervalue, which was first introduced in 1965, because the latter targeted industry,

³⁶ Burns and Siracusa, *op. cit.*, 266-267.

³⁷ Burns and Siracusa, *op. cit.*, 265.

³⁸ *Ibid.*

³⁹ Ravenal, *op. cit.*

civilian infrastructure, and other societally valuable assets.⁴⁰ As the Soviet nuclear arsenal rapidly expanded, counterforce was the U.S. symbolic response to neutralize its threat capability, while also creating “crisis stability,” or a situation in which “neither side has an immediate incentive or need to escalate to a nuclear strike.”⁴¹ The strategy harkens back to the hawkish attitude proposed by Allison, claiming peace through shows of force. Flexible response and counterforce were both strategies that were contingent on the idea of preemptive nuclear war fighting, as opposed to restraint and deterrence. Rather than trying to prevent war from happening in the first place, officials on both sides of the Cold War were convinced the other side was developing first-strike capabilities for initiating nuclear war, and thus came up with strategies to eliminate the other’s nuclear forces before they could retaliate.⁴² This seemed like a bonus for U.S. allies seeking protection, except that in the early 1970s the U.S. was also attempting to implement the Nixon Doctrine, which told allies to take care of their own security unless the U.S. nuclear umbrella was absolutely needed. The full effects of this paradox will be discussed in a later chapter through the case of Japan.

Interestingly enough, though Soviet totals of nuclear warheads and delivery systems continued to rise through this period, the totals of U.S. nuclear warheads and delivery systems stagnated and in some cases even decreased. Soviet warheads increased by over 10,000 from 1966 to 19,055 in 1975, while the U.S. decreased its stockpile from 31,700 to 27,052 in that same time duration.⁴³ This was due to a number of contextual

⁴⁰ Hans M. Kristensen, Robert S. Norris, and Ivan Oelrich, “From Counterforce to Minimal Deterrence: A New Nuclear Policy on the Path Toward Eliminating Nuclear Weapons,” Federation of American Scientists, April, 2009, http://fas.org/pubs/_docs/occasionalpaper7.pdf.

⁴¹ Ravenal, *op. cit.*

⁴² Burns and Siracusa, *op. cit.*, 405.

⁴³ <http://www.nrdc.org/nuclear/nudb/datab19.asp>.

factors, one being the Nuclear Non-Proliferation Treaty, which came into force in 1970 and promoted three pillars of non-proliferation, disarmament, and the peaceful use of nuclear energy, a treaty to which the U.S. was a member. During a period of tense relations with the Soviets, U.S. military planners were also transitioning their strategy from increasing the nuclear stockpile to finding new and more efficient ways of delivering the existing warheads.⁴⁴ On the other hand, as the U.S. streamlined its forces, the USSR stubbornly maintained its original path by further expanding its arsenal.

These trends were sustained in the 1980s under the Reagan Administration, which marked some of the most drastic innovations in nuclear weapons technology, even as the U.S. pared down its total numbers of warheads and delivery systems. Multiple independently targeted reentry vehicles, or MIRV, put multiple nuclear weapons onto each missile, allowing a single delivery system to hit several targets at once, thus increasing efficiency. Stealth aircraft and durable submarines were also developed during this time. The Trident II SLBMs carried the most advanced warhead in the U.S. nuclear arsenal, the W-88, while the Peacekeeper ICBM was given the W-87 in 1988.⁴⁵ These changes were made in conjunction with steady Soviet warhead increases, hitting a peak in 1986, when the Soviet Union possessed 40,723 over the U.S. arsenal of 23,254.⁴⁶ The 1980s highlighted U.S. transition from predominantly preemptive nuclear strategies to deterrent strategies, as it shifted its efforts to focus on advanced second-strike capabilities rather than all-out massive retaliation in a continuation of its policies from the 1970s.

⁴⁴ Jennifer Llewellyn, Jim Southey, and Steve Thompson, "Nuclear weapons," Alpha History, <http://alphahistory.com/coldwar/nuclear-weapons/>.

⁴⁵ "U.S. Nuclear Modernization Programs," Arms Control Association, January 2014, <http://www.armscontrol.org/factsheets/USNuclearModernization>.

⁴⁶ <http://www.nrdc.org/nuclear/nudb/datab19.asp>.

Deterrence efforts continued with negotiations toward a mutual drawdown of nuclear weapons between the U.S. and the Soviet Union beginning in May 1982, though the official treaty, known as the Strategic Arms Reduction Treaty (START I), was not signed until July 31, 1991. President Mikhail Gorbachev, struggling to maintain what was left of the Soviet Union, made an agreement with U.S. President George H.W. Bush to implement deep reductions of strategic nuclear weapons on both sides, effectively ending the Cold War.⁴⁷ START I, which entered into force on December 5, 1994, provided a 15-year window for the U.S. and the Soviet Union (the Russian Federation after the Soviet Union's December 1991 collapse) to reach a limit of 1,600 delivery vehicles and 6,000 warheads for each side.⁴⁸ The treaty also banned the construction of new ICBMs and SLBMs, with the exception of modernization programs, and had an extensive verification system. Arsenal drawdowns aside, in the 1990s the U.S. also withdrew its forward deployed nuclear weapons from South Korea, and as of 2014 has withdrawn about 90 percent of its forward deployed nuclear weapons from Europe.⁴⁹ All U.S. nuclear strategies prior to this point had been predominantly tailored toward a war with the Soviet Union; massive retaliation, flexible response, and counterforce were reactions not only to the capacities and efficiencies of the U.S. nuclear arsenal but also to that of its main rival. However, with the dissolution of the Soviet Union in 1991, the U.S. no longer had an enemy threatening enough to surround with nuclear weapons at the same level. Thus began a new era in which the U.S. reduced its nuclear weapons stockpile, and its allies

⁴⁷ "Treaty between the United States of America and the Union of Soviet Socialist Republics on Strategic Offensive Reductions (START I)," Nuclear Threat Initiative, <http://www.nti.org/treaties-and-regimes/treaties-between-united-states-america-and-union-soviet-socialist-republics-strategic-offensive-reductions-start-i-start-ii/>.

⁴⁸ Ibid.

⁴⁹ Michaela Dodge, "U.S. Nuclear Weapons in Europe: Critical for Transatlantic Security," The Heritage Foundation, February 18, 2014, <http://www.heritage.org/research/reports/2014/02/us-nuclear-weapons-in-europe-critical-for-transatlantic-security>.

wondered how credible their extended deterrence commitments still were. This will also be addressed from the perspective of Japan later on in the paper.

The Post-Cold War State of Nuclear Affairs

The most important developments in U.S. strategy since the START I Treaty have been the lead but hedge concept, established under the Clinton Administration, and the “new triad” strategy under the George W. Bush Administration. The former was introduced in the 1994 Nuclear Posture Review, and recognized the threat of rising nuclear proliferation in other states as higher in priority than simply balancing Russia. This was shown in the increasing concerns from the U.S. and its allies over deterring the belligerent North Korean nuclear regime. Hence, the U.S. would “lead” in disarming its nuclear stockpiles, but would “hedge” an affordable arsenal in the case of possible tensions or disruptions in the international community.⁵⁰ The latter strategy, proposed by George W. Bush, was included in the 2002 Nuclear Posture Review and sought to revive a form of Kennedy’s flexible response with the “new triad.”⁵¹ This triad consisted of offensive strike systems, active and passive defenses, and a revitalized defense infrastructure, tinted with hawkish intentions in the aftermath of the events on September 11, 2001.⁵²

Since President Obama came into office on January 20, 2009, his Prague speech advocating nuclear zero, the 2010 New START Treaty⁵³ that rejuvenated the arms

⁵⁰ “Nuclear Posture Review,” Federation of American Scientists, http://fas.org/nuke/guide/usa/doctrine/dod/95_npr.htm.

⁵¹ The use of the word “triad” is in reference to a type of strategy, and does not refer to the nuclear triad of delivery systems.

⁵² David S. McDonough, “The ‘New Triad’ of the Bush Administration: Counterproliferation and Escalation Dominance in US Nuclear Strategy,” *International Journal* 59, no. 3 (Summer, 2004): 613-34, <http://www.jstor.org/stable/40203958>.

⁵³ The full title of this document is the Treaty between The United States of America and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms.

reduction process between the U.S. and Russia, and the 2010 Nuclear Posture Review have all contributed to shape the current U.S. nuclear weapons strategy. While the Prague speech gave rhetorical hope to the nonproliferation movement, the New START Treaty was a practical application of the dovish attitude, setting fresh limits on the bilateral disarmament process by restricting the parties to 1,550 deployed strategic nuclear warheads and 800 delivery vehicles each by 2020.⁵⁴ Meanwhile, despite the ongoing nuclear arms dismantlement, the U.S. is also sticking to its nuclear triad. The 2010 Nuclear Posture Review stresses the need for all three legs of the triad, while also maintaining the current U.S. posture of nuclear-capable bombers off full-time alert, the majority of ICBMs on alert, and a significant patrol of nuclear ballistic missile submarines (SSBNs) at sea at all times.⁵⁵ The NPR also indicates the U.S. need for control in order to avert crises for as long as possible. For instance, “the United States would only consider the use of nuclear weapons in extreme circumstances to defend the vital interests of the United States or its allies and partners.”⁵⁶ This reflects the administration’s recognition of the stigma that using nuclear weapons carries in the international community, and the need to make nuclear weapons the absolute last resort in order to avoid a nuclear strike from occurring, either accidentally or purposefully.

As of April 2015, the U.S. is estimated to possess 7,100 nuclear weapons out of a global total of 15,650.⁵⁷ Only 1,900 of these, however, are deployed (or operational) strategic forces, meaning that the majority of the weapons are in reserve or are awaiting

⁵⁴ <http://www.nti.org/treaties-and-regimes/treaty-between-the-united-states-of-america-and-the-russian-federation-on-measures-for-the-further-reduction-and-limitation-of-strategic-offensive-arms/>.

⁵⁵ “Nuclear Posture Review Report,” Department of Defense, April 2010, <http://www.defense.gov/npr/docs/2010%20Nuclear%20Posture%20Review%20Report.pdf>.

⁵⁶ *Ibid.*

⁵⁷ “Status of World Nuclear Forces,” Federation of American Scientists, last modified April 1, 2015, <http://fas.org/issues/nuclear-weapons/status-world-nuclear-forces/>.

dismantlement.⁵⁸ Out of the 1,920 operational strategic warheads, the U.S. has 1,150 deployed on submarine-launched ballistic missiles (SLBMs), 470 on intercontinental ballistic missiles (ICBMs), and 300 stored at bomber bases.⁵⁹ Russia is the only state remotely close to the U.S. in terms of numbers; it actually has a higher total of nuclear weapons, capping at 7,500, but only has 1,780 deployed strategic forces, fewer than the U.S., though not by much.⁶⁰ The Obama Administration has continued to stress the importance of further nuclear reductions in conjunction with those of Russia. There is still a considerable amount of warheads that needs to be maintained and managed, which will impact both domestic and foreign policies.

The modern nuclear strategy must take into account a few crucial factors. While non-nuclear weapons states grow increasingly impatient over the lack of faster progress toward nuclear disarmament, all of the nuclear weapons states are looking to modernize their arsenals, and none have expressed serious expectations about reaching an eventual ban on nuclear weapons, despite President Obama's optimistic statements. As such, the U.S. must confront its own aging arsenal, a problem which has been put off by several presidential administrations. Its network of partner countries expects extended nuclear deterrence; it has a domestic sequestration budget that, if followed, would reduce the nuclear arsenal rather than maintaining it; and its military forces seem to have lost sight of the nuclear mission. The U.S. will have to craft a strategy for the future that will sufficiently protect the nation, satisfy its concerned allies, and maintain realistic levels of cost and inventory, a daunting task indeed.

⁵⁸ Ibid.

⁵⁹ Hans M. Kristensen and Robert S. Norris, "US nuclear forces, 2014," *Bulletin of the Atomic Scientists* 70, no. 1 (2014): 85-93, <http://bos.sagepub.com/content/70/1/85.full.pdf+html>.

⁶⁰ Ibid.

III. ORIGINS OF THE U.S.-JAPAN ALLIANCE

While the U.S. was making adjustments to its nuclear strategy throughout the twentieth century, its efforts were complicated by the bilateral security alliance with Japan. Japan has had diplomatic relations with the U.S. since 1860, but it did not establish a security-based connection with the larger superpower until after its defeat in World War II. This chapter will briefly explore the early stage of this security relationship, particularly focusing on a few main symbolic policies, in order to understand how two states that were mortal enemies in combat managed to create an arrangement that remains one of the strongest bilateral alliances today. It should be noted that there have never been binding public commitments between the U.S. and Japan detailing exact circumstances for the use of nuclear weapons.⁶¹ There are generalized references to the “U.S. nuclear deterrent” in certain documents, and the term “nuclear umbrella” is frequently used in academia, but there are no concrete guarantees that U.S. nuclear weapons will be used in defense of Japan. Instead, a series of historical agreements has shaped the nature of U.S. extended deterrence over Japan and provided a foundation for the shifts and periods of tension in the alliance over the following decades.

In the aftermath of the two U.S.-deployed atomic bombs devastating the cities of Hiroshima and Nagasaki in August 1945, Japan surrendered and admitted defeat to the Allies on September 2, agreeing to meet the terms of the Potsdam Declaration, which included the dismantlement of the Japanese leadership, Allied occupation of Japanese territory, the promotion of democracy and human rights, and the unconditional surrender

⁶¹ Jeffrey Lewis, “Extended Nuclear Deterrence in Northeast Asia,” Nautilus Institute for Security and Sustainability, August 1, 2012, <http://nautilus.org/napsnet/napsnet-special-reports/extended-nuclear-deterrence-in-northeast-asia/>.

of all Japanese armed forces, upon pain of “prompt and utter destruction.”⁶² The U.S.-led Government Section of the Supreme Command for the Allied Powers (SCAP) took the responsibility of creating a new Constitution in 1946. Fearing that drafts supported by Japanese staff would be too lenient on nationalist forces, the SCAP wrote two articles to restructure Japanese leadership into the new constitution, which went into effect in May 1947: Article I retained the emperor system but reduced his status to that of a symbolic figure, and the more dramatic Article IX demolished Japan’s previous security policy, as it reads:

“Aspiring sincerely to an international peace based on justice and order, the Japanese people forever renounce war as a sovereign right of the nation and the threat or use of force as means of settling international disputes.

In order to accomplish the aim of the preceding paragraph, land, sea, and air forces, as well as other war potential, will never be maintained. The right of belligerency of the state will not be recognized.”⁶³

The world was still recovering from the imperial exploits of Japan on both sides of the Pacific, and Article IX fulfilled the need for a formal legal measure to prevent this from happening ever again. At the same time, by occupying Japanese territory the U.S. had for the first time become responsible for keeping Japan away from any international troubles that might need military recourse. This quickly became relevant at the end of the decade, when the Chinese Communist victory in 1949 and the outbreak of the Korean War in 1950 events solidified U.S. perceptions that Japan was an ally worth keeping. Article IX has been heavily debated in both domestic and international contexts, with some complaints that Article IX is too restrictive on what Japan can accomplish, and others that it is not restrictive enough. For nuclear policy, the problem is that Article IX has been

⁶² “Potsdam Declaration,” atomicarchive.com,
<http://www.atomicarchive.com/Docs/Hiroshima/Potsdam.shtml>.

