OBSTACLES TO DENUCLEARIZATION:

INCONSISTENT U.S. RESPONSES TO

NUCLEAR WEAPONS FREE

ZONE TREATIES

By

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LIST OF ACRONYMS

AFCONE	African Commission of Nuclear Energy
ANWFZ	African Nuclear Weapons Free Zone
ANZUS	Australia, New Zealand, and United States Security Treaty
ATOM	Against Testing on Mururoa
CANWFZ	Central Asian Nuclear Weapons Free Zone
COFA	Compact of Free Association
FSM	Federated States of Micronesia
HEU	Highly Enriched Uranium
IAEA	International Atomic Energy Agency
MAD	Mutually Assured Destruction
NSA	Negative Security Assurance
NFZ	Nuclear Free Zone
NPT	Nuclear Nonproliferation Treaty
NWFZ	Nuclear Weapons Free Zone
NWS	Nuclear Weapons States
OAU	Organization of African Unity
PIF	Pacific Islands Forum
SPNFZ	South Pacific Nuclear Free Zone
UNODA	United Nations Office for Disarmament Affairs

CHAPTER I

INTRODUCTION

In July 2009, the Southern Hemisphere completely banned nuclear weapons as the Pelindaba Treaty entered into force in Africa. The Pelindaba Treaty and others like it are available options for states to cooperate with each other on the issue of denuclearization through security regimes. However, treaties like this also require the support and cooperation of states which possess nuclear weapons to be truly effective because "the policies of cooperation that will bring mutual rewards if others cooperate may bring disaster if they do not" (Jervis 1978: 167). While I focus on the US responses to these security regimes, this thesis also touches on the more general question of whether or not cooperation is possible amongst states. Out of the five regions (Latin America and the Caribbean, the South Pacific, Southeast Asia, Africa, and Central Asia) that have attempted to prohibit the possession or use of nuclear weapons, the US has only fully supported the Latin America and Caribbean Nuclear Weapons Free Zone by both signing and ratifying the Treaty of Tlatelolco. The US has also given some initial support to two others by signing the treaties in the South Pacific and Africa. So, my research question is what factors affect the inconsistent US response to nuclear weapons free zone treaties?

The UN definition of a nuclear weapon free zone (NWFZ) and the obligations of nuclear weapons states (NWS) toward the states within these denuclearized zones are defined as:

> "any zone, recognized as such by the General Assembly of the United Nations, which any group of States, in the free exercise of their sovereignty, has established by virtue of a treaty of convention whereby: (*a*) The statute of total absence of nuclear weapons to which the zone shall be subject, including the procedure for the delimitation of the zone, is defined; (*b*) An international system of verification and control is established to guarantee compliance with the obligations deriving from that statute." (UN General Assembly 1975, Res3472B (XXX))

The UN General Assembly suggests that obligations of the NWS should be to respect the treaty or convention which establishes the NWFZ and not to use or threaten to use nuclear weapons against those states within the NWFZ.

The existing literature does not directly answer my question, so to explain how the US addresses this particular type of security regime, I must start at the beginning. First, working within the neorealist assumptions that states are ultimately security seekers and cooperation is difficult to achieve, I examine why states would want to build nuclear weapons. I explain the security dilemma and deterrence, follow that with other explanations of proliferation, and then discuss why some particular states see it in their interests to ban these weapons through security regimes and other arms control methods such as the nonproliferation treaty and NWFZs.

The former Delegate from Guam to the US House of Representatives, Ben Blaz (1987) outlined a list of seven criteria that the US uses to evaluate their acceptance of a NWFZ treaty, though this list of criteria does not effectively answer my research question either.

So I develop three additional factors, with the aid of Blaz's (1987) list and Putnam's (1988) explanation of two-level games in international negotiations, that I believe may be the most important factors to explain the US responses to these treaties. I find that one of these factors, based on the US relationship with the Soviet Union (and later Russia) has the most support overall. My other two additional factors include the treaties' relationships to the Nuclear Nonproliferation Treaty as well as to the parties that control the American Presidency and Senate. I also test four factors from Blaz's (1987) list that I think are of equal importance. This suggests that there may be certain factors that regional denuclearization movements, and more broadly, international actors seeking to create security regimes through cooperation, should focus on in order to successfully draw support from major players in the system.

To test my theory that these three additional factors are important, I use a structured, focused comparison to evaluate the US response to three NWFZs: Latin America and the Caribbean, the South Pacific, and Africa.

CHAPTER II

REVIEW OF LITERATURE

As I mentioned above, there is not much existing literature that focuses broadly on the issue of NWFZs or the responses of Nuclear Weapons States (NWS). Many studies that focus on the topic of nuclear weapons free zones do so in the context of one particular region which I will illustrate in the last section of this chapter. Therefore, the examination of US responses to NWFZs rests first in the introduction of the broad context of cooperation. Then the focus turns to deterrence and the security dilemma, which then leads to proliferation pressures. Proliferation leads to arms control through cooperative security regimes, which includes the nonproliferation regime and the NWFZ agreements. My research contributes to the existing literature by looking at the broad topic of NWFZs as opposed to focusing on a single agreement by comparing three of the agreements.

Cooperation is defined as occurring "when actors adjust their behavior to the actual or anticipated preferences of others" (Axelrod and Keohane 1985: 226). Is cooperation possible for security seekers, specifically within the nuclear context? As an effort at security through cooperation, Nuclear Weapons Free Zone (NWFZ) agreements can be

difficult to achieve due to the cooperation challenges and problems that arise as proliferation spreads. Such concerns could be an underlying issue as to why the US may be hesitant to accede to such agreements, even though the US is generally supportive of controlling proliferation. One of the challenges in these types of cooperative agreements is the two-level game described by Putnam (1988). This two-level game describes the interaction of domestic politics and diplomacy, creating a two stage process of negotiating treaties like these NWFZ agreements. The first stage of this process is the negotiation stage at the international level and the second is the ratification process at the national level (Putnam 1988). For these NWFZ agreements, since the US has signed most of them but has only ratified one, the problem of inconsistent responses may lie within the second stage of the process. Looking into the security dilemma and deterrence literature can illustrate how the cycle begins, from the need to acquire nuclear weapons to the first stage of the two-level game, cooperating to create a security agreement.

Deterrence and the Security Dilemma

To understand attitudes toward NWFZs, one must understand the reasons why states pursue nuclear weapons in the first place. There are three major debates identified in the deterrence and security dilemma literature. The first general theme involves how states and state relationships are affected by the security dilemma. The other two debates are centered on nuclear weapons. The questions within these other two debates include: what

is the role of nuclear weapons in the security dilemma and are nuclear weapons effective in deterring armed conflict? The neorealist literature implies that states in the international system are ultimately security seekers, so these questions are important in identifying measures to achieve cooperation and prevent states from actually using nuclear weapons.

The security dilemma makes cooperation difficult. Jervis (1978:169) defines the security dilemma as a problem which develops because "many of the means by which a state tries to increase its security decrease the security of others." Jervis (1978) suggests solutions to this problem, but others, like Glaser (1997) and Schweller (1996) are critical of his assumptions. Jervis (1978) argues that weapons can be differentiated into offensive and defensive uses. He proposes that the most stable situation would be a world where defense has the advantage and when defensive and offensive weapons are distinguishable. This would then make the world safer by significantly lowering the chance of creating security problems. Glaser (1997: 194) argues that not all states are security seekers, because some states are just greedy, so "the importance of the security dilemma for both explanation and prediction decreases when one or more of the major powers is a greedy state." Focusing mostly on the work of neorealist Kenneth Waltz, Schweller (1996) also makes a similar argument. He argues that Waltz is inconsistent with the realist approach because of the assumption that states are security seekers instead of power seekers; that there is a neorealist bias toward the status quo, overlooking "the importance of revisionist goals (nonsecurity expansion) as the driving force" (Schweller 1996: 92). Another criticism from Glaser (1997) is that many weapons can be

used for both offensive and defensive purposes, so the variation in weapons may not always be present, as Jervis (1978) had suggested. If this is true, Jervis's proposed plan of escaping the security dilemma will not always work.

Jervis (1978: 198) admits that, "concerning nuclear weapons, it is generally agreed that defense is impossible—a triumph not of the offense, but of deterrence," which is one reason why states pursue the acquisition or development of nuclear weapons. Roth (2007) outlines the arguments of Waltz and Mearsheimer about the role of nuclear weapons. For Waltz, nuclear weapons prevent any armed conflict between nuclear powers because the costs are too high because even a conventional war can lead to "inadvertent escalation" and the use of nuclear weapons (Roth 2007: 372). At one point, Mearsheimer (1990) expresses similar beliefs about the stabilizing power of nuclear weapons, arguing that limited nuclear proliferation would help keep Europe stable after the Cold War, but more recently has argued "that possession of nuclear weapons alone is neither an absolute deterrent nor a guarantee of security" (Roth 2007: 379). The argument is that if states realize that they cannot risk actually using nuclear weapons, they will become confident that a conventional war will not become nuclear (Roth 2007: 378). But is deterrence an effective strategy? Brown and Deutch (2007: np) argue that as a deterrent, nuclear weapons are still valuable to US security and international stability. However, a group of former high US officials, Shultz, Perry, Kissinger and Nunn (2007: np), believe that "deterrence is decreasingly effective and increasingly hazardous," especially that which is based on the obsolete Cold War era Mutually Assured Destruction (MAD) strategy.

In an international system in where states do not cooperate freely, the literature suggests that in order to escape the fear of the security dilemma, states must find a way to stabilize the international system by scaring others to force them to cooperate. Here, cooperation becomes important because if states within the security dilemma choose not to cooperate, another problem is that spiral arms races could emerge (Jervis 1976). One avenue to force cooperation is through nuclear deterrence, as long as people believe it works. But, since not all states *want* to join the nuclear club, there must be alternative explanations of how states escape the security dilemma that do not involve the threat of nuclear war. Another way to escape the security dilemma, through cooperation, is the creation of NWFZs. So, the next steps in the journey toward the development of NWFZs are proliferation and the creation of security regimes.

Proliferation

The security dilemma is one reason why states are likely to want nuclear weapons. Acquisition of these weapons creates cooperation problems which then leads to international arms control efforts. The major theme in the proliferation literature focuses on why states choose to build nuclear weapons (beyond the strategy of deterrence discussed above) and how we may be able to predict when states are planning to develop nuclear weapons in the future. The literature suggests several necessary, but not always sufficient, conditions which explain proliferation decisions. These are important

questions to explore in an era in which many of the major powers are seeking to slow or halt nuclear proliferation for security reasons, specifically through NWFZs as I am interested in for this study. As mentioned above, Waltz and Mearsheimer argue that proliferation and deterrence would be a good thing, as this could promote stability. Waltz (Sagan and Waltz 1995: 42) argues that although there could never be a guarantee of peace from the spread of nuclear weapons, a "gradual spread of nuclear weapons is better than no spread or rapid spread." In what Roth (2007) describes as Mearsheimer's second out of three distinct periods, Mearsheimer takes a similar approach to Waltz. Mearsheimer (1990) argues that nuclear proliferation could be a useful tool in promoting peace and stability in post-Cold War Europe. He believes that proliferation and deterrence would be helpful with the breakdown of the bipolar structure of the system at the end of the Cold War. He argues that the worst scenario would be to make Europe nuclear free, and the best scenario would be to "incorporate the limited, managed proliferation of nuclear weapons" (Mearsheimer 1990: 31). Ideally, he believes that this managed proliferation should not spread further than Germany because of the possibility of mismanagement among smaller states. Hoffmann (1990) and Risse-Kappen (1990) respond to Mearsheimer's (1990) arguments. Hoffmann (1990: 192) argues that there really is not any reason that Germany would want to acquire nuclear weapons, and that the superpowers and Germany's neighbors would not likely "tolerate a nuclear Reich." Risse-Kappen (1990: 219) makes a similar argument that others would want to prevent German proliferation because of the state's past and that managed proliferation "would be bound to lead to precisely the kind of crises he wants to prevent."

Sagan (Sagan and Waltz 1995) also argues against these points. He responds to Waltz's discussion and argues that more nuclear weapons could be worse. Sagan (Sagan and Waltz 1995) discusses the possibilities that new nuclear states and more nuclear weapons could lead to accidents or nuclear terrorism, although Waltz (Sagan and Waltz 1995) responds that there are sufficient means to prevent accidents and nuclear weapons would be difficult for terrorist groups to acquire, as there are easier ways to reach their goals. Shultz, et al. (2007) echo Sagan's (Sagan and Waltz 1995) point about the dangerous risk of mistakes that could be possible when dealing with nuclear weapons. To help make their point they borrow a statement made by Governor Arnold Schwarzenegger: "mistakes are made in every other human endeavor. Why should nuclear weapons be exempt?" (Shultz, et al. 2007: np). Sugden (2008) and Brown (2007: 13) also mention the threat of nuclear terrorism, one of the risks of not disarming that has become more salient since 2001, one threat that would certainly be difficult to address if it were to happen because unlike other states, non-state actors are undeterrable.