⁶³ “The Constitution of Japan,” Prime Minister of Japan and His Cabinet,
http://japan.kantei.go.jp/constitution_and_government_of_japan/constitution_e.html.

largely interpreted as prohibiting Japan from holding offensive military weapons, meaning it cannot have ICBMs, nuclear weapons, aircraft carriers, or bomber fleets on its territory. This means that U.S. nuclear deterrent capabilities that provide Japanese protection, such as submarines and bombers, cannot technically patrol Japanese waters or refuel on Japanese bases, a logistical and political issue that in times of crisis could have significant repercussions for the bilateral relationship.

In 1952, the U.S. ended its military occupation of Japan and signed the Treaty of Mutual Cooperation and Security between Japan and the United States of America, later amending it in 1960. Interestingly, while the first article of this document is similar to Article IX in its ideals of peace, it requires both Japan and the U.S. to “settle any international disputes in which they may be involved in peaceful means in such a manner that international peace and security and justice are not endangered.”⁶⁴ This front-running liberal ideology is quickly backed by realist Articles III and V, which commit the two parties to develop their own separate capacities to resist armed attack and, in the case of an attack against *either* Party in territories owned by Japan, “act to meet the common danger in accordance with its constitutional provisions and processes.”⁶⁵ The dilemma when it comes to an attack from nuclear weapons on Japan is that while Japan is constitutionally prohibited from launching an offensive, the U.S. is not. This is confusing when determining the exact response the U.S. should take in a hypothetical attack on Japanese territory. If Japan assists the U.S. with logistical or strategic support in a nuclear counterattack, it could be considered as a violation to both the bilateral security treaties

⁶⁴ “Japan-U.S. Security Treaty: Treaty of Mutual Cooperation and Security Between Japan and the United States of America,” Ministry of Foreign Affairs of Japan, <http://www.mofa.go.jp/region/n-america/us/q&a/ref/1.html>.

⁶⁵ *Ibid.*

and Japan's constitution. How far can Article IX be stretched to fit the cause of self-defense? Different constitutional conditions are extremely damaging for the effectiveness of extended nuclear deterrence, because if potential foes perceive discrepancies and uncertainty between the allies, they might be more emboldened to test the allies in a game of chicken, which could lead to unnecessary violent escalation.

The 1946 constitution and the U.S.-Japan Mutual Security Treaty go hand in hand with the Yoshida Doctrine, developed by Prime Minister Shigeru Yoshida, who served from 1946-1947 and 1948-1954. This doctrine remained a lasting foundation for policy through the Cold War and even lingers, some argue, in the decisions of the Abe administration.⁶⁶ Its three main tenets reinforced the U.S. as the main guarantor of Japanese security, directed focus toward reconstructing the domestic economy through international economic ties, and emphasized the need to maintain a low profile in international affairs.⁶⁷ In the context of complete military reliance, a crushed economy, and international status as an "enemy state", this was a way for Japan to quietly rebuild and find its place in the world once more. Yoshida himself had a strong personal commitment toward minimizing Japanese rearmament and entrenching the norm of Article IX, since he disliked the Imperial military system, worried about the stability of Japanese economic recovery, and wanted to smooth over tensions in the international system.⁶⁸ It was only under intense U.S. pressure that Yoshida reluctantly set up the "police reserve force" in 1950, responding to U.S. concerns over the Cold War and

⁶⁶ Monika Chansoria, "Relevance of the Yoshida Doctrine in current U.S.-Japan ties," *Japan Today*, May 13, 2014, under "Opinions," <http://www.japantoday.com/category/opinions/view/relevance-of-the-yoshida-doctrine-in-current-u-s-japan-ties>.

⁶⁷ David M. Potter, "Evolution of Japan's Postwar Foreign Policy," Nanzan University, 2008, http://office.nanzan-u.ac.jp/cie/gaiyo/kiyo/pdf_09/kenkyu_03.pdf.

⁶⁸ Sun-Ki Chai, "Entrenching the Yoshida Defense Doctrine: Three Techniques for Institutionalization," *International Organization* 51, no. 3 (Summer, 1997): 389-412, <http://www.jstor.org/stable/2703609>.

Korean War. This eventually evolved into the Japan Self-Defense Forces by 1954, which has branches for land, sea, and air forces, and has evolved into a formidable force of troops, missile destroyers, tanks, and aircraft. However, these forces have no offensive agenda besides deployment in international peacekeeping missions under the United Nations, and even this has been severely limited.⁶⁹ They also do not have a nuclear arsenal with which to retaliate in the case of nuclear war on the Japanese homeland. This balance has shaped the way in which Japan approaches its own self-defense, the defense provided by the U.S., and also *deterrence* provided by the U.S. Though the Yoshida Doctrine is not as strongly emphasized today as it was during the Cold War, the principle of military reliance on the U.S. remains entrenched in Japanese foreign policy, despite attempts by Japanese nationalists to reverse the trend.

The final pillar of the U.S.-Japan security alliance in regard to nuclear weapons is not actually a concrete piece of legislation but rather an informal principle. On December 11, 1967, Prime Minister Eisaku Sato made a statement to the Budget Committee outlining the “Three Non-Nuclear Principles” of not possessing, not producing, and not permitting the introduction of nuclear weapons in Japan.⁷⁰ Sato, a follower of the Yoshida Doctrine, understood that proposing these principles as actual legislation would have caused heavy disputes not only between but also within the political parties due to contentious opinions on defense. This could jeopardize the stability of the Japanese political system and possibly the power of individual officials, including Sato himself.⁷¹ Nonetheless, the prime minister’s iconic statement remained in the hearts and minds of

⁶⁹ Ibid.

⁷⁰ “Three Non-Nuclear Principles,” Ministry of Foreign Affairs of Japan, <http://www.mofa.go.jp/policy/un/disarmament/nnp/>.

⁷¹ Chai, *op.cit.*

Japanese lawmakers such that any attempt to breach the equilibrium of the Three Non-Nuclear Principles has been met with earnest opposition. This consensus has a strong impact in discouraging any change in Japan's non-nuclear stance, while simultaneously putting all of the pressure on the U.S. to maintain its security commitments.

Article IX of the Japanese Constitution, the 1952 and 1960 Treaty of Mutual Cooperation and Security between Japan and the United States of America, the Yoshida Doctrine, and the Three Non-Nuclear Principles formed the groundwork on which the U.S. and Japan developed a security alliance incorporating nuclear weapons and deterrence. Japan viewed the bilateral relationship from a largely pacifist lens, reluctant to pursue any sort of rearmament, particularly nuclear, and favoring a low international profile in the interest of rebuilding the domestic sphere. The U.S., continuing its crusade against communism, was more than willing to keep Japan non-nuclear, but also saw the island state as a key geopolitical tool in containing the potential threats of China and the Koreans, thus pushing Japan toward the development of the Self-Defense Forces. The following chapter will illustrate some key events in which the strength of this alliance is tested, affecting national attitudes toward nuclear weapons and allied interests, which have an important impact on diplomatic bilateral relations and provide insight into how Japan will react given future changes to U.S. nuclear strategy.

IV. SHIFTS IN THE U.S.-JAPAN ALLIANCE

Bilateral security ties, like any other relationship, require hard work on the part of both sides, particularly in times of crisis. The strongest ties are those that persevere and even grow stronger in the face of unanticipated obstacles. The U.S. and Japan encountered three such periods after the foundations of the alliance had been laid out in the 1940s and 1950s. The 1964 Chinese nuclear tests, the Nixon nuclear détente and nuclear shock of the early 1970s, and the North Korean and Chinese nuclear threats of the 1990s all tested the U.S.-Japan alliance. Each time, the two countries reached an eventual compromise and maintained stable relations. This chapter will explore these three situations in order to understand the Japanese perception of the importance of nuclear deterrence. It will also evaluate the main factors that triggered Japanese concern in each situation, how Japan responded to these concerns, and subsequently how the U.S. responded with bilateral or unilateral changes in policy.

A Response to Chinese Belligerence: The U.S. and Japan in the 1960s

From 1964 to 1967, China conducted six nuclear tests, each escalating in yield and publicity. The first, on October 16, 1964, was accompanied by an official statement of China's no-first-use policy and dedication to nuclear disarmament. It was followed by Chinese Vice Chairman Zhou Enlai urging the leaders of the world to "reach agreement... that the nuclear Powers *and those countries which may soon become nuclear powers* undertake not to use nuclear weapons, neither to use them against non-nuclear countries and nuclear-free zones, nor against each other."⁷² Needless to say, the rest of the world was not as pleased about this proposition. Japan's Foreign Minister

⁷² Walter C. Clemens Jr., "Chinese Nuclear Tests: Trends and Portents," *The China Quarterly* no. 32 (Oct.-Dec., 1967): 111-31, <http://www.jstor.org/stable/651407>.

Etsusaburo Shiina complained to the General Assembly that the test was “open betrayal” of the world’s “millions upon millions of people,” and emphasized the hypocrisy of developing nuclear weapons while claiming the goal of abolishing them.⁷³ Japan, among other countries, openly condemned both the test and the summit proposal, while other countries like the U.S. and West Germany condemned only the test. The lack of any serious diplomatic action, even by the superpowers of the U.S. and the Soviet Union, allowed the Chinese to escalate their nuclear development plans, putting increasing stress on both Japan and its security ally. The world watched and waited as China continued to build its nuclear arsenal, eventually gaining thermonuclear capabilities and, by the sixth test in June 1967, reaching the capacity to detonate a bomb yielding between 3 and 7 megatons of explosive power, larger than both the U.S. Minuteman and Polaris missiles.⁷⁴

Interestingly, Japan was much less prepared for these nuclear tests than the U.S. In a publicly released conversation between Japanese Prime Minister Hayato Ikeda and U.S. Secretary of State Dean Rusk, nine months before the first Chinese explosion in 1964, Ikeda was recorded as claiming that China has “a long way [to go]” before they developed an actual weapon.⁷⁵ Rusk, on the other hand, responded that the U.S. was expecting China to detonate a nuclear device in one or two years. Ikeda was more concerned with the threat of the USSR, amid rumors that the Communist superpower had

⁷³ “Japanese, in U.N., Scores China For Defiance on Nuclear Tests,” *New York Times Archives*, December 5, 1964, <http://nytimes.com/1964/12/05/japanese-in-un-scores-china-for-defiance-on-nuclear-tests.html>. Ironically, Japan has a similarly contradictory position today, in that they are protected by nuclear weapons but continue to call for nuclear nonproliferation in the diplomatic realm.

⁷⁴ Clemens, *op. cit.*

⁷⁵ “Japan underestimated China's nuclear weapons potential in '64,” *Japan Times*, July 24, 2014, <http://www.japantimes.co.jp/news/2014/07/24/national/japan-misread-chinas-nuclear-weapons-potential-declassified-letter>.

moved nuclear weapons to nearby Sakhalin and the Kuril Islands.⁷⁶ This aligned with the majority opinion in Japan, which at the time placed the Soviet Union as the “highest critical reaction as a disliked nation,” and put less emphasis on China.⁷⁷ It also highlighted the misguided intelligence collected at the time by a country without a functioning military and severely restricted security budget.

During this period, the U.S. was extending its nuclear deterrence to Japan and the Asian region as a whole through forward deployed nuclear weapons. The bulk of them were placed in South Korea beginning in 1958, a collection of surface-to-surface missiles, cruise missiles, and nuclear bombs for fighter-bombers that totaled 950 at the peak of the build-up in the mid-1960s.⁷⁸ In the meantime, the U.S. was stocking up Kadena Air Base in Okinawa with hydrogen bomb-armed F-100 fighter-bombers, as well as the TM-76 Mace missiles, from 1954 until 1972.⁷⁹ Okinawa’s geographic location made it a prime position for strategic deterrence efforts against China and the Soviet Union. The U.S. had skillfully navigated the complications of Article IX, and later the Non-Nuclear Principles, by not handing Okinawa’s administrative rights back to Japan when the 1960 Mutual Treaty was established. This allowed Japan to keep its word on forbidding nuclear bases on its territory, while still receiving U.S. protection.

Japanese opinion against any sort of nuclear influence within its borders was amplified in November 1964, when the American nuclear-powered submarine *Sea Dragon* docked at the Japanese port of Sasebo a month after the first Chinese nuclear test

⁷⁶ Ibid.

⁷⁷ Douglas H. Mendel Jr., “Japan Reviews Her American Alliance,” *The Public Opinion Quarterly* 30, no. 1 (Spring 1966): 1-18, <http://www.jstor.org/stable/2747367>.

⁷⁸ Hans M. Kristensen, “A history of U.S. Nuclear Weapons in South Korea,” The Nuclear Information Project, September 8, 2005, <http://www.nukestrat.com/korea/koreahistory.htm>.

⁷⁹ Jon Mitchell, “Okinawa's first nuclear missile men break silence,” *Japan Times*, July 8, 2012, under “Life,” <http://www.japantimes.co.jp/life/2012/07/08/general/okinawas-first-nuclear-missile-men-break-silence/#.VSoLbvnF-So>.

was conducted. The Ikeda cabinet only reluctantly approved the decision, and even then there was considerable pushback from opponents of the 1960 treaty, who contended that the visit would entangle Japan in American nuclear strategy, even though the submarine was not actually carrying nuclear weapons.⁸⁰ Despite holding the U.S. in the highest regard in terms of foreign countries, the Japanese were overall skeptical of the U.S.-Japan security alliance, one of their complaints being that the U.S. ignored Japanese input toward maintaining the relationship. This skepticism was combined with the opposing trade and strategic policies each country developed toward China; the U.S. pursued a policy of total embargo on trade with Communist China, while Japan even with its nuclear fears did not want to miss the opportunity to expand relations with its neighbor.⁸¹ As for the nuclear weapons themselves, the Japanese were still reeling from the humanitarian effects of Hiroshima and Nagasaki, making any effort to support nuclear weapons in the country unacceptable, if not dangerous. So even though there was a very secure bilateral relationship between the U.S. and Japan on paper, there were also some glaring differences in opinion and policy that prevented a unified reaction to the Chinese nuclear tests.

By the sixth test in 1967, then, both countries were fostering concerns about their own safety against nuclear weapons. The U.S. Defense Department did not think China's nuclear arsenal would be developed quickly enough for panicked decisions, but many Congressmen disagreed, calling for an initial deployment of anti-ballistic missile defenses for the protection of U.S. territory.⁸² This only reaffirmed Japanese strategic concerns; increasing Chinese belligerence was right at their door, unchecked by

⁸⁰ Ibid.

⁸¹ Ibid.

⁸² Clemens, *op. cit.*

international measures, while their main bilateral ally seemed to be looking more inward than outward, leaving them in a vulnerable position. Additionally, due to Japan's previous focus on the Soviet Union as the main threat to nuclear security, Chinese nuclear tests came as somewhat of a shock.⁸³ Suddenly, the danger of nuclear proliferation became more real to Japanese policymakers and scholars than ever before, the thought being that if China could build the bomb, other developing countries in the area could too. There were also no concrete diplomatic ties between China and Japan or China and the U.S. in this period, meaning that in the case of nuclear emergency, few preventative measures were in place for correcting miscommunications regarding intentions, and accidental or reactionary nuclear war became an unpleasantly viable option.

Japanese academics had three other concerns as a result of the Chinese nuclear tests of the 1960s. The first questioned the Chinese "paper tiger" attitude, first declared by Chairman Mao Zedong back in 1946.⁸⁴ In the days before anyone besides the U.S. had even tested a nuclear weapon, Mao made a famous statement in August 1946 saying that threatening the use of atomic bombs "is a paper tiger used by the U.S. reactionaries to scare people."⁸⁵ His condescension toward nuclear weapons, as well as his early teachings that physical manpower is more crucial than weapons in deciding the outcome of war, led most leaders and scholars to believe that China was not serious about pursuing a threatening nuclear arsenal. After the tests of the 1960s, however, that paper tiger was looking more and more lifelike, such that some Japanese worried about the policy being

⁸³ Yuri Kase, "The Costs and Benefits of Japan's Nuclearization: An Insight into the 1968/70 Internal Report," *The Nonproliferation Review* (Summer 2001): 55-68, <http://cns.miis.edu/npr/pdfs/82kase.pdf>.

⁸⁴ Kase, *op. cit.*

⁸⁵ "People's Republic of China: Nuclear Weapons Employment Policy and Strategy," Defense Intelligence Agency, March 1972, http://fas.org/irp/dia/product/prc_72/dia_discussion.htm.

only a small part of a larger Chinese conspiratorial strategy, designed to undermine the credibility of nuclear blackmail by either the U.S. or the Soviet Union.⁸⁶ Since China did not share the same logical reasoning as other states, they cautioned, it could be dangerous for Japan or the U.S. to engage in any sort of conventional deterrence, because the risk of miscommunication and unintended violence would be too high.

The second concern, addressed both in academia and policy, was the possibility of China using nuclear blackmail toward Japan. This is not to say that people expected a direct nuclear attack on Japan; the blowback costs on China, including a perfect excuse for U.S. retaliation and perhaps even Soviet aggression, would be much too severe for that to be a feasible option.⁸⁷ Nevertheless, a “nuclear hostage” situation, with Japan as the unfortunate victim, could have shaped the U.S.-China relationship in the event of crises on the Korean Peninsula and the Taiwan Strait, or perhaps unexpected escalation of the Vietnam War.⁸⁸ If China did decide to take the risk of sparking cross-Pacific enmity and taking Japan “hostage,” the strategy became entirely dependent on whether the U.S. had a credible enough extended deterrent to negotiate a salient solution. Both Japanese scholars and policymakers admitted that the nuclear blackmail potential only faded in priority if the bilateral nuclear alliance with the U.S. was strong.⁸⁹

Then there were some who questioned the strength of this alliance in regard to the third concern, the U.S. capability to deter attacks against assumed future Chinese Intercontinental Ballistic Missiles (ICBMs), not only targeted at the home turf but also at the territories of extended allies. Though Chinese ICBMs would not be formally

⁸⁶ Kase, *op. cit.*

⁸⁷ *Ibid.*

⁸⁸ *Ibid.*

⁸⁹ *Ibid.*

introduced into the arsenal until the 1970s, China's six nuclear tests quickly galvanized fearful thoughts toward the future of missile capabilities. As Congress debated the finalities of providing new and more technologies toward nuclear weapons defense and deterrent systems, Japan was coming up with its own alternatives. These included the development of Japan's own multiple independently targetable re-entry vehicle (MIRV) nuclear missiles and nuclear-capable submarines; the abandonment of the U.S. nuclear umbrella, in fear of entrapment in international incidents such as the Vietnam War and other regional tiffs; and the abandonment of the entire bilateral security mechanism between Japan and the U.S., in order to gain ground as a completely neutral state.⁹⁰ All of these concerns affected Japanese and U.S. apprehension toward the 1960s Chinese nuclear tests.

In response to the perceived Chinese nuclear threat, Japan, despite the pervasiveness of pacifist Article IX, conducted what would be its earliest and only nuclearization investigation for the 1968/70 Internal Report.⁹¹ This report, written by four Japanese university academics and commissioned by the advisory research board to Prime Minister Sato, is the most frequently cited document on the topic both domestically and internationally, despite its secret status within the Japanese government. It outlines the obstacles that make a Japanese nuclear weapons program counterproductive to national interests, addressing the three concerns discussed above. The most vital conclusion for the purpose of this paper is that it was not worth Japan's effort to adopt a nuclear weapons regime, given the financial, technological, and political costs. The

⁹⁰ Ibid.

⁹¹ Ibid. The Report is named as such because the first part, which looks at technical and economic issues, was completed in September 1968, while the 2nd part, focusing on strategic and political issues, was not completed until January 1970. It also did not surface to the attention of the press until fall 1994, and was never officially released to the public.

benefits were reduced dependence on the U.S. and membership in the “nuclear club”, but given the interdependence and strong relationship between the two countries, it would have been a small reward for the larger price. The 1968/70 Internal Report looked at both the Chinese nuclear blackmail case and the U.S. credibility case, and determined the following logic:

1. China will not attack Japan unless it believes the U.S. will never retaliate on Japan’s behalf, in other words, unless it does not believe the credibility of the U.S. extended deterrence.
2. Whether or not *Japan* believes the U.S. extended deterrence is credible, as discussed in the third concern, will not affect the way China calculates U.S. credibility.
3. Therefore, it is in Japan’s best interest to stick with the U.S. extended deterrence, and not pursue nuclear weapons of its own.⁹²

While the exact impact of the 1968/70 Internal Report will likely remain unknown, its conclusions, presented by outside Japanese academics with less incentive to skew numbers and opinions, could have had a major influence on the way in which Japan conducted diplomatic affairs with the U.S. following the Chinese nuclear tests of the 1960s.

How did all of this affect the alliance, and how did both parties work together to relieve tensions? For the most part, public verbal assurances were the most effective method. In January 1965, U.S. President Johnson and Prime Minister Sato assembled in Washington to reiterate, among other commitments, the stability of the security policy:

⁹² Ibid.

“The President and the Prime Minister reaffirmed their belief that it is essential for the stability and peace of Asia that there be no uncertainty about Japan's security. From this viewpoint, the Prime Minister stated that Japan's basic policy is to maintain firmly the United States-Japan Mutual Cooperation and Security Treaty arrangements, and the President reaffirmed the United States determination to abide by its commitment under the Treaty to defend Japan against any armed attack from the outside.”⁹³

Analysts note the importance of the phrase “any armed attack,” as it was considered by the Japanese to be the first time in which the U.S. explicitly promised to defend Japan with both conventional and nuclear forces.⁹⁴ The other key factor was the enthusiasm of Prime Minister Sato, who confirmed after the 1965 Joint Communique that no country would dare to attack Japan under the cover of U.S. protection. Reassurance by the U.S. president was essential, but domestic concerns within Japan were much more easily allayed with encouragement from the Japanese leader himself. The impact of these verbal assurances on Japan is apparent even today, as “even the slightest change of this government line has caused political chaos in Japan.”⁹⁵

The Chinese nuclear tests of the 1960s were essential in the way they pushed the security relationship between Japan and the U.S. toward a more comprehensive nuclear plan. The U.S. saw that a simple bilateral mutual security treaty would not be enough to address the complications of external threats, as the sudden aggression from China caused reactionary opinions among scholars and public opinion, and even led Japan to consider the pros and cons of nuclearizing. Because of this, the U.S. adjusted their

⁹³ “Joint Statement of Japanese Prime Minister and U.S. President Johnson,” “The World and Japan” Database Project, Database of Japanese Politics and International Relations, Institute of Oriental Culture, University of Tokyo, <http://www.ioc.u-tokyo.ac.jp/~worldjpn/documents/texts/JPUS/19650113.D1E.html>.

⁹⁴ Kase, *op. cit.*

⁹⁵ *Ibid.*

diplomatic efforts with strong diplomatic statements and assurances for the Japanese leadership in order to manage the situation, and eventually reached stability once more.

Nixon and Kissinger Shake Things Up

In the 1970s, Japan faced an entirely different challenge from that of the 1960s: dealing with sudden changes in U.S. policy.

President Richard Nixon and Henry Kissinger had a distinct view for the U.S. role in the world. They wanted the U.S. to remain in states where it could make a difference and protect essential allies, specifically in the context of the Vietnam War, but they also wanted to give states the “freedom” to defend themselves in order to relieve some of the burden on U.S. economic resources. Nixon in particular had long been a proponent of Japanese rearmament, including the removal of pacifist Article IX. In May 1969, Nixon approved the National Security Decision Memorandum (NSDM) 13, which suggested “moderate increases and qualitative improvements” for Japan’s defense capabilities, so long as there was no significant military buildup, especially in regard to armed forces.⁹⁶ Then, two months later in July, Nixon announced the more prominent Nixon Doctrine, which called for a decrease in U.S. direct involvement abroad, combined with a steady maintenance of existing treaty commitments and the nuclear umbrella for U.S. allies.⁹⁷ To close out the year, Nixon urged Prime Minister Eisaku Sato to “develop a significant military capability” and “assume a greater responsibility” for East Asian regional security

⁹⁶ Yukinori Komine, “Whither a 'Resurgent Japan': The Nixon Doctrine and Japan's Defense Buildup, 1969-1976,” *Journal of Cold War Studies* 16, no. 3 (2014): 88-128, accessed February 19, 2015, http://muse.jhu.edu/journals/journal_of_cold_war_studies/v016/16.3.komine.pdf.

⁹⁷ Ibid.

at a November 1969 summit.⁹⁸ This summit focused on the reversion of Okinawa and its bases from the U.S. to Japan.

In the midst of all these policy advancements, some U.S. officials were harboring concerns about Japan's potential to return to the world stage as a nuclear power. The 1960s were a relatively peaceful time for Japan, even in nuclear activism, and one could say the period was one of "nuclear soul-searching," to test whether Japan had the capability and interest for handling its own nuclear weapons arsenal. In spite of documents like the 1968/70 Report, analysts like Herman Kahn were convinced that "Japan, with its economic and technological potential, would become a nuclear-armed superpower by the late 1980s."⁹⁹ U.S. officials were also aware of the enormous fear from China and both Koreas over the possibility of Japanese remilitarization. The scars of the war in East Asia had far from fully healed. Meanwhile, Japan had been revitalizing its economy over the decades since its original military occupation by the U.S., catapulting it to great power status in the international economy. At the same time, economic growth encouraged the beginnings of a more independent, nationalistic public opinion, one that would rely increasingly on prestige and autonomy rather than survival and dependence, and one that would cause heightened concerns among U.S. officials.

Yet the Japanese also had reason to worry about U.S. policy, specifically the Nixon Doctrine. They viewed it as a preview for a later U.S. withdrawal from the East Asian region, calling into question once again the issue of the credibility of U.S. extended deterrence in that area of the world. From the Japanese perspective, the U.S. was not only slowly abandoning it as an ally but was also reaching out to its political enemies, namely

⁹⁸ Ibid.

⁹⁹ Ibid.

through détente with the Soviet Union over nuclear arsenals and rapprochement with China.¹⁰⁰ This was not the intent of the U.S.; if anything, the U.S. was trying to unite China and Japan into a trilateral strategic alliance in order to band against the Soviet Union, and ensuring sufficient deterrent capabilities in the region was an absolute priority in order to make the grand strategy happen. However, the Japanese fear of entrapment in other international crises, combined with the questions of U.S. credibility and Chinese nuclear blackmail that had been lingering since the 1960s, made a reactionary response to Nixon policies more and more likely.

Yasuhiro Nakasone was one of the first Japanese officials to actively respond to the Nixon Doctrine and subsequent statements. The nationalistic leader of the Liberal Democratic Party and the director general of the Japan Defense Agency, Nakasone determined that while Japan would not directly benefit from developing its own nuclear weapons, it needed a more secure guarantee from the U.S. in terms of maintaining proper defensive forces. Nakasone ruffled feathers in the diplomatic communities of both parties, as he “sought to obtain explicit reassurance from U.S. military officials of nuclear protection and even suggested that Japan should allow the United States to bring nuclear weapons into Japan in emergencies.”¹⁰¹ Nothing too productive came from the Nakasone initiative, namely because of the difficulties of getting such extreme measures through the U.S. and Japanese legislatures and the contradictory diplomacy of the Foreign Minister Kiichi Aichi, who took a more moderate stance. In spite of this, Nakasone laid the groundwork for a few more Japanese nationalistic reactions to Nixon policies to

¹⁰⁰ Ibid.

¹⁰¹ Ibid.

reignite a serious debate on nuclear weapons and how they should best protect Japan in light of external threats.

Just as the responses to the Nixon Doctrine were dying down, Nixon added fuel to the fire of tensions in the U.S.-Japan security relationship in July 1971, when he made an official visit to China without informing Japanese Prime Minister Sato until three minutes beforehand.¹⁰² This diplomatic disaster, known as the “Nixon Shock,” came especially hard to the Japanese. The last thing Japan wanted to see was “Japan Passing,” in other words, the U.S. bypassing it on the list of priorities to visit the Chinese, one of its more bitter political enemies. Serious damage was done to the trust and confidence between the two governments, as well as to the domestic and international reputation of Prime Minister Sato. Anti-U.S. sentiments increased in Japan in response to Japanese officials’ perception of having been deceived by policymakers such as Nixon and Kissinger. This was not helped by the apparent double standard of Nixon and Kissinger, who wanted at all costs to prevent Japan-China collusion against the U.S. At the January 1972 summit with Sato and the February 1972 summit with Mao Zedong and Zhou Enlai, Nixon and Kissinger used tailored diplomatic arguments in an attempt to persuade the leaders of both countries that staying with the U.S. and not normalizing Japan-China relations was the optimal path.¹⁰³

The U.S. was not the only one with tools in its belt, however. While they indeed felt betrayed by the larger superpower in the aftermath of the Nixon Shock and the February 1972 China summit, Japanese officials were also aware of their strategic location for U.S. tactics in the region, and therefore understood that using the threat of

¹⁰² Ibid.

¹⁰³ Ibid.

blocking access to military facilities, specifically Yokota Base in western Tokyo, could be leverage toward having a voice in deciding nuclear policy.¹⁰⁴ Though nuclear weapons were being removed from Kadena Air Base, Yokota still made up an important part of the strategic triad with fighter wings in South Korea and the Philippines to deter attacks from China. It could also be said that Japanese officials were tired of the “China-first attitude,” which seemed prevalent at the higher levels of U.S. government. With heightened concerns over the withdrawal of U.S. forces from Asia, and dwindling domestic admiration for the U.S., Japan faced a greater nationalistic desire for diplomatic independence and, as a result of its economic growth, more recognition as a great power.¹⁰⁵ Nixon soon saw the effects of his audacity on Asian regional diplomacy, as Japan embarked on a policy pattern of “U.S. Passing,” forgoing prioritizing U.S. interests and openly seeking its own relationships with other states. In September 1972, newly instated Japanese Prime Minister Kakuei Tanaka visited Beijing and worked with Premier Zhou to end the “abnormal state of relations” between Japan and China and establish diplomatic normalization. Soviet leader Leonid Brezhnev received Tanaka in Moscow in October 1973 to discuss further development of diplomatic and trade relations between the two countries, especially in regard to the Northern Territories and Siberian natural resources.¹⁰⁶ And disregarding Kissinger’s recommendation to not pursue unilateral diplomacy in the Middle East, Japan supported oil-producing Arab states in the October 1973 Arab-Israeli War in order to protect its valuable Persian Gulf oil supply,

¹⁰⁴ Ibid.

¹⁰⁵ This does not mean that the Japanese had suddenly changed their minds on rearmament; there was still a great deal of anti-militarist sentiment against an expansion of Japanese forces and defense capabilities.