There are several determinants or conditions which the literature suggests would cause a state to decide to build nuclear weapons. The first of these are a state's technological conditions. Singh and Way (2004: 862-863) explain that a state's ability to acquire the resources needed to produce nuclear weapons is only a necessary condition of proliferation. Some of the technological determinants they mention are "economic prosperity, literacy levels, and scientific development" (Singh and Way 2004: 862). For Lavoy (2006), technological determinants become part of the third stage of the nuclear

mythmaking theory, which helps "mythmakers" persuade the public that nuclear weapons should and can be produced (Singh and Way 2004: 435).

The second group of determinants includes domestic or organizational conditions. Singh and Way (2004: 864) identify four domestic factors which may lead to nuclear proliferation: democratization, liberalization, "an autonomous domestic elite," and status perceptions. Jo and Gartzke (2007: 170-171) also examine the possibility that regime type or status variables may explain why some states choose to proliferate. They conclude that both factors influence nuclear decisions, but only symbolic and status variables affect both stages of proliferation (programs and possession), while democratic regimes only positively affect the possession stage (Jo and Gartzke 2007: 179). In the case of South Africa, Liberman (2001) argues that organizational conditions, mainly military dominance, drove the state to build nuclear weapons. In Pakistan, nuclear weapons developed an important symbolic value which they believed would enhance their status (Ahmed 1999: 185).

The third set of conditions involves international security and international pressure. This relates back to the mythmaking theory: the first stage is that there is a problem with the state's security and the second stage is that nuclear weapons would be the best way to solve this security problem (Lavoy 2006: 435). Singh and Way (2004: 863) also suggest that security threats, as well as security guarantees, can influence proliferation decisions. This is mirrored by Jo and Gartzke (2007: 173-174) who identify threat levels (nuclear and conventional), defense agreements and isolation as variables which influence a

state's *willingness* to develop nuclear weapons. For Pakistan, regional security was a contributing factor in nuclear weapons development due to the Indian nuclear threat (Ahmed 1999). Liberman (2001) explains that there was a possible nuclear threat to South Africa because of the Soviet and Cuban presence in Angola and Namibia as well as a conventional regional threat, the African National Congress. But in South Africa, international pressure succeeded in ending the nuclear program, whereas in India and Pakistan it has not, although it has been somewhat influential on certain aspects.

Some suggest that there are certain advantages to nuclear proliferation, which may also help explain why some states build nuclear weapons. The major advantage is deterrence, connecting proliferation back to the security dilemma. Asal and Beardsley (2007: 140) find evidence to support the theory that "crises involving nuclear actors are more likely to end without violence." Ahmed (1999) offers an example of this advantage by looking at the case of Pakistan, which has had some success at developing a less violent relationship with India through the proliferation process. For those states which are included in the second generation of nuclear powers, Hagerty (1998) suggests that some states have found that opaque proliferation also adds to the advantage of nuclear deterrence because there is a higher level of uncertainty involved. India, Pakistan and Israel are included in Hagerty's discussion of opacity.

The nuclear proliferation literature does help to explain a lot of the reasons why certain states may choose to build nuclear weapons. What, then, do we do when more states

express interest in acquiring these weapons? Cooperation through security regimes is one way to address these proliferation concerns.

Security Regimes: Arms Control and the Nonproliferation Treaty

Security regimes and institutions could help promote cooperation so that states stay out of the security dilemma. NWFZs are some examples of security regimes which could promote regional cooperation, as well as cooperation with the major nuclear powers. NWFZ agreements are also part of larger arms control efforts designed to counter proliferation pressures. There were two key questions asked in the arms control literature. What has been done to stop or stall nuclear proliferation and how can we make the nonproliferation regime stronger? In addition to these questions, another would be how have global regimes affected the US response to regional agreements? Understanding these questions is important because with more and more states gaining access to the technology and materials to build nuclear weapons, it may become increasingly difficult to control nuclear proliferation. The Nuclear Nonproliferation Treaty (NPT) was an early attempt to form a multilateral agreement to halt proliferation. The NPT regime and the NWFZ treaties linked to it have become a strong focal point of nuclear arms control. Because the NWFZ agreements are linked to the NPT, the strength of the NPT regime has an effect on how the US and other major powers respond to the smaller regional agreements. The NPT defines a nuclear weapon state (NWS) as “one

which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 January 1967." Therefore, there are only five recognized NWS (US, UK, France, Russia, and China) and the treaty's goal is to keep it that way.

Ayson (2001), Brown (2007) and Nye (1992) suggest some strategies to deal with the process of proliferation. Ayson (2001: 67) outlines three of the traditional strategies as "management," which refers to arms control and the NPT regime, "abolition," which refers to the pursuit of complete disarmament, and "nullification," which he describes as "military counter-measures, such as missile defense systems, to cancel out the capabilities and threats that arise from proliferation." He argues that these strategies are not working, so we need to create new hybrid strategies that would combine these traditional approaches. One such approach could be the pursuit of NWFZs, which would combine both management and abolition. Brown (2007) and Nye (1992) both suggest a sticks and carrots approach to halting proliferation. Nye (1992: 1297) argues that "traditional proliferation policy must build upon past accomplishments with four types of instruments: security guarantees, technical restraints, unilateral measures, and multilateral institutions." Brown (2007) argues that we should prevent transfer of weapons, knowledge and technology. He also suggests two other ways to prevent proliferation. A "sticks" approach would be to place sanctions on states with new or developing programs and trade or financial incentives, the "carrots" approach, can be added or used instead.

The arms control regime created between the US and the Soviet Union was an important starting point to the nonproliferation regime of today and this is relevant to one aspect of

my theory because the struggles here between the US and the Soviet Union/Russia foreshadow their responses to the NWFZ agreements. It is important to understand how this particular relationship developed so that we might be able to use elements from this regime to strengthen the current nonproliferation regime. In explaining arms control in general, using realist assumptions, Jervis (1993: 239) argues that arms control can be linked to national security; that "if the main objective of arms control is to make war less likely, then any theory of arms control must rest on a theory of the causes of war." Baglione (1997) reviews some of the theories which have been used to attempt to explain the START I agreement between the US and the Soviet Union. She argues that a realist explanation would not work because the Soviets accepted regulations which would weaken their position in relation to the US (Baglione 1997: 136). She also explains that the agreement did not develop under bureaucratic pressure on either side (Baglione 1997: 137-138). Her argument is that both leaders (Bush and Gorbachev) possessed a high level of autonomy at the time and were able to pursue their preferred strategies. Braun and Chyba (2004) and Pilat (2007) argue that the nonproliferation regime under the NPT created between the Cold War superpowers can still be helpful. But there must be some attempts to reform the regime, due to the different circumstances that now exist.

Pilat (2007), Wesley (2005), and Hanson (2005) look into the future of the NPT. Similar to previous arguments, Pilat (2007) claims that the US-Soviet created regime is outdated and insufficient to deal with the current nuclear situation. He argues, though, that the current NPT regime should not be replaced but "maintained and strengthened" (Pilat 2007: 475). Wesley (2005) and Hanson (2005) also look into the future of the NPT.

Hanson (2005: 301) takes a position similar to that of Pilat (2007), arguing that there are some changes that should be made to the existing regime to make it more effective, as she believes "that there is no viable alternative to the NPT." Wesley (2005) makes an argument which seems to be quite like that of Mearsheimer (1990) at the end of the Cold War. Wesley (2005: 283) argues that horizontal proliferation is inevitable and "will probably continue at the rate of one or two additional nuclear weapons states per decade, whether or not the NPT is retained." So his suggestion is to replace the NPT with a regime that is more practical; one which would govern possession and limited proliferation. Hanson (2005) blames U.S. policies for the failures of the NPT regime. In particular, she blames the U.S. for avoiding the disarmament goals of the NPT. Leaver (2005: 424) makes a similar argument, suggesting that nuclear weapons states should "reinvigorate their own commitments to Article 6…a reformist project which is truly worthy of our time and energy." Here Leaver is referring to Article Six of the NPT, which states that "each of the parties to the treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control" (Brown and Deutch 2007: np).

The nuclear arms control literature offers insight into how the US and the Soviet Union created a nonproliferation regime that has survived since the end of the Cold War, but that the regime is beginning to crumble. By studying the current situations, it has been suggested that the Nonproliferation Treaty should be reformed. This would strengthen the regime and help it fit with current issues more closely. Finding reasonable incentives

for nonproliferation and disarmament could be a big step toward restoring the regime. Continuing to expand the regime through linking it to NWFZs could also help to restore the nonproliferation regime.

Nuclear Weapons Free Zones

Nuclear weapons free zones have been identified as an important path toward nonproliferation and disarmament by scholars and the UN (Mukai 2005, United Nations General Assembly 1975). The UN General Assembly (1975) looks more broadly at the NWFZ issue with Resolution 3472B (XXX). It is within this resolution that the UN determines that NWFZs are one of the most effective tools for preventing both horizontal and vertical proliferation of nuclear weapons. These zones began spreading over the southern hemisphere, beginning in 1959 with the Antarctic Treaty, which established that Antarctica could be used for peaceful purposes only. Following that, in 1967 the Treaty of Tlatelolco established a NWFZ which covers all of Latin America and the Caribbean. In 1985, the Treaty of Rarotonga established a NWFZ in the South Pacific, excluding most of the northern island states and territories which are linked to the United States. The Bangkok Treaty of 1995 established a NWFZ in Southeast Asia, which includes Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam. The Pelindaba Treaty of 1996 established a NWFZ in Africa. The most recent NWFZ was established in Central Asia in 2006. The CANWFZ

covers Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. As of July 2009, all of these NWFZs have entered into force: Antarctica in June 1961, Rarotonga in December 1986, Bangkok in March 1997, CANWFZ in March 2009, and Pelindaba in July 2009. The Tlatelolco Treaty entered into force for each state individually as it was ratified and all but eight out of the 33 signatories had ratified it by the early 1980s – the first was Mexico in September 1967 and the last was Cuba in October 2002. Only one of these, the CANWFZ, is completely outside of the southern hemisphere, so since the Pelindaba Treaty has entered into force, it should effectively ban nuclear weapons from the entire southern hemisphere (Mtimkulu 1996).

An example of the literature on NWFZs, which shows that most focus on individual treaties, is that of the South Pacific Nuclear Free Zone (SPNFZ) created by the Treaty of Rarotonga in 1985. Former New Zealand Prime Minister David Lange (1985) claims that collective security was a strategy pursued by his government on the nuclear issue. But for New Zealand and the rest of the South Pacific, regional security did not mean creating deterrents by building nuclear weapons, but by banning nuclear weapons. There are two key questions addressed in the SPNFZ literature. Why would the states of the South Pacific Forum want to create a nuclear free zone? And which of the five major nuclear powers supported the creation of the zone? At first, only two (China and the Soviet Union) supported the treaty. The other three (US, UK and France) finally signed the treaty a decade later, but the US has never ratified the treaty. The existing literature discusses why these three waited so long to sign, but there is still a question remaining about why the United States has still failed to ratify the Treaty of Rarotonga and how it

may affect the SPNFZ, which I aim to address in this study. Sagan (1996) offers three explanations of nuclear proliferation: the international security model, the domestic politics model, and the normative model. Through applying these three models, it would make sense that South Pacific states have not had the need for nuclear weapons. There have been no significant external military threats to the island states in the region, either from outside the region or even within the region. Most causes of political instability in the Pacific have been intrastate. There has been no popular support or bureaucratic desire for the acquisition of nuclear weapons, but there were growing anti-nuclear movements in the 1970s and 1980s, especially in New Zealand (Clements 1988) and French Polynesia (Regnault 2005). Also, banning the weapons seems to have more of a symbolic contribution to autonomy and legitimacy than building them would have had because of their strong anti-nuclear position. For example, the Soviet Union and China praised the South Pacific Forum for creating the agreement, "despite pressure from the United States, France, and the United Kingdom" (Regnault 2005: 349). So why would these Pacific states want to ban nuclear weapons from the region since no one wanted them to begin with?