¹⁰⁶ Ibid.

contrary to efforts made by the U.S.¹⁰⁷ All of these provided irritants in the U.S.-Japan security relationship that brought up questions on both sides as to the credibility of the arrangement, particularly on the important and expensive issue of nuclear deterrence.

By 1973, the Nixon administration definitely had concerns about the Japanese potential to develop its own nuclear deterrent. The U.S. Department of Defense saw the rise of Japanese nationalism as a key catalyst toward such a goal. However, the NSC staff had more pragmatic views of the situation, reporting that while the possibility for Japanese nuclearization did exist, it would take Japan a considerably long period of time to construct and would be unnecessarily costly, matching the observations of the Japanese themselves.¹⁰⁸ Hence, as the U.S. transitioned into a new presidency with Nixon's resignation, a more moderate policy toward Japan began to emerge. The first positive diplomatic sign came when new President Gerald Ford, in an effort to boost the bilateral relationship, made an official visit to Japan in November 1974 and became the first U.S. president to do so.¹⁰⁹ 1975 marked a revival of goodwill in Asian relations, as the Vietnam War ended in April, and in December, Ford introduced the New Pacific Doctrine, which had three main premises relevant to Japan: 1) the U.S. needed to continue providing physical strength to maintain the balance of power in East Asia; 2) the bilateral relationship with Japan was a "pillar" of U.S. strategy; and 3) the U.S. would continue to normalize relations with China.¹¹⁰ Japan responded by drafting its first National Defense Program Outline in 1976, led by then Prime Minister Takeo Miki, which provided a comprehensive national defense strategy and strove to limit the quantity

¹⁰⁷ Ibid.

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

¹¹⁰ Gerald R. Ford, "Address by President Gerald R. Ford at the University of Hawaii," Gerald R. Ford Presidential Library & Museum, <http://www.fordlibrarymuseum.gov/library/speeches/750716.asp>.

of peacetime expenditures while improving the quality.¹¹¹ To round out the period of positivity, the Japan-U.S. Security Consultative Committee, the subcommittee for defense cooperation under the 1960 U.S.-Japan Mutual Security Treaty, published the Guidelines for Japan-U.S. Defense Cooperation on November 27, 1978. This document, which focuses on the two countries' deterrence posture, defense against armed attacks, and bilateral cooperation in the case of external threats that might influence Japan,¹¹² restated the commitment of the U.S. nuclear deterrent, as well as "the forward deployments of combat-ready forces and other forces capable of reinforcing them."¹¹³ Thus, the tensions through the Nixon Doctrine, the Nixon Shock, and manipulative diplomacy of the great powers lessened slightly in light of new, cooperative policies, though lingering issues of politics and Japanese constitutional restraints continued to provide new challenges to the bilateral relationship.

Wohlstetter noted on the nature of U.S. nuclear deterrence: "If dangers are small because they would produce a U.S. response, then if we want to keep them small, we should do nothing that would greatly diminish the plausibility of U.S. response."¹¹⁴ The U.S. and the Nixon administration learned this lesson firsthand in the context of the alliance with Japan in the 1970s. When the Nixon Doctrine threatened to withdraw some U.S. forces in the region, Japan saw the move as both abandonment and opportunity. Together with the Nixon Shock, the Nixon Doctrine produced more chaos and misunderstanding than any policy since the military occupation in the 1940s, and

¹¹¹ Komine, op. cit.

¹¹² No doubt the third category refers to incidents such as the 1960s Chinese nuclear tests.

¹¹³ "Guidelines for Japan-U.S. Defense Cooperation," Federation of American Scientists, <http://fas.org/news/japan/sisin1e.htm>.

¹¹⁴ Albert Wohlstetter, "Japan's Security: Balancing after the Shocks," *Foreign Policy* no. 9 (Winter 1972-1973): 171-190, accessed March 17, 2015, <http://www.jstor.org/stable/1148092>.

heightened the danger in terms of nuclear deterrence and the possibility of armed conflict. Yet, as Wohlstetter commented:

“If the failure were only a lapse in understanding at the highest level of the American government about the importance and the past role of American foreign policy in Japanese internal politics, the Japanese might still have to wonder why there was such a lapse; and whether our leaders would have acted any differently if they had been better informed.”¹¹⁵

For the future of extended nuclear deterrence and the security relationship with Japan, it will be crucial to keep in mind the historical precedents that made the 1970s one of the tensest periods between the two countries.

The 1990s: Enter the Koreans

After the Chinese nuclear tests of the 1960s and the uproar of the Nixon administration policies in the 1970s, there was a relative lull in the Japan-U.S. security relationship until the end of the Cold War at the turn of the 1990s. At this point two new actors became prominent in the East Asian security paradigm: North and South Korea. Japan had not been directly involved with the Koreas since it occupied those territories in the early 1900s, and at first it was mainly concerned with South Korea and the diplomatic ties it was establishing with China and the Soviet Union.¹¹⁶ However, when the development of North Korea’s nuclear weapons and missile programs resulted in the nuclear crisis of 1994 and the Taepodong launch of 1998, Japan experienced two major

¹¹⁵ Ibid.

¹¹⁶ C.S. Eliot Kang and Yoshinori Kaseda, “Korea and the Dynamics of Japan's Post-Cold War Security Policy,” *World Affairs* 164, no. 2 (Fall 2001): 51-59, accessed March 18, 2015, <http://www.jstor.org/stable/20672626>.

peaks of tension with the U.S. that altered the way in which both countries viewed each other's security commitments.

From 1990 to 1991, the U.S. stockpile of nuclear strategic warheads dropped from 5,330 to 3,400.¹¹⁷ At the same time, the forward deployed weapons systems in South Korea were being dismantled and removed, ICBM launchers were almost halved in quantity, and nuclear submarines, SLBM launchers, and even bombers faced dramatic decreases.¹¹⁸ Then, after 1991, there were small fluctuations within the numbers of all these categories but the overall trend pointed toward further reductions. These statistics reflected the impact of START I (even though it was not officially entered into force until 1994), as well as Clinton's lead but hedge strategy, to maintain effective deterrent forces while also providing a strong example for the rest of the world in disarmament.

Japan's adverse reaction to the 1994 nuclear crisis can be traced back to its actions in 1989 and 1990. After a comfortable period of growth in the 1980s, Japan became embroiled in the "Lost Decade," during which a sharp increase in inter-bank lending rates in 1989 led to the burst of the Japanese asset price bubble and the crash of the Japanese stock market, causing severe economic repercussions throughout the 1990s. These financial struggles, combined with Japan's desire to develop its own autonomous foreign policy from the U.S. and South Korea, influenced the Japanese Foreign Ministry's decision to issue a statement in January 1989 indicating Japan's neutral stance toward North Korea, despite U.S. and South Korean opposition.¹¹⁹ This remark was followed by a set of negotiations between North Korean representatives and Deputy

¹¹⁷ "Table of US Nuclear Warheads," Natural Resources Defense Council, <http://www.nrdc.org/nuclear/nudb/datab9.asp>.

¹¹⁸ Ibid.

¹¹⁹ David Fouse, "Japan's Post-Cold War North Korea Policy: Hedging toward Autonomy?," *Asian Affairs* 31, no. 2 (Summer 2004): 102-20, accessed March 18, 2015, <http://www.jstor.org/stable/30172611>.

Prime Minister Shin Kanemaru in September 1990, which resulted in a Three-Part Declaration between Japan's Liberal Democratic Party (LDP) and Japan Socialist Party and North Korea's Korean Workers Party.¹²⁰ Though this declaration never came into force, its terms, which sought negotiations to establish official diplomatic relations between North Korea and Japan, and called for Japan to apologize and compensate North Korea for atrocities from the early 1900s Japanese occupation period, greatly alarmed the U.S. After all, perhaps with lingering resentment from the Nixon Shock, Japanese officials had conveniently neglected to consult either the U.S. or South Korea on their plans.¹²¹ Frantic diplomatic scuffles ensued in an attempt to realign Japanese policy, and U.S. reprimands led Japan to create a new normalization policy more similar to that of its allies. However, the seeds of tension between Japan and the U.S. had been planted, contributing to the diplomatic fiasco of the 1994 North Korean nuclear crisis.

After test launching a long-range missile, the Nodong-1, into the East Sea/Sea of Japan in May 1993, North Korea caused peak anxiety levels in the U.S. and its allies in April 1994, when it removed spent fuel rods from its Yongbyon nuclear reactor but refused to disclose them to international inspection.¹²² These fuel rods contained valuable evidence which could point to the development of a nuclear weapons program. Japan had every reason to fear these advances; not only could North Korea theoretically attack cities throughout Japan, including southern cities like Osaka, with its long-range missiles, but also it could be arming them with nuclear warheads. Unfortunately, it was also torn by its overwhelming worry of entrapment. Hence, when tensions were escalating and the U.S. called on Japan to support it in preparation for potential hostilities through intelligence

¹²⁰ Ibid.

¹²¹ Fouse, *op. cit.*

¹²² Kang and Kaseda, *op. cit.*

gathering and other rear-area logistical backing, Japan was caught off guard.¹²³ Having no specific contingency plan for supporting U.S. forces outside of a direct attack on Japan, and worrying that such action would violate Japan's ban on collective defense, Japan refused to respond to the U.S. request.¹²⁴ Though former U.S. President Jimmy Carter was able to defuse the tensions by visiting Pyongyang in June 1994 and setting a path toward the Agreed Framework between the United States and North Korea in October, it was clear that more work was needed to solidify a productive U.S.-Japan alliance. As a result, Japan revised its National Defense Program Outline in 1995, adding that in security situations involving "areas surrounding Japan," Japan will more actively support UN efforts and "the smooth and effective implementation of the Japan-U.S. agreement."¹²⁵ The U.S. had to make sure that Japan stayed in line and understood that there was a limit to the freedom of determining foreign policy under the alliance, especially when the two countries were so closely engaged in similar regional issues. Japan and the U.S. also issued a Joint Declaration on Security in April 1996, reaffirming the importance of the Mutual Security Treaty, even after the major threat of the Cold War.

While these agreements gave the impression that they would prevent future discrepancies in policy, the Taepodong incident in August 1998 made it seem like none of it had ever happened. Despite U.S. demands for Japan to align with its North Korea policy, it still neglected to fully integrate Japan into the information-sharing network it had in place with South Korea since the Korean War in the 1950s.¹²⁶ This meant that when the North Korean two-stage long-range missile, Taepodong-1, was fired over Japan

¹²³ Fouse, *op. cit.*

¹²⁴ *Ibid.*

¹²⁵ Fouse, *op. cit.*

¹²⁶ Kang and Kaseda, *op. cit.*

in late August 1998, Japan responded in its own unique way, without considering the interests of its allies. Among its many threats, its withdrawal as a key financial sponsor of the Korean Peninsula Energy Development Organization (KEDO), suspension of normalization talks with North Korea, and freezing of food and other humanitarian support to North Korea were most prominent (and distressing).¹²⁷ The U.S. and South Korea, who were more interested in getting a positive deal out of North Korea than provoking it through intimidation, were appalled by Japan's audacity, and in the end were more supportive of the North Korean side. The U.S. affirmed North Korea's claim that the Taepodong was a satellite launch instead of Japan's accusation that it was a missile test, and forced Japan back into its position as a KEDO supporter.¹²⁸ Japan had no feasible alternative: it could not feel safe without U.S. protection, and in order to continue receiving U.S. protection it had to maintain the trilateral alliance with South Korea and improve information-sharing and military relationships. A diplomatic method called the Perry process was implemented to narrow the policy gap among the three countries, and established the Trilateral Coordination and Oversight Group in April 1999.¹²⁹ The 1998 U.S. Security Strategy for East Asia-Pacific focused on the bilateral relationship with Japan as "the linchpin of U.S. security strategy in Asia," and the revised Guidelines for U.S.-Japan Defense Cooperation, approved by the Japanese Diet on May 24, 1999, provided more specificity on cooperation and planning in response to threats directly and indirectly related to Japan.¹³⁰

¹²⁷ Ibid.

¹²⁸ Fouse, op. cit.

¹²⁹ Kang and Kaseda, op. cit.

¹³⁰ David J. Richardson, "US-Japan Defense Cooperation: Possibilities for Regional Stability," *Parameters: US Army War College Quarterly* 30, no. 2 (Summer 2000): 94-104, <http://strategicstudiesinstitute.army.mil/pubs/parameters/Articles/00summer/contents.htm>.

In spite of these reinforcements of the alliance, the threat from North Korea and the pressures from the U.S. to redirect Japanese foreign policy did give incentive to Japan to consider its own defense capabilities in a way that was not seen during the Cold War. In November 1998, for example, Japan announced its intentions to develop its own surveillance satellite system, and in March 1999, JDA Director General Norota Hosei informed a Diet defense panel that if a missile attack on Japan was “imminent,” Japan had the right to make preemptive military strikes.¹³¹ These proactive moves, in addition to the decision to obtain mid-air refueling aircraft for the purpose of long-range strike missions by the Japanese Air Self-Defense Force, illustrated that while Japan has had a pervasive culture of pacifism, it is not necessarily one widely shared by all in the Japanese government, and therefore not necessarily a permanent one.

Conclusion

The Chinese nuclear tests of the 1960s, the Nixon policies of the 1970s, and the rise of the North Korean nuclear regime in the 1990s provided three main periods of tension for the U.S.-Japan security alliance. Reacting both to these changes and the trends in the structure and quantity of the U.S. nuclear arsenal, Japan often developed controversial policies that shook the alliance and required a considerable amount of diplomatic effort to resolve. The U.S. was good at fixing these issues once they had become large enough to notice, but it also continued to make mistakes by leaving Japan out of important policy and information-sharing and remaining ambiguous on its security commitments. Japan’s attraction to the nuclear deterrent was apparent throughout these periods, despite domestic opposition to having nuclear weapons on physical Japanese territory. It was simply too cost effective and easy to remain under the U.S. nuclear

¹³¹ Kang and Kaseda, *op. cit.*

umbrella, and a real conventional or nuclear force would violate the constitutional restraints placed on Japan since World War II. As the focus of this paper turns to current challenges and changes in domestic and international policy for both countries, these historical precedents make useful comparisons when determining the triggers for Japanese concerns in the alliance and the appropriate U.S. responses to mitigate those concerns.

V. THE ALLIANCE TODAY

Having examined the three main periods of tension related to nuclear weapons that tested, but did not break, the security relationship between Japan and the U.S., this paper now turns to the present. The past few years have brought several important changes to the way both sides view the bilateral alliance, giving it unique context today that did not exist in the 1960s, 1970s, or 1990s. This chapter will outline first the main framework of the U.S.-Japan extended deterrence relationship today, encompassing both diplomatic and military cooperative efforts. The second part will analyze the concerns held by both the U.S. and Japan in regard to this alliance as well as to the U.S. nuclear arsenal. These range from U.S. nuclear modernization plans to Japanese apprehension of abandonment in the face of regional conflict.

Alliance 101: Modern U.S.-Japan Security Relations

There are currently 50,000 U.S. troops stationed in Japan, spread out between 90 different military facilities within the territory.¹³² In exchange for Japanese hosting of soldiers, the U.S. provides Japan with extended deterrence, using both conventional and nuclear arsenals. Most experts assert that the original, asymmetric alliance between the two countries has evolved into a “more balanced security partnership,” particularly since the turn of the century.¹³³ Recognizing that information sharing and discussions were essential to appeasing Japan’s concerns about the alliance throughout history, the U.S. established two different diplomatic mechanisms. The Cabinet-level Security Consultative Committee, also known as the “2+2” since they are composed of the U.S. Secretaries of Defense and State and their Japanese counterparts, meets to present

¹³² Emma Chanlett-Avery et al., “Japan-U.S. Relations: Issues for Congress,” Congressional Research Service, January 13, 2015, accessed April 26, 2015, <https://www.fas.org/sgp/crs/row/RL33436.pdf>.

¹³³ Ibid.

alliance concerns at a general level and releases public statements with their goals and strategies.¹³⁴ The bilateral Extended Deterrence Dialogue, on the other hand, works specifically for the purpose of U.S. assurance for its ally, and allows for an exchange of opinions and strategies to influence subsequent nuclear policies. An example of this is the Japanese policy makers' impact on the 2010 U.S. Nuclear Posture Review; according to reports, the Japanese dissuaded an attempt to determine the "sole purpose" of U.S. nuclear weapons as deterring nuclear attack.¹³⁵

As part of the more balanced alliance, Japan has also been working toward bolstering its own defenses, specifically in the realm of ballistic missile defense (BMD). After its 2003 purchase of technologies and interceptors developed by the U.S., Japan has become the second most potent BMD capability in the world, working with the U.S. to deploy both ground-based BMD units and BMD-capable ships.¹³⁶ When Prime Minister entered his second term in office in September 2012, he authorized the first increase in the Japanese budget in years, a 0.8 percent jump for the fiscal year (FY) of 2013.¹³⁷ From that point on, there were three major developments in Japanese defense policy. The first was the National Defense Program Guidelines for FY 2014 and beyond, which introduced the policy of "Proactive Contribution to Peace," based on international cooperation, and stressed the need for new military hardware, as well as "extensive persistent ISR," referring to intelligence, surveillance, and reconnaissance.¹³⁸

Concurrently published on December 17, 2013 was Japan's first ever National Security

¹³⁴ Emma Chanlett-Avery and Ian E. Rinehart, "The U.S.-Japan Alliance," Congressional Research Service, December 13, 2013, accessed April 26, 2015, <https://www.fas.org/sgp/crs/row/RL33740.pdf>.

¹³⁵ Chanlett-Avery et al., "Japan-U.S. Relations: Issues for Congress," op. cit.

¹³⁶ Ibid.

¹³⁷ Chanlett-Avery and Ian E. Rinehart, "The U.S.-Japan Alliance," op. cit.

¹³⁸ "National Defense Program Guidelines for FY 2014 and beyond," Ministry of Defense of Japan, December 17, 2013, http://www.mod.go.jp/j/approach/agenda/guideline/2014/pdf/20131217_e2.pdf.

Strategy. This document reinforced the “Proactive Contribution to Peace,” and laid out the country’s three objectives of deterring threats toward Japan, improving the security environment of the Asia-Pacific region, and improving the global security environment, keeping in mind the “complex and grave national security challenges.”¹³⁹ Moreover, on July 1, 2014, Abe announced in a press conference that according to a Cabinet decision, Japanese forces would be able to come to the aid of other countries under very specific circumstances.¹⁴⁰ This was a revolutionary reinterpretation of the constitution and the right of “collective self-defense,” and would permit more flexible Japanese engagement in activities such as noncombat logistical operations, defense of distant sea lanes, and U.N. peacekeeping operations.¹⁴¹

To round out the alliance, the U.S. and Japan are currently in the process of revising the bilateral Mutual Defense Guidelines, which have not been changed since 1997. On his visit to Tokyo in April 2015, Secretary of Defense Ashton Carter called the revisions transformative for U.S. military ties with Japan, one main objective being to establish new guidelines for cooperation in the fields of cyber warfare, military uses of space, and ballistic missile defense, among others. The other major change, according to U.S. officials, would “allow Japan to respond to an attack on the U.S. military even if the American forces are not acting in defense of Japan at the time.”¹⁴² It is assumed that the finalized guidelines will be published in time for Abe’s visit to Washington on April 28.

¹³⁹ “National Security Strategy,” Cabinet Secretariat of Japan, December 17, 2013, <http://www.cas.go.jp/jp/siryoku/131217anzenhoshou/nss-e.pdf>.

¹⁴⁰ “Press Conference by Prime Minister Abe,” Prime Minister of Japan and His Cabinet, July 1, 2014, http://japan.kantei.go.jp/96_abe/statement/201407/0701kaiken.html.

¹⁴¹ Chanlett-Avery et al., “Japan-U.S. Relations: Issues for Congress,” op. cit.

¹⁴² Missy Ryan, “Revised defense rules would give Japan new powers to aid U.S. military,” *Washington Post*, April 8, 2015, http://www.washingtonpost.com/world/new-defense-rules-would-give-japan-new-powers-to-aid-us-military/2015/04/08/419c0678-dda8-11e4-a500-1c5bb1d8ff6a_story.html.

U.S. Concerns

The U.S. has two main concerns when it comes to the nuclear weapons posture and the bilateral relationship with Japan: the direction of nuclear modernization, and the possibility of reemerging hostile Japanese policies.

Nuclear modernization

As mentioned earlier in this paper, Obama's 2009 Prague speech and the success of the 2010 New Strategic Arms Reduction Treaty between Russia and the U.S. brought a fresh wave of hope to the nonproliferation regime, particularly in regard to the possibility of a global nuclear zero. However, recent events have seen a gradual but steady disregard for these ideals on both the U.S. and Russian sides, leading to more perceptions of urgency toward nuclear modernization.

At the current moment, the fate of the U.S. nuclear arsenal is more closely tied to that of the Russian nuclear arsenal than any time since the Cold War. Woolf of the Congressional Research Service notes that while the Bush Administration denied any connection between the U.S. arsenal and Russia's, since "the United States and Russia were no longer enemies," the Obama Administration has taken the opposite approach, arguing that the relationship between the sizes of the two arsenals is still relevant.¹⁴³ The Administration has staunchly refused to make unilateral cuts to its arsenal, and will further reduce the numbers of warheads under New START Treaty limits only if it is paralleled by Russia.

¹⁴³ Woolf, op. cit.

According to President Obama, “The New START Treaty responsibly reduces the number of nuclear weapons and launchers that the United States and Russia deploy, while fully maintaining America’s nuclear deterrent.”¹⁴⁴ The goal of the treaty is to reach a deployed strategic nuclear arsenal limit of only 1,550 warheads, as well as a cap of 700 total nuclear missiles and heavy bombers, on each side by 2018.¹⁴⁵ As of April 1, 2015, Russia is reported to possess 1,780 deployed strategic warheads, while the U.S. possesses 1,900.¹⁴⁶ Each country has increased its number of deployed nuclear warheads over the most recent six-month period, the U.S. increasing by 57 additional warheads, Russia by 131, an anomaly that prominent Federation of American Scientists researcher Hans Kristensen believes is nothing to be worried about, but which certainly illustrates the slow rate of disarmament in recent years.¹⁴⁷

Furthermore, after the Russian invasion of Crimea in March 2014, unnamed Russian officials from the Defense Ministry gave interviews to media outlets expressing their displeasure of the “groundless threats to Russia from the U.S. and NATO regarding its Ukrainian policy,” and hinted at the possibility of suspending permission for the U.S. to carry out New START-mandated inspections in Russia.¹⁴⁸ This fortunately never came about, but the aggressive remarks highlighted the increased activity on the Russian side related to nuclear forces. Mikhail Ulyanov, head of the Russian Foreign Ministry’s Department for Non-Proliferation and Arms Control, seemed to have a similar attitude

¹⁴⁴ “New START,” U.S. Department of State, <http://www.state.gov/t/avc/newstart/index.htm>.

¹⁴⁵ W.J. Hennigan and Ralph Vartabedian, “As U.S. nuclear arsenal ages, other nations have modernized,” *Los Angeles Times*, November 10, 2014, <http://www.latimes.com/nation/la-na-nukes-silos-20141110-story.html#page=1>.

¹⁴⁶ <http://fas.org/issues/nuclear-weapons/status-world-nuclear-forces/>.

¹⁴⁷ Hennigan and Vartabedian, *op. cit.*

¹⁴⁸ Kingston Reif, “Top Russian Official Backs New START,” Arms Control Association, March, 2015, https://www.armscontrol.org/ACT/2015_03/News/Top-Russian-Official-Backs-New-START.

when he stated in January 2015: “I am not ruling out the possibility that Washington could force us to... adjust our policy in this area.”¹⁴⁹

Supplementing these sorts of declarations is the effort by Russia, and indeed by all of the other nuclear weapons states, to modernize their nuclear arsenals. While it is estimated that only 10 percent or \$54 billion of Russia’s defense budget will go toward its aging nuclear forces, the U.S. is also concerned with the recent developments of Russian medium-range cruise missiles, large ballistic missile submarines known as “boomers,” and attack submarines.¹⁵⁰ France is deploying new missiles and warheads expected to last until the 2050s; Pakistan is working on new cruise missiles and short-range rockets; and even NATO forces will be updated with new B61 guided bombs and nuclear F-35A fighter-bombers to be implemented in the 2020s.¹⁵¹ In this environment, the U.S. is and plans to continue mirroring the other nuclear weapons states in modernizing its own nuclear arsenal.

The push for nuclear zero is also stymied by no other than U.S. non-nuclear allies. Jeffrey Lewis, Director of the East Asia Nonproliferation Program at the Middlebury Institute of International Studies at Monterey, stated that in the current environment, “the primary source of nuclear deterrence for US allies comes from the strategic triad of intercontinental ballistic missiles, submarine launched ballistic missiles and bombers.”¹⁵² When the U.S. even remotely considers removing a leg of the triad or implementing severe drawdowns of the arsenal, it brings the scrutiny of its allies, and in the end it

¹⁴⁹ Ibid.

¹⁵⁰ Hans M. Kristensen, “Nuclear Weapons Modernization: A Threat to the NPT?,” Arms Control Association, May 1, 2014, http://www.armscontrol.org/act/2014_05/Nuclear-Weapons-Modernization-A-Threat-to-the-NPT.; Julian Borger, “US and Russia in danger of returning to era of nuclear rivalry,” *Guardian*, January 4, 2015, <http://www.theguardian.com/world/2015/jan/04/us-russia-era-nuclear-rivalry>.

¹⁵¹ Kristensen, “Nuclear Weapons Modernization: A Threat to the NPT?,” op. cit.

¹⁵² Lewis, “Extended Nuclear Deterrence in Northeast Asia,” op. cit.

comes down to how well the U.S. can convey its intentions. If Tokyo and Seoul are not convinced that the existing arsenal will protect their cities just as well as Los Angeles and New York, there will be a serious confidence problem. And since both countries have considered their own nuclear weapons programs in the past, the more assurances they have, the safer and more stable the region will be.

External factors aside, Woolf identifies two major internal domestic factors playing a role in the U.S. nuclear modernization issue: overall cost, and security and management issues.¹⁵³ The practical reality is that the U.S. cannot afford an excessive nuclear arsenal, and the nuclear weapons and delivery systems it has now are “reaching the end of their service lifetimes.”¹⁵⁴ Therefore, as Congress examines the modernization budget provided by the Obama Administration and the military, determining the optimal amount and positioning of these weapons will also determine the future nuclear force’s size and structure. In January 2015, the Congressional Budget Office estimated that over the 10-year period from 2015 to 2024, the nuclear budget will cost the U.S. \$348 billion, averaging \$35 billion a year.¹⁵⁵ However, this does not properly show what Defense Department officials are calling the “modernization mountain” of the late 2020s, when the U.S., given the current trajectory, will attempt to replace all three legs of the triad and buy new fighter planes at the same time.¹⁵⁶ Over the next thirty years, the James Martin Center for Nonproliferation Studies estimated in 2014 that costs to maintain the current arsenal, buy replacement systems, and upgrade existing nuclear bombs and warheads will

¹⁵³ Woolf, *op. cit.*

¹⁵⁴ “Projected Costs of Nuclear Forces, 2015 to 2024,” Congressional Budget Office, January, 2015, <https://www.cbo.gov/sites/default/files/cbofiles/attachments/49870-NuclearForces.pdf>.

¹⁵⁵ *Ibid.*

¹⁵⁶ Lewis, “The Nuclear Trials of Ashton Carter,” *op. cit.*

reach \$1 trillion.¹⁵⁷ Though Secretary of Defense Ashton Carter has staunchly supported the full nuclear triad, whether the U.S. will have the financial capability to achieve these plans among all of its other commitments will certainly be a point of contention over the next few decades. Following this train of thought, the security and management issues facing the nuclear enterprise are just as much a result of cost as they are of neglect by higher-level administration. The incident of a B-52 bomber accidentally carrying live warheads across the country in 2007; the unintentional shipment of Minuteman III missile nosecones to Taiwan in 2008; and the widespread cheating scandal among Air Force ICBM launch crews in 2012 are only a few of the many problems the U.S. has faced in failing to provide adequate purpose for the various branches of the nuclear enterprise, hindered further by the lack of sufficient resources to maintain and improve the system. If the U.S. wants to demonstrate to the world that it has a tight, efficient, dangerous arsenal, then it has to think long and hard about the cost of its operations, as well as the effect it has on both the physical and human forces responsible for the enterprise.

Matthew Kroenig wrote in the Bulletin of the Atomic Scientists that a failure to modernize the U.S. nuclear arsenal would be “irresponsible,” claiming that: “a crippled U.S. nuclear force would embolden enemies, frighten allies, generate international instability, and undermine U.S. national security. In other words, it would risk ruining the world that currently exists.”¹⁵⁸ This ideology is fully embraced by the U.S. military, as

¹⁵⁷ Jon B. Wolfsthal, Jeffrey Lewis, and Marc Quint, “The Trillion Dollar Nuclear Triad,” James Martin Center for Nonproliferation Studies, January, 2014, http://cns.miis.edu/opapers/pdfs/140107_trillion_dollar_nuclear_triad.pdf.

¹⁵⁸ Matthew Kroenig, “Why US nuclear modernization is necessary,” Bulletin of the Atomic Scientists, January 8, 2015, <http://thebulletin.org/modernizing-nuclear-arsenals-whether-and-how/why-us-nuclear-modernization-necessary>.

seen in the ongoing modernization plans for the nuclear arsenal. There are three main categories: modernized strategic delivery systems, refurbished nuclear warheads, and a modernized nuclear weapons production complex, the last one referring namely to a proposed Uranium Processing Facility in Oak Ridge, Tennessee, which is scheduled to cost between \$6.5-7.5 billion.¹⁵⁹ Strategic delivery systems upgrades include: the reconstruction of the Minuteman III ICBMs and Trident II SLBMs, extended service lives for the current ballistic missile submarines as well as the development of new replacement ones, ongoing B-2 and B-52H bomber technical updates, and plans to develop a new Long-Range Bomber and Long Range Standoff Missile.¹⁶⁰ Moreover, the National Nuclear Security Administration (NNSA) has and will continue to implement Life Extension Programs for the entire U.S. stockpile of nuclear warheads and bombs.

Potential for the reemergence of reactionary Japanese policies

Despite the progress of the U.S.-Japan alliance in becoming more equal partners, the U.S. still retains concerns and frustrations about past and potential reactionary policies from the Japanese government. Some historical concerns were highlighted in the last chapter, when Japan reacted to events such as the Chinese nuclear tests in the 1960s, the Nixon policies of the 1970s, and the North Korean nuclear incidents in the 1990s. However, there are a few other, more tenacious issues that, should Japan react poorly, will squander U.S. efforts in the region and lower the effectiveness of the extended deterrence-based alliance. These issues involve Yasukuni Shrine, the controversy over wartime comfort women, and the territorial dispute over the Senkaku/Diaoyu Islands.