One of the explanations for this, offered by Power (1986), Sawyer (1986), and Regnault (2005) is that the desire for a nuclear-free Pacific was a response to the influence and past exploitation by those three major colonial powers in the region, the United States, France, and the United Kingdom, each of which had nuclear weapons testing programs there. France was testing their nuclear weapons much more recently than the United States and the United Kingdom, so much of the anti-nuclear movement was directed toward French

testing, which lasted well into the 1990s. One of the major episodes that pushed the region further toward the nuclear free zone agreement was the French bombing of the Greenpeace ship *Rainbow Warrior* in Auckland Harbour, which happened about a year after the Treaty of Rarotonga was drafted and a few weeks before it was to be signed. Power (1986: 467) lists some of the consequences that stemmed from this event. It strengthened South Pacific commitment to anti-testing policies, "improved perceptions of the Lange government," and strengthened New Zealand's position on a ban of "nuclear-related vessels" from its ports. France was still committed to their nuclear testing, however, and kept their position against the idea of a nuclear free Pacific until President Jacques Chirac ended the testing program and authorized Gaston Flosse, Secretary of State for South Pacific Affairs, to sign the treaty in March 1996, along with representatives of the United States and the United Kingdom (Regnault 2005: 351). Four of the five major nuclear powers that signed the Treaty of Rarotonga have ratified it, the United States is the only state out of those five that has not done so.

The literature on the South Pacific Nuclear Free Zone explains in great detail the motivations of the states which are parties to the Treaty of Rarotonga. It largely came about because of the exploitation of the major nuclear powers which had colonized the region. The largest nuclear testing programs were carried out by France and the United States, but France has accepted the anti-nuclear feelings of the states in the region and the United States has not. So now that we have seen one example of the US position on this type of nonproliferation strategy, the question emerges as to why that position appears to be inconsistent, especially when comparing the South Pacific with Latin America.

Arms control measures such as NWFZs are a type of prevention, and although it has been the policy of the US to discourage the pursuit of nuclear weapons (Brown 2007), there are some issues that could prevent the US from fully supporting NWFZs. One is the issue of negative security assurances, a promise not to use or threaten to use nuclear weapons against parties to the treaty, which the US has begun backing away from because of the possibility of their interests being threatened by non-NWS and non-state actors (Blair and du Preez 2005). Another is that these NWFZ agreements are multilateral, and "in general, the United States prefers to negotiate commitments with individual nations rather than with multiple countries or with multilateral institutions" (Caruson and Farrar-Myers 2007: 639). So again, this leads to the question of inconsistencies in the US responses to the NWFZs, both on the domestic level and the international level.

CHAPTER III

THEORY

To address my research question about which factors affect the inconsistent US response to NWFZ agreements, my theory is based on Putnam's (1988) two-level game and a list of seven criteria which a NWFZ agreement must meet to be accepted by the US. According to Blaz (1987), these seven criteria determine whether the NWFZ agreement in question supports the strategic interests of the US. So my theory and the seven criteria are based on US strategic interests and how the NWFZ agreements interact with those interests. According to Blaz (1987: np), the seven criteria are:

> 1. The initiative is from the nations in the region;
> 2. All nations whose participation is deemed important participate;
> 3. Adequate verification of compliance is provided;
> 4. It does not disturb existing security arrangements to the detriment of regional and international security;
> 5. All parties are barred from developing or possessing any nuclear device for any purpose;
> 6. It imposes no restriction on international legal maritime and aerial navigation rights and freedoms; and
> 7. It does not affect the international legal rights of parties to grant or deny other transit privileges, including port calls and overflights.

At first, these criteria may seem to be the answer to my question – perhaps the US only supports the NWFZ agreements which meet all of these seven criteria and rejects those that do not. But it does not appear to be so simple. These criteria may not be all that the

US relies on when choosing how to respond to a NWFZ treaty. For example, Blaz (1987) argues that the Treaty of Rarotonga meets all seven of these criteria, yet the US did not sign until 1996 and continues to avoid ratification of the Treaty. Therefore, with the help of Putnam (1988) I develop my own theory and list of factors to explain why the US has responded inconsistently to the NWFZ agreements. As part of this theory, I derive a list of seven hypotheses to attempt to answer my research question. Within the structure of Putnam's (1988) two-level game, the first four hypotheses fall under Level I (international) and the remaining three hypotheses fall under Level II (domestic). My theory is that although all of the conditions highlighted in my hypotheses are important in determining US support for NWFZ treaties, there are three conditions that best explain why the US has fully supported one of the treaties and has only partially supported two others. What is interesting and different about these three explanatory conditions is that they are missing from the seven criteria listed above, which supports my argument that the seven criteria are not the only criteria that the US considers when negotiating their support for these treaties.

The first of my Level I hypotheses suggests that one factor that may influence US policies is system structure, specifically the remnants of the bipolar system of the Cold War and how balancing between the US and Russia continues to exist. I would suspect the US and the Soviet Union to pay very close attention and make decisions on these NWFZ agreements depending on the actions of the other, balancing their behavior. As suggested in the previous chapter, the US and the Soviet Union were leaders in the creation of the NPT regime, so nuclear arms control is an important issue to both sides.

Because the US and Russia are still two of the major NWS, I suspect that that balancing behavior exhibited during the Cold War era will continue to exist and I expect that however the Soviet Union (for the Treaties of Tlatelolco and Rarotonga) or Russia (for the Pelindaba Treaty) responds, it will affect the way the US responds. My first hypothesis is developed from this balancing behavior between the US and the Soviet Union/Russia:

> *Hypothesis 1: The international system structure and balancing behavior during the Cold War has an effect on how the US responds to NWFZ agreements that exists both during and after the Cold War era.*

Another important factor that lends to the context of the international environment is the NPT regime, an attempt at cooperation on a more global scale than the NWFZ agreements, supported by both the US and the Soviet Union/Russia. Does the importance of a global attempt at nuclear arms control and cooperation affect the US response to regional attempts at denuclearization? The earliest NWFZ treaty was created before the NPT was open for signature, so perhaps the others interact differently with the NPT. Perhaps over time as the NPT regime has appeared to be weakening, as discussed in the literature review (Hanson 2005, Leaver 2005, Wesley 2005, Pilat 2007), the US struggles to conclude whether or not such arms control mechanisms will be worth supporting, even though they are generally not supportive of proliferation (Brown 2007). The second part of this category leads to my second hypothesis:

> *Hypothesis 2: If a NWFZ agreement is created when the NPT is being negotiated (or renewed), then the US is more likely to support it.*

The next Level I hypothesis is focused on the states involved in drafting the NWFZ agreements. Which actors are advocating for the creation of the agreement? Was the US

involved in the development of any of these agreements? It would make sense to conclude that if the US was involved in the creation of the treaties, they would be more likely to support the treaties as they reached the signature stage. For example, the Treaty of Tlatelolco (1967) followed closely behind the Cuban Missile Crisis, so denuclearization in Latin America became an important issue in the Western Hemisphere. Therefore, this could partially explain why the US signed and ratified this first NWFZ treaty. So, my third hypothesis is:

> *Hypothesis 3: If the US is involved in the creation of the treaty, then they are more likely to support it.*

The final condition within Level I is proliferation. Are there states within the proposed zones that have expressed interest in or have the capacity to acquire nuclear weapons? If there are dangers of proliferation within the region, the US might be more likely to take action to halt such movements in an attempt to protect their own security interests which includes making sure they have a security advantage over others based on the neorealist assumption that states are security seekers and the interests of the NPT regime. This leads to my next hypothesis:

> *Hypothesis 4: The US is more likely to support a NWFZ if there are proliferation threats in the region.*

My last three hypotheses can be considered domestic conditions under Level II of Putnam's (1988) two-level game because even though some of them affect what happens internationally, they are conditions which would have to be *approved* by domestic actors in the ratification stage. The first of these conditions involves the types of restrictions that the US is willing to accept within one of these NWFZ agreements. Examples of

some controversial issues would include transit restrictions and negative security assurances. One major issue that surrounds the creation of the SPNFZ is the issue of port visits and flyovers, especially after a New Zealand law banned all nuclear armed and nuclear capable vessels from its ports, which angered the US enough to exclude New Zealand from the Australia, New Zealand, and United States Security Treaty (ANZUS). Negative security assurances, which are built into each of the NWFZ treaties, are an attempt to ensure that the NWS will not use or threaten to use nuclear weapons against the treaty's contracting parties. So the idea is that the NWS promise not to use their nuclear deterrent against the denuclearized zone as long as the contracting parties adhere to the provisions of the treaty. These negative security assurances were identified by the UN as an obligation of the NWS by the UN General Assembly (1975: Resolution 3472 (XXX)). The idea of negative security assurances was supported early on by the US, but more recently that has not been the case because of the possibility of security threats from non-state and non-nuclear actors (Blair and du Preez 2005). My next hypothesis was developed from these examples:

> *Hypothesis 5: The more the US is restricted by the provisions of an agreement, the less likely they are to support it.*

The next Level II hypothesis focuses on US strategic interests, specifically the existence of formal security relationships in the regions covered by the NWFZ agreements. If there are existing security relationships with states within the zone, how would the creation of the NWFZ interact with these relationships? Security relationships are strategically important and could therefore constrict the options the US has in accepting these agreements. The NWFZ treaties could clash with existing defense arrangements as it did

in the example of the ANZUS crisis which was sparked by the port-visit standoff between the US and New Zealand in February 1985. The Labour Party government led by David Lange officially banned nuclear armed and nuclear powered ships and aircraft after their election victory in 1984 (Clements 1988). When the Lange government refused to allow a visit from the USS *Buchanan*, the Reagan Administration protested by cutting New Zealand off from its previous security relationship which ultimately led to the decision for the US to "unilaterally [withdraw] its security obligations to New Zealand under the 1951 ANZUS agreement" (Clements 1988: 395). This leads to my next hypothesis:

> *Hypothesis 6: If the region is strategically important, for example, if the US would not be able to fulfill its duties under existing bilateral or multilateral security agreements because of their nuclear policies, then they are less likely to support the NWFZ treaty.*

My final hypothesis is a simple one, also falling under the Level II category. The Democratic Party's platform (2008) compared with the Republican Party's platform (2008) suggests that Democratic politicians show a greater concern for nuclear arms control and strengthening international treaties such as the NPT. So the response of the US to these NWFZ agreements could be explained by which party is in power at the time these agreements are created. Therefore, my final hypothesis is:

> *Hypothesis 7: Democrats are more likely than Republicans to support these agreements.*

Out of these seven hypotheses, I expect to find that the most influential conditions will be those addressed in hypotheses two, three, and seven. This theory combines both Level I

and Level II factors that are not directly addressed in the seven criteria outlined by Representative Blaz (1987).

CHAPTER IV

METHODOLOGY

To test these proposed hypotheses, the qualitative case study method of a structured, focused comparison (George and Bennett 2005) will be used because of the small number of potential cases. The unit of analysis will be the NWFZ treaties. Technically, there are nine international treaties which create NWFZs: the Antarctic Treaty (1959), the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space (1967), the Treaty of Tlatelolco (1967), the Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof (1971), the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (1979), the Treaty of Rarotonga (1985), the Bangkok Treaty (1995), the Pelindaba Treaty (1996), and the Semipalatinsk Treaty (2006) (United Nations Office for Disarmament Affairs 2008). To select my cases from this list, I followed two particular criteria. First of all, the zone should cover sovereign states. This throws out Antarctica, the Seabed, outer space, and the moon and other celestial bodies. Each of the remaining five agreements has one or more additional protocols for the inclusion of the NWS. Of these, I chose the cases which the US has initially pledged its support by signing the protocols open to it. This cuts the Bangkok Treaty that established the Southeast Asian NWFZ and the

Semipalatinsk Treaty that established the Central Asian NWFZ. These two cases would, of course, be useful additions to my study because the US has responded differently to these, but it seems that there may not be enough available data to evaluate these cases at this point because the data for the US responses to these cases are not available from the UNODA (2009) database. The three cases left are the Treaty of Tlatelolco that established the NWFZ in Latin America and the Caribbean, the Treaty of Rarotonga that established the South Pacific NWFZ, and the Pelindaba Treaty which will establish an African NWFZ.

I have created a list of focus questions to carry out the evaluation of these three cases. Each question is derived from the proposed hypotheses. Many of these questions are also closely related to the seven criteria mentioned in the theory section. Those that are not, are linked to the hypotheses which I believe will help further explain why the US has not fully supported all of the agreements. The questions are:

1. What types of restrictions does the agreement place on NWS and what was the US response?
2. How is the region strategically important to the US? For example, does the US have formal security commitments to states or territories within the region? Would those commitments be significantly hindered by a NWFZ agreement?
3. How did other NWS respond to the agreement? Did that affect the US response?
4. To what extent are there proliferation concerns within the region?
5. How does the treaty interact with the timing of the NPT?
6. Did the US have any influence in the creation of the treaty?