¹⁵⁹ <http://www.armscontrol.org/factsheets/USNuclearModernization>.

¹⁶⁰ Ibid.

The issue over Yasukuni Shrine remains relevant to the alliance as Japan begins to loosen some of the stringent restrictions on the use of its Self-Defense Forces. Yasukuni Shrine houses the spirits of the 2.5 million Japanese citizens who lost their lives in various conflicts, including World War I and World War II, enshrined in the form of “written records, which note name, origin and date and place of death.”¹⁶¹ The controversy arises from the 14 Japanese Class A war criminals who were convicted for crimes in World War II; these individuals remain enshrined at Yasukuni with the others, and continue to be visited by Japanese prime ministers and cabinet members. Abe himself caused a controversy in December 2013 when he visited the site, sparking criticism from China and South Korea as well as the U.S. While Abe seems to have tempered his views on the issue (in 2014 he visited an alternative site called Chidorigafuchi National Cemetery to honor the war dead, instead of Yasukuni), the issue could easily become a point of argument strong enough to divide the region, which is hardly in U.S. interests. It also means that China and South Korea have stronger reason to oppose Abe’s constitutional reinterpretation in July 2014, and will no doubt continue to express opposition even at the revision of the Mutual Defense Guidelines.

The comfort women policy was instated by the Japanese imperial military during its expansion in the 1930s and 1940s, authorizing the practice of forced prostitution.¹⁶² It has been largely condemned by the international community, even by the U.S. House of Representatives in 2007. However, the Abe Administration has been reluctant to acknowledge these atrocities, which affected countries from South Korea to Vietnam to

¹⁶¹ “Yasukuni Shrine,” Japan Guide, last modified May 28, 2013, <http://www.japan-guide.com/e/e2321.html>.

¹⁶² Chanlett-Avery et al., “Japan-U.S. Relations: Issues for Congress,” op. cit.

Burma and Timor.¹⁶³ Abe has done seemingly everything possible to undermine progress on this issue. In 2006, he called into question a 1993 joint statement with South Korea called the Kono Statement, which apologized to the comfort women victims and officially acknowledged the responsibility of the Japanese military.¹⁶⁴ Though no changes were made to the statement, Abe proceeded in October 2014 to appoint Hirofumi Nakasone as the chair of a commission to “consider concrete measures to restore Japan’s honor with regard to the comfort women issue.”¹⁶⁵ Nakasone is the son of Yasuhiro Nakasone, former prime minister of Japan, reactionary Nixon-era JDA leader, and the creator of the first “comfort station” back in 1942. These kinds of diplomatic misconduct harm the reputation of Japan, and by association, the U.S. Therefore, the U.S. continues to watch Japan closely on the issue and counter when necessary in order to maintain its strong alliances.

Finally, the Senkaku/Diaoyu Islands dispute is the most illustrative example of a regional tiff that can easily spill over into unpleasant scenarios for the U.S. This small group of islands is administered by Japan but claimed by both China and Taiwan, and has been a contentious location due to its cultural history and nearby energy deposits. The issue returned to the foreign policy spotlight in August 2012, when the Japanese government purchased three of the five islands from a private landowner, hoping to gain more legitimacy over the territory. China responded with anti-Japan protests, a drop in Sino-Japanese trade, and regular deployments of maritime law enforcement ships near the

¹⁶³ Mindy Kotler, “The Comfort Women and Japan’s War on Truth,” *New York Times*, November 14, 2014, under “Opinion,” <http://www.nytimes.com/2014/11/15/opinion/comfort-women-and-japans-war-on-truth.html>.

¹⁶⁴ Chanlett-Avery et al., “Japan-U.S. Relations: Issues for Congress,” op. cit.

¹⁶⁵ Kotler, op. cit.

islands.¹⁶⁶ As both countries scramble their fighter jets and play a ridiculous game of brinkmanship, the U.S. has every right to be concerned. Despite it taking no official side in the territorial dispute, the U.S. has in theory taken the Japanese side due to its commitments under the 1960 U.S.-Japan Security Treaty, which states the U.S. must protect “the territories under the Administration of Japan,” the Senkaku/Diaoyu Islands being part of those administrated territories.¹⁶⁷ As a result, if things get ugly between China and Japan, and threats of violent conflict grow more realistic, the U.S. would have to choose between upholding its defense commitments for an ally and starting a war with China. It is a highly unfavorable position to be in, and thus the U.S. maintains some concerns about the effects of stubborn Japanese policies.

Japanese Concerns

In relation to the bilateral alliance with the U.S. and its nuclear arsenal, Japan has two main concerns: the possibility of military entrapment in future conflicts, and abandonment in the face of regional and international foes. While both concepts are crucial aspects of Japanese perspective, abandonment has become the more predominant of the two in recent years.

Entrapment

It is important here to make the distinction between entrapment and entanglement, though some scholars have used the terms interchangeably. Entanglement is defined as the process by which a state is compelled *by the contents of its alliance* to aid an ally in a “costly or unprofitable enterprise.”¹⁶⁸ An example of entanglement is Japan involving the

¹⁶⁶ Chanlett-Avery et al., “Japan-U.S. Relations: Issues for Congress,” op. cit.

¹⁶⁷ Ibid.

¹⁶⁸ Tongfi Kim, “Why Alliances Entangle But Seldom Entrap States,” *Security Studies* 20, no. 3 (August 25, 2011): 350-77, <http://dx.doi.org/10.1080/09636412.2011.599201>.

U.S. in the Senkaku/Diaoyu Islands dispute under the parameters of the 1960 Treaty of Mutual Cooperation and Security, even though the U.S. has no significant interest in the islands. The U.S. is required to uphold its commitments on an issue that has no direct pertinence to its interests, specifically due to one of the main pillars of the bilateral alliance. On the other hand, one of the most convincing definitions of entrapment entails: “a form of *undesirable* entanglement in which the entangling state adopts a *risky or offensive* policy not specified in the alliance agreement.” Japan was deeply concerned about entrapment in the 1950s, before the signing of the 1960 Treaty of Mutual Cooperation and Security. A weaker power at the time and with little control over the actions of the U.S., Japan was worried about the potential for entrapment in America’s aggressive crusade against Communist countries, especially with American military bases on its territories and a somewhat ambiguous security alliance.¹⁶⁹ Nowhere in the major alliance documents is there mention of Japanese commitment to prevent the spread of communism at all costs. Because of this, Japanese officials, supported by the Japanese public, took proactive diplomatic steps to ensure that by the time the 1960 treaty came around, entrapment would no longer be as pressing of an issue. On a general scale, Japan is more focused on the dangers of entrapment with the U.S. than entanglement.

The chances of an entrapment scenario are relatively rare, but nevertheless, there are two types that Japan is most concerned about: regional entrapment and international entrapment. Regional entrapment is most apparent with Japan’s neighbor and minor rival, South Korea. Both countries are closely allied with the U.S., and neither country is particularly fond of the other, though both rely on each other in the general security framework. In regard to this strange dynamic, a worry for Japan is that if the U.S. gives

¹⁶⁹ Ibid.

too much strength, particularly in nuclear backing, to South Korean defenses, North Korean fears of encirclement will increase, making the region even more volatile.¹⁷⁰ It could embolden South Korea toward its northern neighbor, and it could affect Japan internally, since it has a pro-DPRK resident population, called *Chosen Soren*, which has already been embroiled in several controversies with Japanese nationalists.¹⁷¹ Too much Southern provocation of the North, if backed by U.S. nuclear power, could eventually cause a preemptive reaction by North Korea, which would undoubtedly involve Japan due to its geographic proximity and relationship with the U.S.¹⁷² In addition to the Koreans, Japan also harbors concerns about regional entrapment with Russia. The U.S. is taking a more aggressive stance toward Russia, especially in light of the Ukraine conflict and the controversy over Russia's potential violation of the Intermediate-Range Nuclear Forces Treaty. Given these issues, taking into consideration Japan's existing territorial disputes with Russia, Japan could be pulled into a conflict not explicitly listed in its treaty agreements with the U.S. Japan did not want to fight the Soviet Union back in World War II; it certainly does not want to face Russia as an adversary now.

International entrapment for the U.S.-Japan alliance is mostly enshrined in overseas conflicts such as the Iraq War in 2003. When the U.S. took an offensive stance in the conflict and announced the possibility of weapons of mass destruction, its allies, most of whom did not have direct interests in the conflict, were faced with a tough choice. They could refrain from participation and potentially lose support from the dominating superpower, or support the war and risk the lives of their own citizens. Japan and South

¹⁷⁰ Victor D. Cha, "Abandonment, Entrapment, and Neoclassical Realism in Asia: The United States, Japan, and Korea," *International Studies Quarterly* 44, no. 2 (June 2000): 261-91, <http://www.jstor.org/stable/3013998>.

¹⁷¹ Cha, op. cit.

¹⁷² Ibid.

Korea ended up making the latter decision, sending 1,000 and 3,000 troops respectively to the war-torn region, and while they had some incentive to direct more U.S. policy attention to the North Korea issue, it is certain that neither country had a serious desire to get involved.¹⁷³ The risk of international entrapment is more salient now than in previous years, particularly with U.S. troops back in Iraq and ongoing conflicts in Syria, Yemen, and Ukraine. Japan does not want to engage in these disputes, and will be wary of how loosely its collective self-defense measures are interpreted when assessing responsibility for international peacekeeping.

Abandonment

While Japan may have concerns about entrapment, abandonment is a more persistent issue when it comes to the U.S.-Japan security alliance. Abandonment is the fear that “the ally may leave the alliance, may not live up to explicit commitments, or may fail to provide support in contingencies where support is expected.”¹⁷⁴ Also known as “de-coupling,” abandonment, which could happen if the U.S. deemed it more worthwhile to protect its own homeland and interests than Japan’s, is a prospect over which Japan has repeatedly expressed concern.¹⁷⁵

There are two countries that Japan fears the most in regard to U.S. abandonment: China and North Korea. China and Japan have many ongoing historical and modern-day feuds, on everything from the Senkaku/Diaoyu Islands to revising Japanese textbooks for historical atrocities to clashing nationalism on both sides. Because China has a slowly but

¹⁷³ Jonathan Watts, “End of an era as Japan enters Iraq,” *Guardian*, July 25, 2003, <http://www.theguardian.com/world/2003/jul/26/iraq.japan.>; Balbina Y. Hwang “South Korean Troops to Iraq: A Boost for U.S.-ROK Relations,” The Heritage Foundation, February 13, 2004, <http://www.heritage.org/research/reports/2004/02/south-korean-troops-to-iraq-a-boost-for-us-rok-relations>.

¹⁷⁴ Cha, op. cit.

¹⁷⁵ Brad Roberts, “Extended Deterrence and Strategic Stability in Northeast Asia,” *NIDS Visiting Scholar Paper Series* no. 1 (August 9, 2013): 1-36, <http://www.nids.go.jp/english/publication/visiting/pdf/01.pdf>.

steadily growing nuclear arsenal, with long-range capacities and increasingly sophisticated delivery systems, Japan could be at risk of abandonment if the U.S. decides that in a confrontational situation with China, it is not worth the effort of threatening extended nuclear deterrence over Japan.

North Korea is more likely than China to push Japan into a position of abandonment. North Korean officials stated in 2013 that: “Japan is always in the cross-hairs of our revolutionary army and if Japan makes a slightest move, the spark of war will touch Japan first.”¹⁷⁶ Lingering wartime and xenophobic resentment, combined with proxy aggression toward the U.S. through Japan, are the most convincing motivations behind this statement, though the degree to which each plays a role is a topic for another paper. Three risks for Japan from North Korea include: 1) further North Korean provocation by non-nuclear means; 2) escalation in tensions and threats in the case of a miscalculation from North Korean leaders; and 3) blatant aggression from North Korean nuclear weapons.¹⁷⁷ After the attempts of the 1990s, normalization talks have not been renewed between the two countries, making non-violent solutions to dissolve tensions more difficult to implement. In spite of all U.S. assurances to the contrary, Japan still sees North Korea as a significant threat to its security, and thus naturally sees the potential for U.S. abandonment.

Both entrapment and abandonment are examples of Japan anticipating the failure of the U.S. extended nuclear deterrent. Interestingly enough, failures of deterrence are not as uncommon as one might hope, and are dependent on any of the following three factors: a highly motivated weaker state, a weaker state misperceiving some facet of the

¹⁷⁶ Ibid.

¹⁷⁷ Ibid.

situation, and a stronger state with detected vulnerability.¹⁷⁸ The next chapter will connect the concerns of the current alliance to the evolving nuclear posture in order to determine the best path toward a more comprehensive, stable security relationship between the U.S. and Japan.

¹⁷⁸ Ibid.

VI. EVALUATION OF THE NUCLEAR DETERRENCE FULFILLMENT

Keeping in mind the strategic evolution of U.S. nuclear posture, the original framework of the U.S.-Japan alliance, the challenges the alliance has faced over the past century, and the current circumstances of the bilateral nuclear relationship, this section of the paper now returns to its main two questions. First, how well has the current nuclear posture covered the security commitments established in the U.S.-Japan alliance up to this point? And second, how well will the changing nuclear posture fulfill alliance requirements in the future?

For a straightforward answer to these questions, this paper asserts that while the U.S nuclear posture up to this point has been satisfactory enough to prevent panic and ensure protection of Japan, the evolving nuclear posture from this point onward will strengthen the credibility of existing security commitments, deter potential attackers, and give Japan the confidence to become a more coordinated partner in the relationship.

Security attitudes, or a country's views on the use and placement of military force and foreign intervention measures, have played and will continue to play a role in these evaluations of security commitments. In the aftermath of World War II, Japan was forced to retreat from its foreign exploits, and adopted the 1947 isolationist constitution that renounced all forms of war. It has always been very concerned about issues within the Asian region, and only mildly concerned about conflicts in other parts of the world. It has stuck firmly, with a few minor deviations, to its drive for peace and conflict resolution over violent encounters. While the pacifist attitude has mostly remained in both the Japanese public and the administration, Prime Minister Shinzo Abe's second term has begun see some historic changes, with the 2014 shift to "Proactive Contribution to Peace"

and discussions of increased defense budgets. Meanwhile, the U.S. used to be focused on fighting Communism, not hesitating to antagonize countries from North Korea and Vietnam to the former Soviet Union, and coming up with aggressive strategies such as massive retaliation and flexible response in preparation for bombing these places with nuclear missiles. When the Cold War ended, it reduced its nuclear weapons arsenal, having lost its major enemy, and began to take a more cautious approach, using threats of conventional force in addition as a softer alternative to nuclear. Then the Obama Administration introduced the “Pivot to Asia” concept in 2011, stating that from a strategic standpoint: “maintaining peace and security across the Asia-Pacific is increasingly crucial to global progress, whether through defending freedom of navigation in the South China Sea, countering the nuclear proliferation efforts of North Korea, or ensuring transparency in the military activities of the region’s key players.”¹⁷⁹ This is combined with the understanding that the U.S. is in the process of modernizing its nuclear arsenal, which is designed to more efficiently protect its national and international interests. The historical alliance was built on a bilateral relationship with very different perspectives on war and nuclear weapons, which made for a less credible nuclear deterrent and thus affected the credibility of the two countries’ security commitments both during and after the Cold War. However, in recent years there seems to have been an alignment of sorts due to a mutual focus on the Asian region, as well as increased willingness to engage with each other on nuclear issues. These parallel attitudes strengthen the security commitments of the bilateral alliance, and will continue to strengthen them as modernization progresses.