7. Which party controlled the presidency and the Senate at the time of drafting, signing, and if applicable, ratification of the treaty?

Within the three case studies, data and evidence used to evaluate these questions are based primarily on content analysis of the three treaties and the responses of the NWS available from the UNODA Treaties Database (UNODA 2009). Supporting documents were also reviewed to help clarify issues that may not have been fully addressed within the texts of the treaties. These supporting documents include US Congressional debates, the Palau Compact of Free Association, Resolutions of the UN General Assembly, and the existing literature on the individual treaties. The cases will be presented through a narrative of the development of each treaty and each will conclude with the answers to the above focus questions drawn from that narrative. A summary will also be provided on how well each hypothesis fits the case.

Content analysis is defined as "a careful, detailed, systematic examination and interpretation of a particular body of material in an effort to identify patterns, themes, biases, and meanings" (Berg 2008: 338). I used a system of open coding, one aspect of which is to "ask the data a specific and consistent set of questions" (Berg 2008: 354) by looking at the treaty articles and supplemental data to determine answers to the set of questions listed above. To determine the degree to which each hypothesis was supported by the answers to these questions, I simply labeled each hypotheses "high," "medium," or "low" for each case, and in some instances felt that the evidence was somewhere between "high" and "medium" so there are a few hypotheses that are labeled as "medium-high". For each hypothesis, I developed a certain set of rules that would define these labels.

Table 1 provides the definitions of these rules.

Table 1. Hypothesis Support Label Definitions

Hypothesis	"High"	"Medium"	"Low"
1. The international system structure and balancing behavior during the Cold War has an effect on how the US responds to NWFZ agreements that exists both during and after the Cold War era.	If the Soviet response clearly had some impact on the US response.	If the US considered the Soviet response but another state's response was more important.	If the Soviet response had no effect.
2. If a NWFZ agreement is created when the NPT is being negotiated (or renewed), then the US is more likely to support it.	If the US signed and ratified when the NPT was an important global issue.	If the US signed when the NPT was an important global issue, but did not ratify.	If the NPT context had no effect.
3. If the US is involved in the creation of the treaty, then they are more likely to support it.	If the US was *directly* involved in creating the treaty, and both signs and ratifies the treaty.	If the US is somehow *indirectly* involved and only provides limited support.	If the US was not an influential force and offered limited or no support.
4. The US is more likely to support a NWFZ if there are proliferation threats in the region.	If a proliferation threat exists and the US signs and ratifies the treaty.	If a proliferation threat exists and the US signs, or if no threat exists and the US signs.	If no proliferation threat exists and no US support.
5. The more the US is restricted by the provisions of an agreement, the less likely they are to support it.	If there are major restriction issues such as NSAs and transport restrictions; no US support.	If the US conditionally accepts such restrictions and offers at least some support.	If restrictions have no effect.
6. If the region is strategically important, for example, if the US would not be able to fulfill its duties under existing bilateral or multilateral security agreements because of their nuclear policies, then they are less likely to support the NWFZ treaty.	If there is a concern over existing agreements and the US offers no support.	If existing agreements are addressed and the US offers limited support.	If existing agreements have no effect.
7. Democrats are more likely than Republicans to support these agreements.	If a Democratic president signs and a Democratic Senate ratifies.	Mix between "low" and "high"	Republican president signs; Republican Senate ratifies; Democratic Senate does not ratify.

CHAPTER V

TLATELOLCO

Although earlier international treaties had created NWFZs in Antarctica and Outer Space, the Treaty of Tlatelolco was the first of its kind, creating a regional NWFZ among sovereign states. The Treaty reveals that it was influenced by a number of resolutions passed by the UN General Assembly. In the earliest of these, one conclusion reached by Resolution 808 (IX) was that an international disarmament convention should be created to provide for "the total prohibition of the use and manufacture of nuclear weapons…" (UN General Assembly 1954: 3). Resolution 1911 (XVIII) recognized the efforts of five Latin American states which issued "a declaration on the denuclearization of Latin America" on 29 April 1963 (UN General Assembly 1963: 15). The Treaty of Tlatelolco was also influenced by Resolution 2028 (XX) on the Non-proliferation of nuclear weapons (UN General Assembly: 1965), and like the NPT itself which was created after this agreement, the Treaty of Tlatelolco highlights the goal of eventually achieving complete disarmament. So hypothesis two is supported since the US supported this agreement which was created while the NPT was an important global issue. Fifteen Latin American and Caribbean states signed the Treaty on 14 February 1967 and eventually 33 signed and deposited instruments of ratification. Table 1 illustrates which states are signatories to the Treaty of Tlatelolco. One unique characteristic of this NWFZ

agreement is that it entered into force for each individual state as it ratified the Treaty. This Treaty is also unique because among the three treaties examined here, it is the only one in which the Additional Protocols have been signed and ratified by the US.

Table 2. Parties to the Treaty of Tlatelolco (UNODA 2009)

State	Signature	Deposit
Mexico	14 February 1967	20 September 1967
Nicaragua	15 February 1967	24 October 1967
Brazil	9 May 1967	29 January 1968
El Salvador	14 February 1967	22 April 1968
Dominican Republic	28 July 1967	14 June 1968
Uruguay	14 February 1967	20 August 1968
Honduras	14 February 1967	23 September 1968
Ecuador	14 February 1967	11 February 1969
Bolivia	14 February 1967	18 February 1969
Peru	14 February 1967	4 March 1969
Paraguay	26 April 1967	19 March 1969
Barbados	18 October 1968	25 April 1969
Haiti	14 February 1967	23 May 1969
Jamaica	26 October 1967	26 June 1969
Costa Rica	14 February 1967	25 August 1969
Guatemala	14 February 1967	6 February 1970
Venezuela	14 February 1967	23 March 1970
Trinidad and Tobago	27 June 1967	3 December 1970
Panama	14 February 1967	11 June 1971
Colombia	14 February 1967	4 August 1972
Chile	14 February 1967	9 October 1974
Grenada	29 April 1975	20 June 1975
Bahamas	29 November 1976	26 April 1977
Suriname	13 February 1976	10 June 1977
Antigua and Barbuda	11 October 1983	11 October 1983
St Vincent and the Grenadines	14 February 1992	14 February 1992
Dominica	2 May 1989	4 June 1993
Argentina	27 September 1967	18 January 1994
Belize	14 February 1992	9 November 1994
Guyana	16 January 1995	16 January 1995
Saint Kitts and Nevis	18 February 1994	18 April 1995
Saint Lucia	25 August 1992	2 June 1995
Cuba	25 March 1995	23 October 2002

The Additional Protocols

The Treaty of Tlatelolco includes two Additional Protocols which appeal to the NWS and other states with territorial claims in the region. Additional Protocol I applies the prohibition of nuclear weapons to territories within the zone in which outside states are *de jure* or *de facto* internationally responsible. This Protocol is open for signature to France, the Netherlands, the UK, and the US. Additional Protocol II calls for respect of the denuclearization of Latin America, for the signatories not to contribute to the violation of the Treaty by other parties to the Treaty, and provides negative security assurances. Table 3 illustrates which states have signed and ratified the Additional Protocols.

Table 3. The Additional Protocols (UNODA 2009)

	Protocol I		Protocol II	
NWS	**Signature**	**Deposit**	**Signature**	**Deposit**
China	n/a	n/a	21 Aug 1973	12 Jun 1974
France	2 Mar 1979	24 Aug 1992	18 Jul 1973	22 Mar 1974
Netherlands	15 Mar 1968	26 Jul 1971	n/a	n/a
Russia	n/a	n/a	18 May 1978	8 Jan 1979
UK	20 Dec 1967	11 Dec 1969	20 Dec 1967	11 Dec 1969
US	26 May 1977	23 Nov 1981	1 Apr 1968	12 May 1971

The US first signed and ratified Additional Protocol II with the understanding that

> as regards the undertaking in Article 3 of Protocol II not to use or threaten to use nuclear weapons against the Contracting Parties, the United States would have to consider that an armed attack by a Contracting Party, in which it was assisted by a nuclear-weapons State, would be incompatible with the Contracting Party's corresponding obligations under Article 1 of the Treaty. (UNODA 2009: np)

So this provides some support for hypothesis five because one of the major restriction issues, negative security assurances, is conditionally accepted by the US.

The Protocol was transmitted to the Senate on 13 August 1970 and approved by a 70-0 vote on 19 April 1971. The US ratified Protocol I on the condition that its understandings and declarations to its ratification of Protocol II apply to Protocol I as well and highlighted the issues of transit and transport privileges, as well as freedom of the seas. Protocol I was transmitted to the Senate on 24 May 1978 and approved by a 79-0 vote on 13 November 1981. Therefore, US territories in the region, such as Puerto Rico and the US Virgin Islands, became part of the NWFZ. As this Treaty was created during the Cold War, in April 1982, the Soviet Union countered the US by expressing its own view of the reservations made by the US regarding transit issues:

> The Soviet side considers it necessary to emphasize that the transport of nuclear weapons is covered by the prohibitions provided for in article 1 of the Treaty and that permission of the transit of nuclear weapons in any form through the zone of application of the Treaty would be contrary to the purposes of the Treaty, according to which, as specifically stated in its preamble, Latin America must be wholly free from nuclear weapons, and would be inconsistent with the nuclear-free status of the States Parties to the Treaty and their obligations defined in article 1 thereof.
> It is requested that the Government of Mexico, as depositary of the Treaty for the Prohibition of Nuclear Weapons in Latin America, should bring the above position of the Soviet Union to the attention of the States Parties to the Treaty and to its Additional Protocols I and II. (UNODA 2009: np)

This addresses hypothesis five because it allows for transport, the second major restriction issue I mentioned in the Theory chapter, so I would continue to label this hypothesis as receiving medium support because of the response to the restrictions in this Treaty. Also, the response of the Soviet Union addresses hypothesis one. I would give

hypothesis one high support because of their debates over transport issues and because it took much longer for the Soviet Union to sign and ratify the Treaty.

Proliferation in Latin America?

There have been a few minor proliferation concerns in the region. Cuba, of course, at one point was willing to host Soviet medium- and intermediate-range ballistic missiles pointed at the US and Venezuela's Chavez has expressed interest in a nuclear deterrent (Trinkunas 2006). The states in the region with the greatest chance at successfully developing nuclear capabilities are Argentina and Brazil, pursued that possibility under strong military regimes, but abandoned the pursuit of nuclear military programs with democratization. Civilian control of their nuclear programs under democratic governments sought to "undermine the power of their own militaries, which they viewed as a greater threat to democracy than any potential external adversary, even in the wake of Argentina's defeat in the Malvinas (Falklands) war" (Trinkunas 2006: 617). The countries' interests in nuclear programs are the reason both took quite a while to accede to the Treaty. This addresses hypothesis four, which I would label as highly supported because of the issues surrounding the Cuban Missile Crisis. Hypothesis six is indirectly addressed through the issue of strategic importance, but I would label this as low support for hypothesis six because the US strategic relationship with Latin America differs from the other two regions in this study.

Conclusion

This case provided the following answers to the focus questions:

1. *What types of restrictions does the agreement place on NWS and what was the US response?*
   Additional Protocols include any territories within the region, prohibit the NWS from violating the treaty provisions within the zone, and provide negative security assurances. In this case, the US signed and ratified with reservations regarding these types of issues.

2. *How is the region strategically important to the US?*
   The region was strategically important because the US wanted to keep other major powers out of the Western Hemisphere. The NWFZ complemented this strategy. The US also has territorial claims in the region. The US territories in the Caribbean are covered by Protocol I, which the US took longer to sign and ratify than Protocol II.

3. *How did other NWS respond to the agreement? Did that affect the US response?*
   The major problem was that the US and the Soviet Union disagreed over the transport issue. The Treaty was created on the heels of the Cuban Missile Crisis and the US signed Protocol II in 1968, not long after the creation of the Treaty. It took longer for the US to sign Protocol I to include their Caribbean territories within the zone. They signed and ratified Protocol I around the same time that the Soviet Union finally signed and ratified Protocol II.

4. *To what extent are there proliferation concerns within the region?*
   At one time, there was a possibility of Argentina and Brazil pursuing proliferation, but the main concern at the time was the Soviet presence in Cuba and the effects of the Cuban Missile Crisis.

5. *How does the treaty interact with the timing of the NPT?*
   The Treaty of Tlatelolco was created when the NPT was being developed. The NPT was definitely an important international issue at the time.

6. *Did the US have any influence in the creation of the treaty?*
   The creation of the Treaty was in some ways influenced and advocated by the UN and a regional declaration was created in April 1963. Because of the nature of the US strategic interest in the region, it is likely that the US

did have an influence on the creation of the Treaty since it was created so soon after the Cuban Missile Crisis.

7. *Which party controlled the presidency and the senate at the time of drafting, signing, and if applicable, ratification of the treaty?*
When the Treaty of Tlatelolco was drafted in February 1967, the president (Johnson) and the senate were Democratic. Johnson also signed Additional Protocol I in April 1968 and Carter (also a Democrat) signed Additional Protocol II in May 1977. A Democratic Senate ratified Protocol II in May 1971 but a Republican Senate ratified Protocol I in November 1981.

Hypotheses one, two, three, four, and seven are probably the most important in this case. The US ended up fully supporting this NWFZ agreement within the context of a bipolar system, although it did take them a while to ratify both Additional Protocols. Hypothesis two is supported because the Treaty of Tlatelolco is the only one of the three Treaties examined here that was created before the NPT, and also the closest to the development of the NPT. So, it was quite a paramount issue on the international level at the time. Hypothesis three is important because this treaty is the only one that has been fully supported by the US, but also the one that received the most direct influence. Hypothesis four is be supported by the issues surrounding the Cuban Missile Crisis. The US is not restricted too much and it addresses transit and transport issues in its declarations in signing and ratifying the Protocols, so hypothesis five is supported. Hypothesis six is not really supported, but the US territorial claims in the Caribbean could be an important factor in why it took longer to ratify Protocol I than Protocol II. Also, this region is considered strategically important, but in a different way than the other regions discussed here. The US may have been more likely to support this agreement because their strategy in the Western Hemisphere was to keep other major powers out. Table 4 offers a

summary of the hypotheses and evidence from this case and to what degree the hypotheses were supported. In addition to the hypotheses derived from the seven criteria, the additional three hypotheses I projected would also be important (two, three, and seven), have at least medium-high support in this case.

Table 4. Hypothesis Summary Table: Tlatelolco

Hypothesis	Evidence	Level of Support
1. The international system structure and balancing behavior during the Cold War has an effect on how the US responds to NWFZ agreements that exists both during and after the Cold War era.	Cuban Missile Crisis US and Soviet Union disagree over transport issue	High
2. If a NWFZ agreement is created when the NPT is being negotiated (or renewed), then the US is more likely to support it.	NPT being developed when the Treaty was created	Medium-High
3. If the US is involved in the creation of the treaty, then they are more likely to support it.	Likely because of the Treaty was created so soon after the Cuban Missile Crisis	High
4. The US is more likely to support a NWFZ if there are proliferation threats in the region.	Cuban Missile Crisis Argentina and Brazil	High
5. The more the US is restricted by the provisions of an agreement, the less likely they are to support it.	Transport issue and negative security assurances conditionally accepted	Medium
6. If the region is strategically important, for example, if the US would not be able to fulfill its duties under existing bilateral or multilateral security agreements because of their nuclear policies, then they are less likely to support the NWFZ treaty.	Different strategic relationship in Latin America	Low
7. Democrats are more likely than Republicans to support these agreements.	Signatures and ratifications all Democratic except for the ratification of Protocol I by a Republican senate	Medium-High

CHAPTER VI

RAROTONGA

Regnault (2005: 343) asserts that for Pacific states, “the atomic weapon is not considered a deterrent but an instrument of total destruction.” As mentioned in the literature review, one of the biggest motivating factors behind the general Pacific attitude toward the nuclear issue was that the United States, the United Kingdom, and France used areas of their colonial territories for nuclear weapons testing sites (Power 1986, Sawyer 1986, Regnault 2005). By the time the Treaty of Rarotonga was created, most of the anti-nuclear movement was specifically aimed at France because their testing programs in French Polynesia continued into the mid-1990s. It was the Pacific Islanders themselves who most strongly advocated for a NWFZ, generally through anti-nuclear movements such as Against Testing on Moruroa (ATOM), which began in Fiji in 1970 (Regnault 2005). The US did not have any direct influence on the development of the treaty, but indirectly through close ally Australia. Ben Blaz (1987: np), the former US Delegate from Guam wrote in response to US refusal to sign the Treaty, commenting that “the Australians went the extra distance for us on this treaty, ensuring that it did not compromise our essential defense needs and strategic interests in the region. Specifically, they were largely responsible for ensuring the treaty did not ban the transit and port calls

of our nuclear navy ships and overflights of nuclear weapons-capable aircraft. How have we thanked them for their effort? By leaving them dangling slowly in the wind, naked to the criticism of their regional neighbors that Australia carries little weight in our councils." So, since the US had some indirect influence on the decision making process of creating provisions within the treaty but has offered only limited support, hypothesis three has medium support in this case.

Eight states signed the Treaty when it was opened for signatures at Rarotonga in the Cook Islands on 6 August 1985 and entered into force when the eighth instrument of ratification was deposited in December 1986. Thirteen eligible states have now signed and ratified the treaty, creating a "zone that stretches from Australia to Kiribati, from the equator to the Antarctic – an immense trapezoid covering some 12 million square miles of the Earth's surface" (Blaz 1987: np). Table 5 illustrates which Pacific states are party to the Treaty of Rarotonga.

Table 5. Parties to the Treaty of Rarotonga (UNODA 2009)

State	Signature	Deposit
Fiji	6 August 1985	4 October 1985
Cook Islands	6 August 1985	28 October 1985
Tuvalu	6 August 1985	16 January 1986
Niue	6 August 1985	12 May 1986
Samoa	6 August 1985	20 October 1986
Kiribati	6 August 1985	28 October 1986
New Zealand	6 August 1985	13 November 1986
Australia	6 August 1985	11 December 1986
Nauru	17 July 1986	13 April 1987
Solomon Islands	29 May 1987	27 January 1989
Papua New Guinea	16 September 1985	15 September 1989
Vanuatu	16 September 1995	9 February 1996
Tonga	2 August 1996	18 December 2000

Unlike the Treaty of Tlatelolco and the Pelindaba Treaty, the Treaty of Rarotonga does not emphasize civilian nuclear use. It also prohibits *all* nuclear explosive devices, including those which may be considered as being used for peaceful purposes (Articles 3 and 4). It attempted to go further than its predecessor and is therefore referred to not as a NWFZ, but a nuclear free zone (NFZ).

Rarotonga and the NPT

The Treaty of Rarotonga was written 15 years after the NPT entered into force and recognizes its importance in the Treaty Preamble. The Treaty specifically mentions Article VII of the NPT which states "the right of any group of States to conclude regional treaties in order to assure the total absence of nuclear weapons in their respective territories" (UNODA 2009: np). When the US finally did decide to sign the Treaty, the announcement came soon after the extension of the NPT in 1995. President Clinton wrote a note to strong supporter of the Treaty, Eni F.H. Faleomavaega, the US Delegate of American Samoa, to express the importance of the SPNFZ to the nonproliferation regime:

> … Last year's NPT Review and Extension Conference agreed that internationally recognized nuclear free zones, based on arrangements fully arrived at among the states of the region concerned, enhance international peace and security. The Conference also agreed that the cooperation of all the nuclear weapon states and their respect and support for the relevant protocols are necessary for the maximum effectiveness of such zones.

> Our decision to sign the SPNFZ protocols demonstrates our clear support for a nuclear weapons-free zone in the South Pacific, our commitment to nuclear nonproliferation and our determination to achieve a Comprehensive Test Ban treaty mandating a permanent end to nuclear testing throughout the world. (US Congress 1996)

This shows that in the mid-1990s there was a shift in support for the Treaty. But was this shift a result of the support to extend the NPT or was it France's decision to stop testing? The impact of France's decision will be explained below, but this lends a medium level of support to hypothesis two because the US, along with the UK and France, did not sign the Treaty until the NPT once again became an important global issue.

Restrictions on the NWS

One of the biggest issues, especially after the port visit standoff between the US and New Zealand, was the question of transit. The US did not want to be restricted from port visits and overflights in the zone. But, as I mentioned above, Australia worked to reach a halfway point to accommodate the security interests of the US. Therefore, the Treaty itself does not take the same position as New Zealand in that it does not prohibit port visits and overflights from nuclear armed and nuclear capable vessels. It allows the states to make these decisions:

> Each Party in the exercise of its sovereign rights remains free to decide for itself whether to allow visits by foreign ships and aircraft to its ports and airfields, transit of its airspace by foreign aircraft, and navigation by foreign ships in its territorial sea or archipelagic waters in a manner not

> covered by the rights of innocent passage, archipelagic sea lane passage or transit passage of straits. (Article 5, Paragraph 2)

So since there is the possibility of some states not allowing such transit options, this type of restriction provides some support for hypothesis five.

The official restrictions on the NWS are found in the three Additional Protocols. Protocol I prohibits the manufacturing, testing, and stationing of nuclear explosive devices in the NWS territories located within the zone. Only three of the five NWS have territorial claims within the zone, so this Protocol is open for signature by France, the United Kingdom, and the US. Additional Protocol II includes the negative security assurance, to prohibit the use or threat of use of nuclear weapons against parties to the Treaty and the territories covered by Additional Protocol I. This Protocol also prohibits assisting any party to the Treaty in violating the Articles of the Treaty. The US included similar reservations and conditions when signing this Protocol as they included when they signed and ratified Protocol II of the Treaty of Tlatelolco. This also addresses hypothesis five, and with the combination of transit and negative security assurance issues, hypothesis five has medium-high support. Protocol II is open for signature by all five NWS. Additional Protocol III further emphasizes the Pacific's position on nuclear testing by prohibiting nuclear testing anywhere within the zone. The third Protocol is also open for signature by all five NWS. Table 6 illustrates which of the NWS have signed and deposited instruments of ratification for the Additional Protocols open to them.

Table 6. NWS and the Additional Protocols (UNODA 2009)

	Protocol I		Protocol II	
NWS	**Signature**	**Deposit**	**Signature**	**Deposit**
Russia	n/a	n/a	15 Dec 1986	21 Apr 1988
China	n/a	n/a	10 Feb 1987	21 Oct 1988
France	25 Mar 1996	20 Sep 1996	25 Mar 1996	20 Sep 1996
UK	25 Mar 1996	19 Sep 1997	25 Mar 1996	19 Sep 1997
US	25 Mar 1996		25 Mar 1996	

	Protocol III	
NWS	**Signature**	**Deposit**
Russia	15 Dec 1986	21 Apr 1988
China	10 Feb 1987	21 Oct 1988
France	25 Mar 1996	20 Sep 1996
UK	25 Mar 1996	19 Sep 1997
US	25 Mar 1996	

As I mentioned in the Theory chapter, during this part of the Cold War, the US continued to struggle to balance against the Soviet Union and China by staying on the side of France and the UK, even though the US Congress showed some support for the Treaty. The Soviet Union and China showed support early on by quickly signing and ratifying the Treaty, although the Soviet Union did so with several significant reservations. With China's signature, they offered their respect of the hard work that the South Pacific put toward creating a NFZ and reasserted their strict no-first-use policy, and urged the NWS with significant power in the region to recognize their special responsibilities (UNODA 2009). The Soviet Union asserted that they disagreed with the transit issue, that any nuclear explosive device being transported through the zone is a violation of the Treaty,

reaffirmed their stand on calling for independence of the colonized areas in the region, and that

> …In the event of any actions undertaken by the state or states, which are parties to the Rarotonga Treaty, in violation of their main commitments under the Treaty connected with the non-nuclear status of the zone and perpetration by one or several states parties to the Treaty of an act of aggression with the support of a state having nuclear weapons or jointly with it with the use by such a state of the territory, air space, territorial sea or archipelago waters of those countries for calls by naval ships and flying vehicles with nuclear weapons on board or transit of nuclear weapons, the Soviet Union will have the right to consider itself free from the commitments undertaken under Protocol Two to the Treaty. In the event of any other actions by the parties to the Treaty incompatible with their non-nuclear status, the USSR reserves for itself the right to reconsider the commitments undertaken under the said Protocol. (UNODA 2009)

The fact that the Soviet Union signed and ratified the Treaty posed some negative consequences for the US. Blaz (1987: np) comments that "America's image has been significantly damaged by our refusal to sign. We have handed the Soviets a propaganda bonus."