¹⁷⁹ Hillary Clinton, “America’s Pacific Century,” *Foreign Policy*, October 11, 2011, <http://foreignpolicy.com/2011/10/11/americas-pacific-century/>.

Additionally, the abrupt policy discrepancies or “surprises” between the two countries on nuclear weapons issues have also been influential in shaping the current U.S. nuclear posture for protecting Japan. Japan only considered nuclear weapons development in the late 1960s because of its concern that the U.S. nuclear arsenal would not deter a Chinese nuclear attack, especially with U.S. attention fixated on the Soviet Union. The 1970s Japanese policy of “U.S. Passing,” in response to the Nixon Doctrine, was made out of fear that the U.S. nuclear posture was too engaged with China, which could have negated the extended deterrence protection for Japan. And Japan’s hesitation to give logistical aid to the U.S. against North Korea in the 1990s was not only contingent on its pacifist constitution but also on its unease at the withdrawal of U.S forward deployed nuclear forces from South Korea in 1991. All of these examples illustrate that without aligned security attitudes and a mutual understanding of the priorities and structure of the U.S. nuclear arsenal, Japan begins to question the credibility of U.S. security commitments and looks into other avenues for national defense. Fortunately, in the past few years there have been no major incidents of “surprises” from the Japanese in terms of nuclear security, signaling a positive trend in the development of the U.S.-Japan alliance, even with an evolving nuclear posture.

Given these improvements in the alliance up to now, how can the U.S. maintain its progress and effectively deter attacks on Japan, without making Japan feel that the security commitments are either too loose or too restrictive? Do we have any reason to be worried about the alliance as the nuclear posture changes?

To deter attacks specifically on Japan, the U.S. needs to focus on how it portrays the U.S.-Japan bilateral alliance in its security negotiations with other states, especially

countries like China and Russia. If, in its haste to make friendlier relations with China, the U.S. gives too much of an impression that the U.S.-Japan alliance is irrelevant, it automatically detracts from the credibility and security of the relationship itself. On the physical arsenal side, since deterrence is about threatening second-strike capability, as opposed to defense, there is no need to surround Japan with nuclear weapons and hope for the best. However, as the modernization process is slowly implemented throughout the branches of the U.S. nuclear arsenal, adequate amounts of deployed forces need to be clearly displayed to any state who might think about sneaking in an attack. The word “adequate” when referring to the number of U.S. nuclear weapons is one of the most disputed terms in the business. Proponents of full triad revitalization argue that any other cuts to the nuclear deterrent is harmful to the U.S. arsenal as a whole; in the words of Peter Huessy, president of the consulting firm GeoStrategic Analysts, “Cutting the very backbone of our nuclear security is not the way forward to a safer world or safer America.”¹⁸⁰ Others view the continuation of the triad as a detriment to international disarmament and the NPT, which will lead to more instability.¹⁸¹ No matter how the nuclear force ends up, as long as it gives the impression of being comprehensive and daunting, and the U.S. shows strong diplomatic support of the alliance when dealing with third parties, attacks toward Japan should be effectively deterred.

The other part of this equation is the objective to keep Japan satisfied and confident in the bilateral relationship. It is crucial that the U.S. *not* attempt to shut down Abe’s efforts to reinterpret the constitution. Despite some alarmist reports, the prospect of a remilitarized Japan under Abe is far from reality. Brad Glosserman and David Kang

¹⁸⁰ Peter Huessy, “Want Stability? Fund Nuke Triad Modernization,” *Breaking Defense*, February 23, 2015, <http://breakingdefense.com/2015/02/want-stability-fund-uke-triad-modernization/>.

¹⁸¹ Kristensen, “Nuclear Weapons Modernization: A Threat to the NPT?”, *op. cit.*

write in *The National Interest* that while Abe aims for Japan to have a new regional security role, there are many factors limiting the speed and scope of military expansion.¹⁸² These include public hostility toward extreme constitutional reinterpretations, a considerably restrictive defense budget, and high maintenance costs for existing personnel and equipment.¹⁸³ Besides, Abe's attempts to push for "Proactive Contribution to Peace" are in U.S. interests; after all, the tensions from the Nixon Doctrine were based on the U.S. assumption that Japan should take up a greater share of the alliance burden. As the countries work together for the Mutual Defense Guidelines and other cooperative measures, the U.S. should nurture the more active Japanese security policy while also being on the alert for moves that could push it too closely toward a stance resembling remilitarization. The other important point for the U.S. is to keep Japan informed through diplomatic, intelligence, and military channels, so that if the U.S. President makes a controversial policy statement about or related to nuclear security alliances, such as the Nixon Doctrine, it does not cause Japan to have a violent reaction. Military information-sharing might be the most important out of the three channels; if Japanese defense officials can visually verify and understand the U.S. nuclear posture and how it applies to extended deterrence, there might be less concern for the stability of the alliance. If the U.S. uses its hard and soft power wisely, it can establish an even stronger alliance with Japan than before.

That being said, there are two major reasons to be concerned about the alliance as it aligns with the evolving U.S. nuclear posture. The first is if Japan escalates tensions with its Asian neighbors regarding the historical disputes mentioned in the previous

¹⁸² Brad Glosserman and David C. Kang, "The Myth of Japanese Remilitarization," *The National Interest*, October 15, 2014, <http://nationalinterest.org/feature/the-myth-japanese-remilitarization-11470>.

¹⁸³ *Ibid.*

chapter. While the issues of the Yasukuni shrine, wartime comfort women, and the Senkaku/Diaoyu Islands are all rooted in deep historical sensitivities, the one of most concern to the U.S. is the Senkaku/Diaoyu Islands territorial dispute. This is because if China decides to take more aggressive military measures to gain ownership of the islands, the U.S. will have to step in due to its commitment to protect any and all territories under the administration of Japan, a category under which the Senkaku/Diaoyu Islands currently fall.

The second concern is if the modernization trajectory of the U.S. nuclear arsenal changes drastically without the U.S. briefing or consulting its allies. While the current official U.S. nuclear posture relies on a full nuclear triad, others have proposed several different iterations for the arsenal. Dana Johnson, Christopher Bowie, and Robert Haffa at the Mitchell Institute for Airpower Studies suggested in 2009 that the U.S. should shift to a dyad of SLBMs and ICBMs, phasing out the bomber leg of the triad.¹⁸⁴ In the same year, Jeff Richardson at the Lawrence Livermore National Laboratory advocated that ICBMs should be the retiring leg of the triad, citing bombers and SLBMs as the more practical dyad.¹⁸⁵ Benjamin Friedman, Christopher Preble, and Matt Fay of the Cato Institute took an even more extreme approach in 2013, claiming that SLBMs alone would be more than sufficient to cover the deterrent needs of the U.S. and its allies.¹⁸⁶ It is not within the scope of this paper to discuss which arrangement is the most optimal. However,

¹⁸⁴ Dana J. Johnson, Christopher J. Bowie, and Robert P. Haffa, "Triad, Dyad, Monad? Shaping the US Nuclear Force for the Future," Mitchell Institute for Airpower Studies, December 2009, <http://www.northropgrumman.com/AboutUs/AnalysisCenter/Documents/pdfs/triad-monograph.pdf>. Note that this and the proposal after it were written before the publication of the 2010 NPR, which expressed support for all three legs of the triad, including the bombers.

¹⁸⁵ Jeff Richardson, "Shifting from a nuclear triad to a nuclear dyad," *Bulletin of the Atomic Scientists* 65, no. 5 (September 2009): 33-42, <http://bos.sagepub.com/content/65/5/33.full.pdf+html>.

¹⁸⁶ Benjamin H. Friedman, Christopher A. Preble, and Matt Fay, "The End of Overkill? Reassessing U.S. Nuclear Weapons Policy," Cato Institute, September 24, 2013, <http://www.cato.org/publications/white-paper/end-overkill-reassessing-us-nuclear-weapons-policy>.

if one of these models ends up convincing enough to sway the next U.S. presidential administration, there needs to be a very strong marketing campaign to the domestic sphere, as well as U.S. friends and foes, that the new arrangement will provide just as much deterrence capability as the original triad. Otherwise, the other nuclear weapons states see the move as weakness, Japan's concerns are reignited, and the U.S. will have a decreased nuclear force with fewer deterrent options, combined with more international tensions, creating a more chaotic situation than when it started the modernization process.

Maintaining the positive trend of the U.S.-Japan bilateral relationship with regard to weapons will not be easy. It will take serious hard work on the part of both parties, and there are many factors to keep in consideration, both inside and outside of the alliance. In spite of this, it seems that ongoing developments will push the alliance toward an ever more trusting and responsible relationship.

VII. CONCLUSION

At the end of the day, pushing the nuclear launch button is one of the least desired and most controversial policy moves in the world of international relations. It has not been approved to use against another country since 1945, yet U.S. alliances continue to promise extended nuclear deterrent capabilities under the assumption that if enemies try to attack, they will receive nuclear catastrophe in return. This paper has looked specifically at the U.S.-Japan relationship in the context of the U.S. nuclear arsenal in order to understand the dynamics of these types of alliances, specifically the deterrent strategies that influence foreign relations, the inherent concerns on both sides of the alliance, and what needs to be done for the future to simultaneously deter U.S. foes and reassure U.S. allies.

However, the U.S. and Japan are not in a vacuum. Nuclear weapons-related diplomatic and military efforts with China, South Korea, and North Korea all have important influences on the U.S.-Japan alliance, and will remain key factors during the ongoing U.S. nuclear modernization.

China-U.S. relations regarding nuclear weapons play an important role due to the fact that they are extremely limited. China seems to be sticking to its “lean and effective” nuclear posture, which aims to keep a small, manageable force that can both deter potential nuclear attacks and reduce the effectiveness of nuclear intimidation.¹⁸⁷ This is promising for the U.S. and its allies, who are extremely concerned about a rising China, especially with its formidable economy and modernizing military. Nonetheless, China has also refused to engage in bilateral military-to-military discussions on nuclear

¹⁸⁷ Elbridge A. Colby and Abraham M. Denmark, “Nuclear Weapons and U.S.-China Relations: A Way Forward,” Center for Strategic & International Studies, March 2013, http://csis.org/files/publication/130307_Colby_USChinaNuclear_Web.pdf.

weapons with the U.S., dissuading attempts from both the George W. Bush and Obama Administrations. The U.S. would benefit from these talks in two major ways. First, they would allay U.S. concerns about the trajectory of the Chinese nuclear arsenal, so the U.S. could make better decisions about military investments and provide reassurance for its allies, namely Japan.¹⁸⁸ Second, the U.S. would use the talks to understand Chinese concerns, so that it can avoid or minimize potentially controversial policies while also preventing Beijing from adopting a reactionary approach to its nuclear forces. Neither of these objectives, however, can be achieved without engaging China in some sort of dialogue, which it has rejected on multiple occasions. The lack of communication between the U.S. and China on nuclear weapons issues creates uncertainties and speculation, which in turn can lead to potentially dangerous policy misinterpretations, not only by the two nuclear powers but also by non-nuclear allies like Japan, which already have a list of concerns when it comes to China. The U.S. has to keep China in mind when crafting its modernization strategy, or else there could be serious tensions that push Japan into a threatened position, which threatens the bilateral alliance.

Meanwhile, South Korea provides its own unique influence on the U.S.-Japan bilateral security relationship due to its rival status as another recipient of U.S. extended nuclear deterrence, as well as its controversial relations with Japan. In addition to competing for U.S. nuclear attention, South Korea and Japan are also competing in their own territorial dispute over the Dokdo/Takeshima Islands in the Sea of Japan. South Koreans have ongoing suspicions of Japan that prevent ample diplomatic progress; for example, in May and June 2012 a bilateral intelligence-sharing agreement, which the U.S. hoped would improve trilateral coordination on security issues, fell through at the last

¹⁸⁸ Ibid.

minute because South Korea withdrew its signature.¹⁸⁹ Furthermore, South Korea, unlike Japan, views China as a valuable ally and partner rather than an “existential challenge and territorial threat,” particularly because it needs Chinese support when dealing with North Korea.¹⁹⁰ These conflicting demands, perspectives, and priorities could be detrimental to the stability of the U.S.-Japan alliance and nuclear weapons issues. The U.S. has to choose, for example on concerns related to China, whether to yield to Japanese fears or South Korean confidence; and no matter which one it selects, the unselected ally will automatically feel shunned, an unhelpful attitude for building trust in an alliance involving nuclear weapons.

North Korea is the final piece of the East Asian regional puzzle. While it serves as “one of the most vexing and persistent problems in U.S. foreign policy in the post-Cold War period,” North Korea also has the potential as the hostile state to bring allied countries together like no diplomatic summit ever could. Its provocations have actually led Japan and South Korea into some bilateral breakthroughs, as well as improved trilateral relations with the U.S., the Perry diplomatic process after the 1998 Taepodong launch being a perfect example.¹⁹¹ Both the U.S. and Japan want to maximize their relations with North Korea, despite the lack of diplomatic normalization between any of these countries. At the same time, Japan is painfully aware of the dangers from being so close in proximity to the North Korea’s budding nuclear program, and the U.S. is painfully aware of its commitment to deter North Korean nuclear attacks on Japan. How

¹⁸⁹ Mark E. Manyin et al., “U.S.-South Korea Relations,” Congressional Research Service, June 24, 2014, <https://www.fas.org/sgp/crs/row/R41481.pdf>.

¹⁹⁰ Ibid.

¹⁹¹ Emma Chanlett-Avery and Ian E. Rinehart, “North Korea: U.S. Relations, Nuclear Diplomacy, and Internal Situation,” Congressional Research Service, December 5, 2014, <https://www.fas.org/sgp/crs/nuke/R41259.pdf>.

North Korea acts over the upcoming years, then, will be yet another factor in determining the credibility and quality of the U.S.-Japan bilateral alliance.

China, South Korea, and North Korea each contribute their own special circumstances and interests to the extended nuclear deterrent relationship between the U.S. and Japan. So far, however, the bilateral alliance is looking strong. Increased U.S.-Japanese communication efforts help to ease some of the regional tensions, and active security attitudes on both sides allow for more productive dialogue on crucial nuclear weapons issues, including nuclear modernization. As long as these positive developments are cultivated and expanded upon, the U.S.-Japan alliance will continue to be a cornerstone of U.S. East Asia policy for many more years.

Nuclear weapons have the capacity to destroy civilization as we know it. But with the right amount of good diplomacy, calculated military strategy, and common sense, the U.S. just might be able to use them to leverage a lasting peace.