This propaganda bonus was difficult to deal with, as the US still held France as a close ally and an important part of the Western deterrent. The French absolutely refused to sign the Treaty because of their continuing nuclear weapons testing program at Mururoa in French Polynesia, and one of the issues that Blaz (1987: np) also points out is that "signing the treaty would add the considerable weight of official U.S. support for the movement to force the French government to cease its nuclear testing program at Mururoa." Since this divide between the US and the Soviet Union, in addition to the role of France, was still a major issue, hypothesis one has medium level support.

The US also feared that by supporting NWFZs, other zones may begin to develop in areas of even higher strategic importance, such as Southeast Asia (especially the Philippines) and Central Europe (Blaz 1987). But the US had already supported several NWFZ agreements mentioned above, such as the zones of Antarctica, the Seabed, Space, and Latin America and the Caribbean.

Security Relationships in the Pacific

There are two US dependencies located within the SPNFZ – Jarvis Island and American Samoa. H. Con. Res. 158 (US Congress, 1987: np) urges the administration to consider signing the Treaty of Rarotonga, and mentions that "the administration has testified to the Congress that the protocols to the Treaty of Rarotonga do not prohibit any current or anticipated activities in American territories in the South Pacific (American Samoa and Jarvis Island) or elsewhere in the region." The US also has special defense relationships with most of the Micronesian island states. Three Micronesian members of the Pacific Islands Forum (PIF) are notably absent from the Treaty of Rarotonga – the Federated States of Micronesia (FSM), the Marshall Islands, and Palau. These states are not part of the Treaty because of their special security relationships as Freely Associated States under their Compacts of Free Association (COFA) with the US. For example, in the Palauan COFA, Title III, Article I, Section 312 states that:

> The Government of the United States has full authority and responsibility for security and defense matters in or relating to Palau…[and] the

> Government of the United States may conduct within the lands, water and airspace of Palau the activities and operations necessary for the exercise of its authority and responsibility under this Title.

But the US also addresses the anti-nuclear feelings of Palau by also including the following within the COFA:

> In the exercise in Palau of its authority and responsibility under this Title, the Government of the United States shall not use, test, store or dispose of nuclear, toxic chemical, gas or biological weapons intended for use in warfare and the Government of Palau assures the Government of the United States that in carrying out its security and defense responsibilities under this Title, the Government of the United States has the right to operate nuclear capable or nuclear propelled vessels and aircraft within the jurisdiction of Palau without either confirming or denying the presence or absence of such weapons within the jurisdiction of Palau. (Title III, Article II, Section 324)

And, as mentioned above, the US once was involved in ANZUS, a security alliance with Australia and New Zealand which began falling apart when New Zealand passed its law to prohibit port visits by nuclear armed and nuclear powered ships. The nature of the existing security relationships in the Pacific provides high support for hypothesis six.

Nuclear Testing in the Pacific

Hypothesis four is supported because, for the most part, there were no proliferation concerns at the time the Treaty was created. Australia had flirted with the idea of acquiring a nuclear weapon, but had abandoned that plan (Walsh 1997). The only real concern in the South Pacific was the issue of French testing, although the US had played a similar role with some major nuclear testing programs in the Pacific beginning in the

1940s. Although the US stopped testing nuclear weapons in the Pacific in the early 1960s, Kwajalein Atoll in the Marshall Islands continues to host the Ronald Reagan Ballistic Missile Defense Test Site. France announced it would sign the Treaty in late 1995, but continued its nuclear tests until its last at Fangataufa in January 1996.

The list of nuclear testing sites for the United States included Bikini Atoll and Enewetak in the Marshall Islands, Kiritimati Island in Kiribati, and Johnston Atoll (Regnault 2005). The first atomic test in the Pacific was carried out by the US in 1946 at Bikini, the same year they had evacuated the Bikinians from their home (Katosang 1976). This would be the first of 93 tests at Bikini from 1946 to 1958. That includes the first test of a deliverable thermonuclear hydrogen bomb, the 15 megaton Castle Bravo, on 28 February 1954 (Niedenthal 2001). The severe fallout accident from the Bravo test led to an eventual evacuation of the neighboring islands of Rongelap, Rongerik, Utirik, and Ailinginae. Kiritimati Islands and South Australia were testing sites for the United Kingdom and French testing sites were Moruroa and Fangataufa in French Polynesia (Regnault 2005). This history of testing and the continued military presence in the region provides additional support for hypothesis six on strategic importance.

Conclusion

The following answers to the focus questions were addressed in this case:

1. *What types of restrictions does the agreement place on NWS and what was the US response?*
   Additional Protocols prohibit manufacturing, stationing, and testing. They also provide negative security assurances which the US supported conditionally when signing.

2. *How is the region strategically important to the US?*
   Formal security agreements exist with the freely associated states (FSM, Palau and the Marshall Islands) and at one time, with the ANZUS alliance. The COFA agreements address the nuclear issue. The ANZUS alliance was broken with New Zealand because of the New Zealand transit laws concerning nuclear capable vessels. Also, the US did have a major testing program in the northern part of the region that is not covered by the SPNFZ and the US continues to test conventional weapons in the Marshall Islands.

3. *How did other NWS respond to the agreement? Did that affect the US response?*
   The response of France had the greatest effect on the US. The US also disagreed with the Soviet Union's position on some provisions. The Cold War was ending when the agreement was created, but the US continued to live under its shadow, balancing against the Soviet Union decision to support the Treaty. The US and the UK decided to stand behind France's extreme opposition to the Treaty.

4. *To what extent are there proliferation concerns within the region?*
   No proliferation concerns in the region.

5. *How does the treaty interact with the timing of the NPT?*
   Created 15 years after the NPT went into force, but the US, UK and France finally signed when the NPT was once again a major issue as it was being extended in the mid-1990s.

6. *Did the US have any influence in the creation of the treaty?*
   Influenced by strong regional anti-nuclearism because of testing history. Indirect influence of the US through Australia on the transit issue.

7. *Which party controlled the presidency and the senate at the time of drafting, signing, and if applicable, ratification of the treaty?*
   When the treaty was drafted, a Republican president (Reagan) was in office and there was a Republican majority in the Senate. A Democratic president (Clinton) signed the agreement in 1996.

It appears that the most important hypotheses involved with the Rarotonga case are one, two, five, and six. Restrictions seemed to be an important part of the problem, even though Australia tried to help with the transit issue so hypothesis five is supported. Hypothesis six fits, as the Pacific has been an important strategic area for the US, especially since the Second World War. If the PIF ever wanted to extend the boundary of the zone into the North Pacific or if the northern states more forcefully pursued entry into the zone, it could create problems for US security interests. Also, this hypothesis is supported through the example of the dissolving of the ANZUS alliance and trying to fit nuclear issues into the COFA agreements. The first hypothesis was probably the most important, because in this case, the US was *less* likely to support the SPNFZ within the bipolar structure of the 1980s because they were balancing against the Soviet Union who chose to support the agreement, and attempted to stay on the side of their western ally, France, who absolutely refused to sign the Treaty because of their nuclear testing program in the Pacific. Table 7 provides a summary of which hypotheses are supported and what evidence there is to support them. Though strategic interests were highly supported, for this Treaty, it seems the most important factor was that of Soviet support and strong French opposition to the creation of the SPNFZ.

Table 7. Hypothesis Summary Table: Rarotonga

Hypothesis	Evidence	Level of Support
1. The international system structure and balancing behavior during the Cold War has an effect on how the US responds to NWFZ agreements that exists both during and after the Cold War era.	The Soviet Union offered early support. The US backed their western ally, France.	Medium
2. If a NWFZ agreement is created when the NPT is being negotiated (or renewed), then the US is more likely to support it.	The US did not sign the Treaty when it was created, but did choose to sign when the NPT was being extended.	Medium
3. If the US is involved in the creation of the treaty, then they are more likely to support it.	Indirectly influenced the transit issue through the help of Australia.	Medium
4. The US is more likely to support a NWFZ if there are proliferation threats in the region.	No proliferation threats.	Medium
5. The more the US is restricted by the provisions of an agreement, the less likely they are to support it.	Transit issue could be a potential problem but negative security was accepted.	Medium-High
6. If the region is strategically important, for example, if the US would not be able to fulfill its duties under existing bilateral or multilateral security agreements because of their nuclear policies, then they are less likely to support the NWFZ treaty.	ANZUS crisis. Associated states have nuclear agreements within the COFAs. Nuclear testing program in some areas. Military presence continues.	High
7. Democrats are more likely than Republicans to support these agreements.	Signed by Democratic President	Medium

CHAPTER VII

PELINDABA

The Pelindaba Treaty, which established a NWFZ in Africa, has taken almost half a century to become fully developed after the United Nations and the Organization of African Unity expressed interest in the denuclearization of the continent (OAU 1964). Although African states and the international community as a whole generally support efforts at strengthening the nonproliferation regime, some obstacles have been thrown into the mix. One of the most crippling of these obstacles to the African NWFZ has been the secret pursuit and development of nuclear weapons by a select group of African states.

The creation of the African NWFZ has been an international effort as well as a regional effort. Just like the Treaty of Tlatelolco, the Pelindaba Treaty acknowledges a number of resolutions which were passed in international and regional bodies such as the United Nations General Assembly, the Organization of African Unity Assembly of Heads of State and Government, and the OAU Council of Ministers. In 1961 the UN General Assembly passed Resolution 1652 (XVI) which addressed the issue of African denuclearization. This Resolution expressed concern over the biological effects of

radioactive fallout from nuclear testing and over the prospect of Africa getting caught up in the US-Soviet arms race, and requests that member states consider Africa as a denuclearized zone. The OAU Assembly of Heads of State and Government then followed in 1964 with the "Declaration on the Denuclearization of Africa," also referred to as the Cairo Declaration. In this declaration, the OAU member states declared their willingness to create an international treaty to ban the production or acquisition of nuclear weapons and requested that the NWS respect the declaration.

In 1991 and 1992, the OAU Council of Ministers adopted CM/Resolution 1342 (LIV) and CM/Resolution 1395 (LVI) in which they "affirmed that the evolution of the international situation was conducive to the implementation of the Cairo Declaration" (UNODA 2009: np). Finally in April 1996, three and a half decades after the UN requested to have Africa considered as a denuclearized zone, the Pelindaba Treaty establishing the African NWFZ was opened for signature. It seems, though, that the US was not an influential actor in the creation of the Treaty. Therefore, hypothesis three has low support.

Benefits of an ANWFZ

So what are some of the benefits that will be provided by a NWFZ in Africa? Ogunbanwo (2003) focused on four major issue areas that are identified in the treaty that

will be beneficial to Africa, and possibly the wider international community. These four areas include negative security assurances, terrorism, economic development, and environmental protection. The treaty's built-in negative security assurances, identified by the UN as an obligation of the NWS, similar to the other two NWFZs discussed in this thesis, should in theory protect the states within the zone from nuclear attacks or threats by the NWS.

The second issue identified by Ogunbanwo (2003) was that the treaty could help address the fears of nuclear terrorism, which have increased since the September 11 attacks and especially after the fabrication of the Iraqi attempt to acquire uranium from Niger. Levi (2008: np) argued that "staging a nuclear attack is harder than most people think," because terrorist groups have limited capabilities and "to pull off a nuclear attack, a group would need to acquire nuclear materials or a weapon, build a bomb or unlock an existing one, move that weapon to its target, and detonate it." Others are more pessimistic than Levi. Allison (2004) argued that the development of new strategies is crucial, and proposed a strategy of preventing nuclear terrorism based on three no's, which include no new nuclear states, no loose nukes, and no nascent nukes. The creation of a NWFZ pretty much takes care of the first "no" and the second "no" is primarily centered on the security of the US and Russian nuclear arsenals which, according to Shultz et al. (2008), hold around 95 percent of the world's nuclear weapons. Allison (2004: np) claimed that "almost every month, someone somewhere is apprehended trying to smuggle or steal nuclear materials or weapons," offering the example of Atomflot deputy director Alexander Tyulyakov being arrested for this in August 2003 in the

Russian port city of Murmansk. Similarly, there is another example that illustrates the sometimes dodgy security of the US nuclear arsenal, that six nuclear armed cruise missiles were flown across the country on a US Air Force plane in late August 2007 and "for 36 hours, no one knew where the warheads were, or even that they were missing" (Shultz et al. 2008: np). The third "no" is more relevant to Africa, as a source of raw nuclear material. Ogunbanwo (2003) asserts that the treaty will provide greater cooperation and regulation of nuclear commerce. The treaty seeks to make dual use of African nuclear materials impossible for non-nuclear weapons states, as Article 9 prohibits "providing source or special fissionable material…for peaceful purposes to any non-nuclear-weapon State unless subject to a comprehensive safeguards agreement concluded with IAEA" (UNODA 2009). As Allison (2004: np) so simply put it, preventing nuclear terrorism "is a basic matter of physics: without fissile material, you can't have a nuclear bomb. No nuclear bomb, no nuclear terrorism." Since addressing terrorism is an important strategic issue for the US in Africa, the ANWFZ should complement that strategic interest. So the US *should* be more likely to support the Treaty. Although this would seem to offer support for hypothesis six, it does not work quite as well as the Rarotonga case. Since the US did sign the Treaty when it was created, this provides medium support for hypothesis six.

Obstacles to an ANWFZ

With so many major benefits, why did it take 35 years to develop the treaty after the first UN resolution and why, 13 years later, has it only just entered into force? There seem to be three major obstacles that have, or will have, an impact on the development of the treaty. An early obstacle was the development of secret nuclear weapons programs. Egypt pursued the idea of developing a nuclear weapons program and South Africa went further and managed to secretly acquire a small nuclear capability. Both countries reversed their nuclear ambitions, by the early 1990s becoming strong advocates for the African NWFZ. An additional layer to this early obstacle is the recent revelation of Libya's secret pursuit of a nuclear capability which was also reversed and publicly disclosed in December 2003 (Braut-Hegghammer 2008). The case of South Africa's nuclear weapons program and subsequent rollback will be discussed in more detail later in the chapter. A second obstacle, which I refer to as the current obstacle, is that "the ratification process has been disappointingly slow" (Ogunbanwo 2003: 132). The ratification of the Pelindaba Treaty has been much slower than the other NWFZ treaties, which each entered into force within a few years of being opened for signature. The Pelindaba Treaty was set to enter into force when it is ratified by 28 states, which it finally achieved in July 2009 (UNODA 2009). Table 8 illustrates which African states are party to the Treaty of Pelindaba.

Table 8. Parties to the Treaty of Pelindaba (UNODA 2009)

State	Signature	Deposit
Mauritius	11 April 1996	24 April 1996
Gambia	11 April 1996	16 October 1996
Algeria	11 April 1996	11 February 1998
Mauritania	11 April 1996	24 February 1998
South Africa	11 April 1996	27 March 1998
Zimbabwe	11 April 1996	6 April 1998
Tanzania	11 April 1996	19 June 1998
Burkina Faso	11 April 1996	27 August 1998
Botswana	9 June 1998	16 June 1999
Mali	11 April 1996	22 July 1999
Côte d'Ivoire	11 April 1996	28 July 1999
Guinea	11 April 1996	21 January 2000
Swaziland	11 April 1996	17 July 2000
Togo	11 April 1996	18 July 2000
Kenya	11 April 1996	9 January 2001
Nigeria	11 April 1996	18 June 2001
Lesotho	11 April 1996	14 March 2002
Equatorial Guinea	--	19 February 2003
Madagascar	--	23 December 2003
Libya	11 April 1996	11 May 2005
Senegal	11 April 1996	25 October 2006
Rwanda	11 April 1996	1 February 2007
Gabon	11 April 1996	12 June 2007
Benin	11 April 1996	4 September 2007
Ethiopia	11 April 1996	13 March 2008
Mozambique	11 April 1996	26 March 2008
Malawi	11 April 1996	23 April 2009
Burundi	11 April 1996	15 July 2009
Angola	11 April 1996	
Cameroon	11 April 1996	
Cape Verde	11 April 1996	
Central African Republic	11 April 1996	
Chad	11 April 1996	
Comoros	11 April 1996	
Dem. Rep. of the Congo	11 April 1996	
Djibouti	11 April 1996	
Egypt	11 April 1996	
Eritrea	11 April 1996	
Ghana	11 April 1996	
Guinea-Bissau	11 April 1996	
Liberia	11 April 1996	
Morocco	11 April 1996	

State	Signature	Deposit
Namibia	11 April 1996	
Niger	11 April 1996	
Sierra Leone	11 April 1996	
Sudan	11 April 1996	
Tunisia	11 April 1996	
Uganda	11 April 1996	
Zambia	11 April 1996	
Sao Tome and Principe	9 July 1996	
Seychelles	9 July 1996	
Liberia	9 July 1996	
Congo	27 January 1997	
Somalia	23 February 2006	

Ogunbanwo (2003) suggests that the extremely slow march to ratification is a result of three particular factors. First among these factors is that historically, the treaty ratification process among African states has generally been slow. The second factor is that other priorities, such as civil conflicts, have drawn states' attention elsewhere. And finally, he suggests that the delay is partially due to the "inadequate role played by the OAU" as the depository of the treaty and hopes that the AU will be more effective in promoting the ratification of the treaty (Ogunbanwo 2003: 135). The third obstacle, which most closely relates to my study on how the US responds to the Treaty, could become the "future obstacle" to the effectiveness of an African NWFZ – the mixed responses and reservations of the NWS.

Additional Protocols and NWS Responses

The restrictions on NWS are similar to the other Treaties, although not quite as strict as those within the Treaty of Rarotonga. For the Treaty of Pelindaba, there are three additional protocols directed at external state actors as part of the treaty (UNODA 2009). The first two additional protocols are open to the five NWS for signature. Protocol I prohibits the use or threat of use of nuclear weapons against parties to the treaty or territories included in Protocol III, so this is the mechanism in which the NWS can meet their obligations of negative security assurances described above. Protocol II prohibits NWS from testing nuclear weapons within the zone. Protocol III applies the treaty to territories in which non-OAU states are *de jure* or *de facto* internationally responsible. This final protocol is open to France and Spain for signature.

China, France, the United Kingdom, and the US signed the protocols open to them at the signing ceremony on 11 April 1996. The support of France, the UK, and the US carried reservations, however. French reservations and declarations included: that full exercise of the right to self-defense is not impaired, that transit of nuclear explosive devices (bound for other French territories outside the zone) be allowed through its territories within the zone, that the treaty does not modify passage through the Suez Canal, and that negative security assurances only apply to states which are party to the Treaty on the Non-Proliferation of Nuclear Weapons (UNODA 2009). The statement included by the UK conveyed their support of efforts to prevent proliferation, however they also asserted

their sovereignty over the British Indian Ocean Territory and rejected its inclusion within the zone. The UK also declared that they would not be bound by Protocol I "in the case of an invasion or any other attack on the United Kingdom, its dependent territories, its armed forces or other troops, its allies or a State towards which it has a security commitment, carried out or sustained by a party to the Treaty in association or alliance with a nuclear-weapon State…or if any party to the Treaty is in material breach of its own non-proliferation obligations under the Treaty" (UNODA 2009). The US, which operates a military base on the island of Diego Garcia within the British Indian Ocean Territory, signed "with the reservation that no change would be required in its operations on Diego Garcia," which is leased from the UK (Mtimkulu 1996: 11). Hypothesis five is supported because the restrictions were at an acceptable level for the US to offer immediate support by signing the Treaty.

Originally, Russia did not sign the Additional Protocols, although they were present at the signing ceremony, "apparently to show moral support" (Mtimkulu 1996: 11). Russia did add its signature seven months later, on 5 November 1996, with reservations. One reservation is very similar to the UK response to Protocol I about retaining the right to self-defense. The other reservation referred back to the Diego Garcia issue:

> In accordance with the Article 1 of the Treaty 'African Nuclear-Weapon-Free Zone' means the territory of the continent of Africa, island States-members of OAU and all islands considered by the Organization of African Unity in its resolutions to be part of Africa…[while] the military base of the nuclear State is situated on the Chagos archipelago islands they cannot be regarded [as] meeting the requirements put forward by the Treaty for the nuclear-weapon-free territories…[so] proceeding from this, the Russian Federation cannot consider itself to be bound by the

> obligations under Protocol I in respect of the aforesaid territories. (UNODA 2009)

Because of the division between the US and Russia over the Diego Garcia issue, hypothesis one is also highly supported in this case. France ratified Protocols I, II, and III in September 1996. China ratified Protocols I and II in October 1997. The UK ratified Protocols I and II in March 2001. The US and Russia have not yet ratified Protocols I and II. Table 9 illustrates which of the NWS have signed and deposited instruments of ratification for the Additional Protocols open to them.

Table 9. NWS and the Additional Protocols (UNODA 2009)

	Protocol I		Protocol II	
State	**Signature**	**Deposit**	**Signature**	**Deposit**
Russia	5 Nov 1996		5 Nov 1996	
China	11 Apr 1996	10 Oct 1997	11 Apr 1996	10 Oct 1997
France	11 Apr 1996	20 Sep 1996	11 Apr 1996	20 Sep 1996
UK	11 Apr 1996	19 Mar 2001	11 Apr 1996	19 Mar 2001
US	11 Apr 1996		11 Apr 1996	
Spain	n/a	n/a	n/a	n/a

	Protocol III	
State	**Signature**	**Deposit**
Russia	n/a	n/a
China	n/a	n/a
France	11 Apr 1996	20 Sep 1996
UK	n/a	n/a
US	n/a	n/a
Spain		

Referring back to Table 5 in the previous chapter, it is noticeable that the Pelindaba Treaty was signed by the US, the UK and France less than a month after they signed the Treaty of Rarotonga. Therefore, this Treaty was also created and signed while the NPT was still an important global issue. So, hypothesis two has medium support.

Proliferation Concerns

The details of proliferation in Africa show how important and problematic the issue was at the time. Major proliferation concerns have come from three states: Libya, Egypt, and South Africa. Both Libya and Egypt attempted to pursue the development of nuclear weapons capabilities but reversed their preferences before acquiring the bomb. Although both states, to a certain extent, wanted to counter the threat of a nuclear Israel, political identity was a more significant motivation in pursuing nuclear weapons and then to abandon that pursuit. For Libya, joining the nuclear club would be a symbol of modern statehood because of the exclusivity of this club and also because at the time, nuclear weapons were a symbol of advanced technology and scientific knowledge (Braut-Hegghammer 2008). Issues that led to rollback in Libya include the cost of proliferation, its relationship with the US was becoming increasingly more positive, and they also became concerned about the prospect of nuclear terrorism (Braut-Hegghammer 2008). In Egypt, nuclear weapons first became a status symbol which Nasser wished to pursue to fulfill his goal of leading the Arab world. It was not until the Six Day War in 1967 that Nasser recognized Israel as the greater threat than his Arab rivals, although he had declared in 1960 that "if Israel acquired nuclear weapons, Egypt would certainly acquire them as well" (Rublee 2006: 557). After this point, however, the program was stalled and Nasser signed the NPT shortly before his death in 1970. His successor, Sadat, finally ended the nuclear program and advocated for nonproliferation in exchange for aid from the US after the war with Israel in 1973 (Rublee 2006).

South Africa successfully acquired a nuclear capability but gave it up to accede to the NPT. A bit more is known about the South African program than is known about the Libyan and Egyptian programs. The denuclearization norm established with the OAU's Cairo Declaration in 1964 did not last long for the militarily strong, minority ruled South Africa. Liberman (2001) illustrates that there were elements of the international security model and the domestic politics model in South Africa's decision to proliferate. The dominance of the military became one of the organizational, or bureaucratic, conditions that led to proliferation. On the other hand, there were also nuclear and conventional security threats present in the region – the Soviet supported Cuban troops in Angola and the African National Congress (Liberman 2001). South Africa feared what was referred to as encirclement, which included those Cuban troops in Angola in addition to "the imminent independence of…Zimbabwe under an actively antiapartheid regime" (de Villiers, Jardine and Reiss 1993: 101, Burgess 2006). This suggests that Pretoria's policy preferences could be based on the international security model, but something else became the basis of their nuclear strategy. They never even had any intentions to use the nuclear weapons for military purposes, and the military was not even involved in the early stages of the program (de Villiers, Jardine and Reiss 1993). The strategy was completely political, as they recognized that first of all, they would have very few targets, and also that military use or the threat of military use would carry more disadvantages that it would benefits (Long and Grillot 2000).

The more significant basis of Pretoria's nuclear strategy was that they were becoming increasingly isolated from Western and Commonwealth nations (Long and Grillot 2000,

Burgess 2006). So they developed a bombs in the basement or blackmail strategy, as they believed that the West, and most importantly the US, "was less likely to abandon [them if they] possessed a credible nuclear weapons potential" (Burgess 2006, Long and Grillot 2000: 28). The South African nuclear blackmail strategy consisted of three phases (de Villiers, Jardine and Reiss 1993, Long and Grillot 2000). The first phase was referred to as strategic ambiguity, in which they would neither confirm nor deny their nuclear capability. In the second phase, if faced with a military threat, they would covertly reveal their capability, most likely to the US. Phase three consisted of public disclosure of the nuclear arsenal through official acknowledgement or an underground test. In the end, they had never passed the first phase. So this preoccupation with binding themselves to the West illustrates that their preferences were more strongly based on projecting a particular identity to important external actors and not on the security issues they faced in the region.