WORKS CITED

- Arms Control Association. "U.S. Nuclear Modernization Programs." January 2014. <http://www.armscontrol.org/factsheets/USNuclearModernization>.
- atomicarchive.com. "Potsdam Declaration." <http://www.atomicarchive.com/Docs/Hiroshima/Potsdam.shtml>.
- Burns, Richard, and Joseph Siracusa. *A Global History of the Nuclear Arms Race: Weapons, Strategy, and Politics*. Santa Barbara: ABC-CLIO, 2013. Available from <http://claremont.ebib.com/patron/FullRecord.aspx?p=1887851>.
- Cabinet Secretariat of Japan. "National Security Strategy." December 17, 2013. <http://www.cas.go.jp/jp/siryou/131217anzenhoshou/nss-e.pdf>.
- Cha, Victor D. "Abandonment, Entrapment, and Neoclassical Realism in Asia: The United States, Japan, and Korea." *International Studies Quarterly* 44, no. 2 (June 2000): 261-91. <http://www.jstor.org/stable/3013998>.
- Chai, Sun-Ki. "Entrenching the Yoshida Defense Doctrine: Three Techniques for Institutionalization." *International Organization* 51, no. 3 (Summer, 1997): 389-412. <http://www.jstor.org/stable/2703609>.
- Chanlett-Avery, Emma, and Ian E. Rinehart. "North Korea: U.S. Relations, Nuclear Diplomacy, and Internal Situation." Congressional Research Service. December 5, 2014. <https://www.fas.org/sgp/crs/nuke/R41259.pdf>.
- Chanlett-Avery, Emma, and Ian E. Rinehart. "The U.S.-Japan Alliance." Congressional Research Service. December 13, 2013. <https://www.fas.org/sgp/crs/row/RL33740.pdf>.
- Chanlett-Avery, Emma, Mark E. Manyin, Ian E. Rinehart, Rebecca M. Nelson, and Brock R. Williams. "Japan-U.S. Relations: Issues for Congress." Congressional Research Service. January 13, 2015. <https://www.fas.org/sgp/crs/row/RL33436.pdf>.
- Clemens, Walter C. Jr. "Chinese Nuclear Tests: Trends and Portents." *The China Quarterly* no. 32 (Oct.-Dec., 1967): 111-31. <http://www.jstor.org/stable/651407>.
- Clinton, Hillary "America's Pacific Century." *Foreign Policy*. October 11, 2011. <http://foreignpolicy.com/2011/10/11/americas-pacific-century/>.
- Colby, Elbridge A., and Abraham M. Denmark. "Nuclear Weapons and U.S.-China Relations: A Way Forward." Center for Strategic & International Studies. March, 2013. http://csis.org/files/publication/130307_Colby_USChinaNuclear_Web.pdf.

- Congressional Budget Office. "Projected Costs of Nuclear Forces, 2015 to 2024." January 2015. <https://www.cbo.gov/sites/default/files/cbofiles/attachments/49870-NuclearForces.pdf>.
- Defense Intelligence Agency. "People's Republic of China: Nuclear Weapons Employment Policy and Strategy." March 1972. http://fas.org/irp/dia/product/prc_72/dia_discussion.htm.
- Department of Defense. "Nuclear Posture Review Report." April, 2010. <http://www.defense.gov/npr/docs/2010%20Nuclear%20Posture%20Review%20Report.pdf>.
- Dodge, Michaela. "U.S. Nuclear Weapons in Europe: Critical for Transatlantic Security." The Heritage Foundation. February 18, 2014. <http://www.heritage.org/research/reports/2014/02/us-nuclear-weapons-in-europe-critical-for-transatlantic-security>.
- Dulles, John Foster. "The Evolution of Foreign Policy." Nuclear Files. http://www.nuclearfiles.org/menu/key-issues/nuclear-weapons/history/cold-war/strategy/article-dulles-retaliation_1954-01-12.htm.
- Federation of American Scientists. "Guidelines for Japan-U.S. Defense Cooperation." <http://fas.org/news/japan/sisin1e.htm>.
- Federation of American Scientists. "Nuclear Posture Review." http://fas.org/nuke/guide/usa/doctrine/dod/95_npr.htm.
- Federation of American Scientists. "Status of World Nuclear Forces." Last modified April 1, 2015. <http://fas.org/issues/nuclear-weapons/status-world-nuclear-forces/>.
- Ford, Gerald R. "Address by President Gerald R. Ford at the University of Hawaii." Gerald R. Ford Presidential Library & Museum. <http://www.fordlibrarymuseum.gov/library/speeches/750716.asp>.
- Fouse, David. "Japan's Post-Cold War North Korea Policy: Hedging toward Autonomy?" *Asian Affairs* 31, no. 2 (Summer 2004): 102-20. Accessed March 18, 2015. <http://www.jstor.org/stable/30172611>.
- Friedman, Benjamin H., Christopher A. Preble, and Matt Fay. "The End of Overkill? Reassessing U.S. Nuclear Weapons Policy." Cato Institute. September 24, 2013. <http://www.cato.org/publications/white-paper/end-overkill-reassessing-us-nuclear-weapons-policy>.
- Glosserman, Brad, and David C. Kang. "The Myth of Japanese Remilitarization." *The National Interest*. October 15, 2014. <http://nationalinterest.org/feature/the-myth-japanese-remilitarization-11470>.

- Huessy, Peter. "Want Stability? Fund Nuke Triad Modernization." *Breaking Defense*. February 23, 2015. <http://breakingdefense.com/2015/02/want-stability-fund-nuke-triad-modernization/>.
- Huth, Paul K. "The Extended Deterrent Value of Nuclear Weapons." *The Journal of Conflict Resolution* 34, no. 2 (Jun. 1990). http://www.jstor.org/stable/174195?origin=JSTOR-pdf&seq=1#page_scan_tab_contents.
- Hwang, Balbina Y. "South Korean Troops to Iraq: A Boost for U.S.-ROK Relations." The Heritage Foundation. February 13, 2004. <http://www.heritage.org/research/reports/2004/02/south-korean-troops-to-iraq-a-boost-for-us-rok-relations>.
- Japan Guide. "Yasukuni Shrine." Last modified May 28, 2013. <http://www.japan-guide.com/e/e2321.html>.
- Jervis, Robert. "Deterrence Theory Revisited." *World Politics* 31, no. 2 (Jan. 1979): 289-324. http://www.jstor.org/stable/2009945?origin=JSTOR-pdf&seq=1#page_scan_tab_contents.
- Johnson, Dana J., Christopher J. Bowie, and Robert P. Haffa. "Triad, Dyad, Monad? Shaping the US Nuclear Force for the Future." Mitchell Institute for Airpower Studies. December 2009. <http://www.northropgrumman.com/AboutUs/AnalysisCenter/Documents/pdfs/triad-monograph.pdf>.
- Kang, C.S. Eliot, and Yoshinori Kaseda. "Korea and the Dynamics of Japan's Post-Cold War Security Policy." *World Affairs* 164, no. 2 (Fall 2001): 51-59. Accessed March 18, 2015. <http://www.jstor.org/stable/20672626>.
- Kase, Yuri. "The Costs and Benefits of Japan's Nuclearization: An Insight into the 1968/70 Internal Report." *The Nonproliferation Review* (Summer 2001): 55-68. <http://cns.miis.edu/npr/pdfs/82kase.pdf>.
- Kim, Tongfi. "Why Alliances Entangle But Seldom Entrap States." *Security Studies* 20, no. 3 (August 25, 2011): 350-77. <http://dx.doi.org/10.1080/09636412.2011.599201>.
- Komine, Yukinori. "Whither a 'Resurgent Japan': The Nixon Doctrine and Japan's Defense Buildup, 1969-1976." *Journal of Cold War Studies* 16, no. 3 (2014): 88-128. Accessed February 19, 2015. http://muse.jhu.edu/journals/journal_of_cold_war_studies/v016/16.3.komine.pdf.

- Kristensen, Hans M. "A history of U.S. Nuclear Weapons in South Korea." The Nuclear Information Project. September 8, 2005. <http://www.nukestrat.com/korea/koreahistory.htm>.
- Kristensen, Hans M. "Non-Strategic Nuclear Weapons." Federation of American Scientists. May 2012. https://fas.org/_docs/Non_Strategic_Nuclear_Weapons.pdf.
- Kristensen, Hans M. "Nuclear Weapons Modernization: A Threat to the NPT?" Arms Control Association. May 1, 2014. http://www.armscontrol.org/act/2014_05/Nuclear-Weapons-Modernization-A-Threat-to-the-NPT.
- Kristensen, Hans M., and Robert S. Norris. "US nuclear forces, 2014." *Bulletin of the Atomic Scientists* 70, no. 1 (2014): 85-93. <http://bos.sagepub.com/content/70/1/85.full.pdf+html>.
- Kristensen, Hans M., Robert S. Norris, and Ivan Oelrich. "From Counterforce to Minimal Deterrence: A New Nuclear Policy on the Path Toward Eliminating Nuclear Weapons." Federation of American Scientists. April, 2009. http://fas.org/pubs/_docs/occasionalpaper7.pdf.
- Kroenig, Matthew "Why US nuclear modernization is necessary." *Bulletin of the Atomic Scientists*. January 8, 2015. <http://thebulletin.org/modernizing-nuclear-arsenals-whether-and-how/why-us-nuclear-modernization-necessary>.
- Lewis, Jeffrey. "Extended Nuclear Deterrence in Northeast Asia." Nautilus Institute for Security and Sustainability. August 1, 2012. <http://nautilus.org/napsnet/napsnet-special-reports/extended-nuclear-deterrence-in-northeast-asia/>.
- Lewis, Jeffrey. "The Nuclear Trials of Ashton Carter." *Foreign Policy*. February 5, 2015. <https://foreignpolicy.com/2015/02/05/nuclear-triad-modernization-strategic-defense-ashton-carter-pentagon/>.
- Llewellyn, Jennifer, Jim Southey, and Steve Thompson. "Nuclear weapons." *Alpha History*. <http://alphahistory.com/coldwar/nuclear-weapons/>.
- McDonough, David S. "The 'New Triad' of the Bush Administration: Counterproliferation and Escalation Dominance in US Nuclear Strategy." *International Journal* 59, no. 3 (Summer, 2004): 613-34. <http://www.jstor.org/stable/40203958>.
- Mendel, Douglas H. Jr. "Japan Reviews Her American Alliance." *The Public Opinion Quarterly* 30, no. 1 (Spring 1966): 1-18. <http://www.jstor.org/stable/2747367>.

- Ministry of Defense of Japan. "National Defense Program Guidelines for FY 2014 and beyond." December 17, 2013.
http://www.mod.go.jp/j/approach/agenda/guideline/2014/pdf/20131217_e2.pdf.
- Ministry of Foreign Affairs of Japan. "Japan-U.S. Security Treaty: Treaty of Mutual Cooperation and Security Between Japan and the United States of America."
<http://www.mofa.go.jp/region/n-america/us/q&a/ref/1.html>.
- Ministry of Foreign Affairs of Japan. "Three Non-Nuclear Principles."
<http://www.mofa.go.jp/policy/un/disarmament/nnp/>.
- National Park Service. "Atlas ICBM."
<http://www.nps.gov/mimi/learn/historyculture/atlas-icbm.htm>.
- Natural Resources Defense Council. "Table of Global Nuclear Weapons Stockpiles, 1945-2002." <http://www.nrdc.org/nuclear/nudb/datab19.asp>.
- Natural Resources Defense Council. "Table of US Ballistic Submarine Forces."
<http://www.nrdc.org/nuclear/nudb/datab5.asp>
- Natural Resources Defense Council. "Table of US ICBM Forces."
<http://www.nrdc.org/nuclear/nudb/datab3.asp>
- Natural Resources Defense Council. "Table of US Nuclear Warheads."
<http://www.nrdc.org/nuclear/nudb/datab9.asp>
- Natural Resources Defense Council. "Table of US Strategic Bomber Forces."
<http://www.nrdc.org/nuclear/nudb/datab7.asp>.
- Nuclear Threat Initiative. "Treaty between the United States of America and the Union of Soviet Socialist Republics on Strategic Offensive Reductions (START I)."
<http://www.nti.org/treaties-and-regimes/treaties-between-united-states-america-and-union-soviet-socialist-republics-strategic-offensive-reductions-start-i-start-ii/>.
- Obama, Barack. "Remarks by President Obama as Given." The White House. April 5, 2009. http://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered.
- Potter, David M. "Evolution of Japan's Postwar Foreign Policy." Nanzan University. 2008. http://office.nanzan-u.ac.jp/cie/gaiyo/kiyo/pdf_09/kenkyu_03.pdf
- Prime Minister of Japan and His Cabinet. "Press Conference by Prime Minister Abe." July 1, 2014. http://japan.kantei.go.jp/96_abe/statement/201407/0701kaiken.html.

- Prime Minister of Japan and His Cabinet. "The Constitution of Japan."
http://japan.kantei.go.jp/constitution_and_government_of_japan/constitution_e.html.
- Ravenal, Earl C. "Counterforce and Alliance: The Ultimate Connection." *International Security* 6, no. 4 (Spring, 1982): 26-43. <http://www.jstor.org/stable/2538676>.
- Reif, Kingston. "Top Russian Official Backs New START." Arms Control Association. March, 2015. https://www.armscontrol.org/ACT/2015_03/News/Top-Russian-Official-Backs-New-START.
- Richardson, David J. "US-Japan Defense Cooperation: Possibilities for Regional Stability." *Parameters: US Army War College Quarterly* 30, no. 2 (Summer 2000): 94-104.
<http://strategicstudiesinstitute.army.mil/pubs/parameters/Articles/00summer/contents.htm>.
- Richardson, Jeff. "Shifting from a nuclear triad to a nuclear dyad." *Bulletin of the Atomic Scientists* 65, no. 5 (September 2009): 33-42.
<http://bos.sagepub.com/content/65/5/33.full.pdf+html>.
- Roberts, Brad. "Extended Deterrence and Strategic Stability in Northeast Asia." *NIDS Visiting Scholar Paper Series* no. 1 (August 9, 2013): 1-36.
<http://www.nids.go.jp/english/publication/visiting/pdf/01.pdf>.
- Schelling, Thomas C. *Arms and Influence*. New Haven: Yale University Press, 1966.
- "The World and Japan" Database Project, Database of Japanese Politics and International Relations, Institute of Oriental Culture, University of Tokyo. "Joint Statement of Japanese Prime Minister and U.S. President Johnson." <http://www.ioc.u-tokyo.ac.jp/~worldjpn/documents/texts/JPUS/19650113.D1E.html>.
- Truman, Harry S. "295. The President's News Conference." Harry S. Truman Library & Museum. <http://trumanlibrary.org/publicpapers/viewpapers.php?pid=985>.
- U.S. Department of State. "New START." <http://www.state.gov/t/avc/newstart/index.htm>.
- Waltz, Kenneth. "The Spread of Nuclear Weapons: More May Better." *Adelphi Papers* no. 171 (1981).
http://polsci.colorado.edu/sites/default/files/10B_Waltz.pdf.
- Walzer, Michael. *Just and Unjust Wars: A Moral Argument with Historical Illustrations*. New York: Basic Books, 1977.
- Wells, Samuel F. Jr. "The Origins of Massive Retaliation." *Political Science Quarterly* 96, no. 1 (Spring, 1981): 31-52. <http://www.jstor.org/stable/2149675>.

Wohlstetter, Albert. "Japan's Security: Balancing after the Shocks." *Foreign Policy* no. 9 (Winter 1972-1973): 171-190. Accessed March 17, 2015. <http://www.jstor.org/stable/1148092>.

Wohlstetter, Albert. "The Delicate Balance of Terror." *Foreign Affairs* 37, no. 2 (Jan. 1959). <http://www.jstor.org/stable/20029345>.

Wolfsthal, Jon B., Jeffrey Lewis, and Marc Quint. "The Trillion Dollar Nuclear Triad." James Martin Center for Nonproliferation Studies. January, 2014. http://cns.miis.edu/opapers/pdfs/140107_trillion_dollar_nuclear_triad.pdf.

Woolf, Amy F. "U.S. Strategic Nuclear Forces: Background, Developments, and Issues." Congressional Research Service. March 18, 2015. <http://fas.org/sgp/crs/nuke/RL33640.pdf>.