Before producing fissionable material, an underground test site was built at the Vastrap Range in the Kalahari Desert for a cold test of the device's non-nuclear components. However, it was abandoned due to international pressure after a Soviet satellite discovered the site in 1977 and soon after was confirmed by the US (de Villiers, Jardine and Reiss 1993). Although Pretoria has denied ever testing its nuclear devices, there is some evidence to the contrary, which for the most part is centered on their alleged collaboration with Israel. The most controversial of these allegations is referred to as the Vela Incident, in which a US Vela satellite detected a double flash in the South Atlantic off the southern coast of South Africa in September 1979 (de Villiers, Jardine and Reiss

1993, Liberman 2004). The exact source of the double flash was suspected to be a joint Israeli/South African test of a low-yield nuclear device, although the Carter Administration determined that a possible source of the flash could have been a meteor striking the satellite (de Villiers, Jardine and Reiss 1993).

Other aspects of the South African nuclear program are more transparent. The Pelindaba nuclear research and storage facility, and the Y-Plant, a uranium enrichment plant built nearby at Valindaba were the central elements to South Africa's nuclear program. The Y-Plant produced its first HEU in early 1978 and the first fully assembled nuclear device was completed in1979, which was intended to be used in an underground test (de Villiers, Jardine and Reiss 1993). An additional six devices were planned for a total of seven, though the seventh had not been completed when the program was terminated. The devices were estimated to yield between 10 and 18 kilotons, the largest of which would have been slightly smaller than the US *Trinity* bomb.

By the end of the 1980s, Pretoria began to question the strategic benefits of continuing its nuclear blackmail strategy. Regional security threats were vanishing with the collapse of the Soviet Union – Cuban troops withdrew from a now less violent Angola and Namibia became independent (de Villiers, Jardine and Reiss 1993). Even more influential was that their economic and political isolation was becoming worse. The global norm of nonproliferation became overshadowed by the growing norm of rejecting South Africa's apartheid regime. Sanctions were contributing to the state's isolation and influenced a normative shift, as Klotz (1995a: np) explained that "economic and cultural dimensions

of international pressure against South Africa had important, and generally, underestimated consequences for both the ruling National Party and its critics."

When F.W. de Klerk was elected in September 1989, his plans for reform included ending both apartheid and the nuclear weapons program, in pursuit of "a program of political reform to normalize South Africa's international relations" (de Villiers, Jardine and Reiss 1993: 103). The state had recognized that their nuclear strategy had become more of a burden than a benefit and sought to use accession to the NPT to improve its relationship with Washington and the rest of the international community. The Y-Plant was closed in February 1990 and dismantlement began in July 1990 and completed by July 1991, not long before South Africa joined the NPT on 10 July 1991. On 24 March 1993, de Klerk publicly confirmed that South Africa had secretly built and dismantled the nuclear weapons and the IAEA subsequently confirmed complete disarmament in August 1994 (Burgess 2006). So, once again preoccupied with its relationship with the US and the West, a normative shift led to the reversal of the state's earlier policies. This illustrates that there was a major proliferation concern within the region, and since the US offered initial support for the ANWFZ, hypothesis four has mixed medium-high support.

Conclusion

This final case provided the following answers to the focus questions:

1. *What types of restrictions does the agreement place on NWS and what was the US response?*
   Additional Protocols prohibit testing and provide negative security assurances. Similar response as previous two cases.

2. *How is the region strategically important to the US?*
   The terrorism issue is important and the use of Diego Garcia as a military base is an important strategic position.

3. *How did other NWS respond to the agreement? Did that affect the US response?*
   Russia's opposition to the exclusion of Diego Garcia still keeps Russia from ratifying the Treaty. The US and the UK signed on the condition that Diego Garcia would be excluded from the zone.

4. *To what extent are there proliferation concerns within the region?*
   Major proliferation concerns due to the past nuclear pursuit by Egypt, Libya and South Africa. Some proliferation concerns also come from the fear of nuclear terrorism.

5. *How does the treaty interact with the timing of the NPT?*
   The Treaty was created while the NPT was being extended, so it was once again a major global issue.

6. *Did the US have any influence in the creation of the treaty?*
   African denuclearization has been advocated by the OAU (now the AU) since 1964. No US influence.

7. *Which party controlled the presidency and the senate at the time of drafting, signing, and if applicable, ratification of the treaty?*
   When the Pelindaba Treaty was drafted in April 1996, it was signed by a Democratic president (Clinton) and Republicans controlled the Senate at the time.

For the Pelindaba Treaty, the most important hypotheses were one, two, four, five, and six. The first hypothesis seemed to fit, because although the Cold War was over, there was still some tension between Russia and the US. That tension was enough for Russia to take issue with the exclusion of Diego Garcia from the zone. Hypothesis two is supported because of the proximity of the creation of the Treaty to the extension of the

NPT. Since there were some major proliferation concerns within the region, hypothesis six is supported. Hypothesis five is supported because Pelindaba is much less restrictive than Rarotonga and the US signed its support of the Treaty right away. Hypothesis six is supported, but in a slightly different way than it was with Rarotonga. Parts of Africa are considered strategically important to combat terrorism, and with the rising fears of nuclear terrorism, it makes sense that the US would support greater nuclear restrictions in Africa. Table 10 provides a summary of these hypotheses and the evidence to support them. I think for this case, the most important explanations would be the tension between Russia and the US over the US strategic position at Diego Garcia and the concerns of proliferation and terrorism.

Table 10. Hypothesis Summary Table: Pelindaba

Hypothesis	Evidence	Level of Support
1. The international system structure and balancing behavior during the Cold War has an effect on how the US responds to NWFZ agreements that exists both during and after the Cold War era.	Russia and the US are still divided over the Diego Garcia issue and transit issues.	High
2. If a NWFZ agreement is created when the NPT is being negotiated (or renewed), then the US is more likely to support it.	The Treaty was created along with the extension of the NPT.	Medium
3. If the US is involved in the creation of the treaty, then they are more likely to support it.	The US was not involved in the creation of the Treaty.	Low
4. The US is more likely to support a NWFZ if there are proliferation threats in the region.	Major proliferation concerns.	Medium-High
5. The more the US is restricted by the provisions of an agreement, the less likely they are to support it.	The Pelindaba Treaty is less restrictive than the Treaty of Rarotonga.	Medium
6. If the region is strategically important, for example, if the US would not be able to fulfill its duties under existing bilateral or multilateral security agreements because of their nuclear policies, then they are less likely to support the NWFZ treaty.	Terrorism and nuclear terrorism are an issue. Diego Garcia is an important strategic position.	Medium
7. Democrats are more likely than Republicans to support these agreements.	Signed by Democratic President.	Medium

CHAPTER VIII

CONCLUSION

Almost 65 years after the *Trinity* test, the states of the Southern Hemisphere have nearly banned nuclear weapons from their part of the world by cooperating through security regimes. However, states with nuclear capabilities have not always been fully supportive of these regimes, as only one of the five regional NWFZ agreements carries signatures and ratifications of all the NWS. The seven criteria the US uses to evaluate these agreements is obviously not enough for the US to actually support them, even though the conditions based on that list did, for the most part, work to predict the US responses as I expected.

Overall, the hypotheses with the highest support were one and four. Hypothesis one was important because for each of the treaties, there seemed to be some sort of clash or balancing act between the US and the Soviet Union/Russia, regardless of whether or not the Cold War was still in existence. In Latin America, they disagreed over transport issues. In the South Pacific, they were divided by France's decision. In Africa they disagreed over how the island of Diego Garcia should fit into the context of the NWFZ. The existence of a proliferation threat in the region also affected how the US responded (hypothesis four). In Latin America, the threat came from the Cuban Missile Crisis and

in Africa one of the states succeeded in secretly acquiring a small nuclear arsenal. Each of the other hypotheses had an overall "medium" score. The NPT regime may also be an important factor in the US response to these NWFZ agreements, which is connected to hypothesis two. It seemed as though the US was more likely to support a NWFZ agreement if the NPT was a strong international issue at the time. The Treaty of Tlatelolco was created nearly parallel to the creation of the NPT, and the US signed both the Treaty of Rarotonga and the Pelindaba Treaty on the heels of the extension of the NPT. My other additions to the seven criteria, influence and party in power, were scored just as high as those hypotheses connected to the seven criteria. The US only really had an influence on the Tlatelolco and Rarotonga Treaties, but still initially supported the Pelindaba Treaty. So hypothesis three only had medium support. Hypothesis five had medium support because for the most part, the US addressed and conditionally accepted restrictions placed on them by these NWFZs. Hypothesis six only had a medium level of support because it really only had an impact on how the US responded to the South Pacific's NFZ and to Africa's NWFZ, due to their COFA agreements and their other security ties to certain Pacific Islands and their use of Diego Garcia in the Indian Ocean.

Finally, the treaties were more likely to be signed and ratified by Democrats, but there was the one outlying example of Protocol I of Tlatelolco where a Republican Senate ratified the treaty which did not follow with my expected outcome. So hypothesis seven was supported, but I believe that a deeper examination of this issue would be very helpful in strengthening this study. Table 11 provides a final summary of which hypotheses were supported in each case and how much support each hypothesis has overall.

Table 11. Hypothesis Summary Table: Conclusion

Hypothesis	Tlatelolco	Rarotonga	Pelindaba	Overall Support
1. The international system structure and balancing behavior during the Cold War has an effect on how the US responds to NWFZ agreements that exists both during and after the Cold War era.	High	Medium	High	High
2. If a NWFZ agreement is created when the NPT is being negotiated (or renewed), then the US is more likely to support it.	Medium-High	Medium	Medium	Medium
3. If the US is involved in the creation of the treaty, then they are more likely to support it.	High	Medium	Low	Medium
4. The US is more likely to support a NWFZ if there are proliferation threats in the region.	High	Medium	Medium-High	Medium-High
5. The more the US is restricted by the provisions of an agreement, the less likely they are to support it.	Medium	Medium-High	Medium	Medium
6. If the region is strategically important, for example, if the US would not be able to fulfill its duties under existing bilateral or multilateral security agreements because of their nuclear policies, then they are less likely to support the NWFZ treaty.	Low	High	Medium	Medium
7. Democrats are more likely than Republicans to support these agreements.	Medium-High	Medium	Medium	Medium

An important policy suggestion that can be concluded from this study is that the regions covered by these NWFZ agreements (and others that may follow) need to somehow find a way to obtain the approval of both the US and Russia so that their security regimes will be more effective. By examining the efforts of the states in these three regions, it seems that cooperation is possible, but may be more successful on the regional level than the global level since some regions are having trouble getting some of the NWS to agree to

their Additional Protocols. Though, the importance of the NPT suggests that an international regime must exist and be an important issue for smaller regional regimes to successfully seek out the support of major players. It also seems to suggest that within security regimes, a major player's response is heavily dependent on the responses of others in similar situations.

These results are interesting, but I think there could be other explanations for why the US has inconsistently responded to NWFZ agreements. Another way to look at this would be to examine, more closely than I have here, which parties controlled the Presidency and the Senate at the times in which these agreements were created and the position that each party may have taken in the decision whether or not to support or even consider supporting these treaties. I only looked at the results of this factor, and not more in-depth at how the actual individuals and parties responded and debated from the point these treaties were drafted to the point that they were signed or ratified. Other suggestions for further study could be to examine if and how much each of these treaties influences the next. It would also be interesting to explore why the US has not signed other NWFZ agreements such as those created by the Treaty of Bangkok and the Semipalatinsk Treaty when more information becomes available regarding these agreements.

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Scope and Method of Study: The purpose of this study was to examine the responses of the US to three nuclear-weapons-free zone agreements as an example of international cooperation and security regimes. The agreements included were the Treaty of Tlatelolco (Latin America and the Caribbean), the Treaty of Rarotonga (South Pacific), and the Pelindaba Treaty (Africa). Seven hypotheses and seven focus questions were developed with the aid of Putnam's (1988) theory of two-level games, to analyze the treaties and how the US responded to those treaties.

Findings and Conclusions: As expected, the three factors that were not included in the list of seven criteria outlined by Blaz (1987) were important in determining how the US responded to the NWFZ agreements. Responses of other nuclear weapons states such as Russia and France were important factors. Another important factor was the presence of the Nuclear Nonproliferation Treaty within the international environment. The third pair of important factors, that could be examined more closely, were the parties that have been in power in both the presidency and the Senate since these agreements were created.

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